



## SAFETY DATA SHEET CADISOLVE 154

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name CADISOLVE 154

Product number 60424

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Fragrance Diluent Fuel additive.

#### 1.3. Details of the supplier of the safety data sheet

Supplier Univar Solutions UK Ltd  
Aquarius House  
6 Mid Point Business Park  
Bradford  
BD3 7AY  
+44 1274 267300  
+44 1274 267306  
SDS.EMEA@univarsolutions.com

#### 1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 60424

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Not Classified

#### 2.2. Label elements

##### Hazard pictograms



Signal word Danger

Hazard statements  
H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

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|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautionary statements</b> | <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312 Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                 |             |
|-----------------|-------------|
| <b>Contains</b> | PROPAN-2-OL |
|-----------------|-------------|

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

|                                                                                         |                      |                                                  |                |
|-----------------------------------------------------------------------------------------|----------------------|--------------------------------------------------|----------------|
| <b>PROPAN-2-OL</b>                                                                      |                      |                                                  | <b>60-100%</b> |
| CAS number: 67-63-0                                                                     | EC number: 200-661-7 | REACH registration number: 01-2119457558-25-XXXX |                |
| <b>Classification</b><br>Flam. Liq. 2 - H225<br>Eye Irrit. 2 - H319<br>STOT SE 3 - H336 |                      |                                                  |                |

The full text for all hazard statements is displayed in Section 16.

|                             |                                                                 |
|-----------------------------|-----------------------------------------------------------------|
| <b>Composition comments</b> | The data shown are in accordance with the latest EC Directives. |
|-----------------------------|-----------------------------------------------------------------|

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                     |                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Move affected person to fresh air at once. Get medical attention.                                                                                                                                                                                                              |
| <b>Ingestion</b>    | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. |
| <b>Skin contact</b> | Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if symptoms are severe or persist after washing.                                                                                                                             |
| <b>Eye contact</b>  | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.                                                               |

### 4.2. Most important symptoms and effects, both acute and delayed

|                    |                                    |
|--------------------|------------------------------------|
| <b>Inhalation</b>  | May cause drowsiness or dizziness. |
| <b>Ingestion</b>   | May cause drowsiness or dizziness. |
| <b>Eye contact</b> | Causes serious eye irritation.     |

### 4.3. Indication of any immediate medical attention and special treatment needed

|                             |                                                |
|-----------------------------|------------------------------------------------|
| <b>Notes for the doctor</b> | Treat symptomatically. Effects may be delayed. |
|-----------------------------|------------------------------------------------|

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Highly flammable liquid and vapour. Vapours may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

**Hazardous combustion products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### 5.3. Advice for firefighters

**Protective actions during firefighting** Avoid the spillage or runoff entering drains, sewers or watercourses. Contain and collect extinguishing water. Use water to keep fire exposed containers cool and disperse vapours.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Approach the spillage from upwind. Keep unnecessary and unprotected personnel away from the spillage. No action shall be taken without appropriate training or involving any personal risk. Take precautionary measures against static discharges. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Use only non-sparking tools. Use explosion-proof electrical equipment.

#### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Fire-water run-off in sewers may create fire or explosion hazard.

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

#### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Avoid inhalation of vapours and contact with skin and eyes. Keep away from heat, sparks and open flame. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Use only non-sparking tools. Use explosion-proof electrical equipment. Avoid the formation of mists. Vapours may form explosive mixtures with air. Do not cut or weld used containers unless they have been thoroughly cleaned internally.

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### Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Provide eyewash station and safety shower. Take off immediately all contaminated clothing and wash it before reuse. Wash after use and before eating, smoking and using the toilet.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage precautions

Store in tightly-closed, original container in a well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid exposure to high temperatures or direct sunlight. Storage tanks and other containers must be earthed. Use explosion-proof electrical equipment. Avoid contact with the following materials: Acids. Oxidising agents.

#### Storage class

Flammable liquid storage.

### 7.3. Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit.

#### PROPAN-2-OL (CAS: 67-63-0)

#### DNEL

Industry - Dermal; Long term systemic effects: 888 mg/kg/day  
 Industry - Inhalation; Long term systemic effects: 500 mg/m<sup>3</sup>  
 Consumer - Dermal; Long term systemic effects: 319 mg/kg/day  
 Consumer - Inhalation; Long term systemic effects: 89 mg/m<sup>3</sup>  
 Consumer - Oral; Long term systemic effects: 26 mg/kg/day

#### PNEC

- Fresh water; 140.9 mg/l  
 - marine water; 140.9 mg/l  
 - Intermittent release; 140.9 mg/l  
 - STP; 2251 mg/l  
 - Sediment (Freshwater); 552 mg/kg  
 - Sediment (Marinewater); 552 mg/kg  
 - Soil; 28 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use explosion-proof electrical equipment. Observe any occupational exposure limits for the product or ingredients. Provide eyewash station and safety shower.

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|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye/face protection</b>            | Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.                                                                                                                                                                 |
| <b>Hand protection</b>                | Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It is recommended that gloves are made of the following material: Butyl rubber. Frequent changes are recommended. To protect hands from chemicals, gloves should comply with European Standard EN374. |
| <b>Other skin and body protection</b> | Wear appropriate clothing to prevent any possibility of skin contact. Wear anti-static protective clothing if there is a risk of ignition from static electricity.                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Hygiene measures</b>               | When using do not eat, drink or smoke. Wash after use and before eating, smoking and using the toilet. Take off immediately all contaminated clothing and wash it before reuse. Remove contaminated clothing and protective equipment before entering eating areas.                                                                                                                                                                                                                                                                   |
| <b>Respiratory protection</b>         | Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Gas filter, type A2. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.                                                                                                                                         |

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                                                     |                             |
|-----------------------------------------------------|-----------------------------|
| <b>Appearance</b>                                   | Clear liquid.               |
| <b>Colour</b>                                       | Colourless.                 |
| <b>Odour</b>                                        | No information available.   |
| <b>Odour threshold</b>                              | No information available.   |
| <b>pH</b>                                           | No information available.   |
| <b>Melting point</b>                                | No information available.   |
| <b>Initial boiling point and range</b>              | 80.1°C                      |
| <b>Flash point</b>                                  | 17.5°C                      |
| <b>Evaporation rate</b>                             | No information available.   |
| <b>Evaporation factor</b>                           | No information available.   |
| <b>Flammability (solid, gas)</b>                    | No information available.   |
| <b>Upper/lower flammability or explosive limits</b> | No information available.   |
| <b>Other flammability</b>                           | No information available.   |
| <b>Vapour pressure</b>                              | No information available.   |
| <b>Vapour density</b>                               | No information available.   |
| <b>Relative density</b>                             | 0.8209 @ 20°C 0.8252 @ 15°C |
| <b>Bulk density</b>                                 | No information available.   |
| <b>Solubility(ies)</b>                              | Miscible with water.        |

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|                                                 |                           |
|-------------------------------------------------|---------------------------|
| <b>Partition coefficient</b>                    | No information available. |
| <b>Auto-ignition temperature</b>                | No information available. |
| <b>Decomposition Temperature</b>                | No information available. |
| <b>Viscosity</b>                                | No information available. |
| <b>Explosive properties</b>                     | No information available. |
| <b>Explosive under the influence of a flame</b> | No information available. |
| <b>Oxidising properties</b>                     | No information available. |

### 9.2. Other information

|                         |               |
|-------------------------|---------------|
| <b>Refractive index</b> | 1.373 - 1.381 |
|-------------------------|---------------|

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

|                   |                                                                                 |
|-------------------|---------------------------------------------------------------------------------|
| <b>Reactivity</b> | The following materials may react with the product: Oxidising materials. Acids. |
|-------------------|---------------------------------------------------------------------------------|

### 10.2. Chemical stability

|                  |                                                                     |
|------------------|---------------------------------------------------------------------|
| <b>Stability</b> | Stable at normal ambient temperatures and when used as recommended. |
|------------------|---------------------------------------------------------------------|

### 10.3. Possibility of hazardous reactions

|                                           |                                                                                                                                                                                  |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Possibility of hazardous reactions</b> | Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 10.4. Conditions to avoid

|                            |                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Conditions to avoid</b> | Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. |
|----------------------------|----------------------------------------------------------------------------------------------------------|

### 10.5. Incompatible materials

|                           |                          |
|---------------------------|--------------------------|
| <b>Materials to avoid</b> | Acids. Oxidising agents. |
|---------------------------|--------------------------|

### 10.6. Hazardous decomposition products

|                                         |                                                                                                  |
|-----------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Hazardous decomposition products</b> | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. |
|-----------------------------------------|--------------------------------------------------------------------------------------------------|

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

|                              |                           |
|------------------------------|---------------------------|
| <b>Toxicological effects</b> | No information available. |
|------------------------------|---------------------------|

#### Skin corrosion/irritation

|                                  |                           |
|----------------------------------|---------------------------|
| <b>Skin corrosion/irritation</b> | No information available. |
|----------------------------------|---------------------------|

#### Serious eye damage/irritation

|                                      |                                |
|--------------------------------------|--------------------------------|
| <b>Serious eye damage/irritation</b> | Causes serious eye irritation. |
|--------------------------------------|--------------------------------|

#### Respiratory sensitisation

|                                  |                           |
|----------------------------------|---------------------------|
| <b>Respiratory sensitisation</b> | No information available. |
|----------------------------------|---------------------------|

#### Skin sensitisation

|                           |                           |
|---------------------------|---------------------------|
| <b>Skin sensitisation</b> | No information available. |
|---------------------------|---------------------------|

#### Germ cell mutagenicity

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**Genotoxicity - in vitro** No information available.

**Carcinogenicity**

**Carcinogenicity** No information available.

**Reproductive toxicity**

**Reproductive toxicity - fertility** No information available.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** No information available.

**Aspiration hazard**

**Aspiration hazard** No information available.

**Inhalation** May cause drowsiness or dizziness.

**Ingestion** May cause drowsiness or dizziness.

**Skin contact** Skin irritation should not occur when used as recommended.

**Eye contact** Causes serious eye irritation.

**Toxicological information on ingredients.****PROPAN-2-OL****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,840.0

**Species** Rat

**Notes (oral LD<sub>50</sub>)** OECD 401

**ATE oral (mg/kg)** 5,840.0

**Acute toxicity - dermal**

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 13,900.0

**Species** Rabbit

**Notes (dermal LD<sub>50</sub>)** OECD 402

**ATE dermal (mg/kg)** 13,900.0

**Acute toxicity - inhalation**

**Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)** 10,000.0

**Species** Rat

**Notes (inhalation LC<sub>50</sub>)** LC<sub>50</sub> (6h) >10000 ppm, Inhalation, Rat OECD 403

**Skin corrosion/irritation**

**Animal data** Not irritating.

**Serious eye damage/irritation**

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**Serious eye damage/irritation** Causes serious eye irritation.

**Respiratory sensitisation**

**Respiratory sensitisation** Not sensitising.

**Skin sensitisation**

**Skin sensitisation** Not sensitising.

**Germ cell mutagenicity**

**Genotoxicity - in vivo** No information available.

**Carcinogenicity**

**Carcinogenicity** There is no evidence that the product can cause cancer.

**Reproductive toxicity**

**Reproductive toxicity - fertility** No information available.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** No information available.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** No information available.

**Aspiration hazard**

**Aspiration hazard** No information available.

**Inhalation** May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.

**Ingestion** Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

**Skin contact** Prolonged contact may cause dryness of the skin.

**Eye contact** Causes serious eye irritation.

**Target organs** Kidneys Liver

### SECTION 12: Ecological information

**Ecotoxicity** The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

**Ecological information on ingredients.**

**PROPAN-2-OL**

**Ecotoxicity** The product is not expected to be toxic to aquatic organisms.

**12.1. Toxicity**

**Toxicity** No information available.

**Ecological information on ingredients.**

**PROPAN-2-OL**

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|                                               |                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------|
| <b>Toxicity</b>                               | Not considered toxic to fish.                                                 |
| <b><u>Acute aquatic toxicity</u></b>          |                                                                               |
| <b>Acute toxicity - fish</b>                  | LC <sub>50</sub> , 48 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow) |
| <b>Acute toxicity - aquatic invertebrates</b> | EC <sub>50</sub> , 48 hours: 10000 mg/l, Daphnia magna                        |
| <b>Acute toxicity - aquatic plants</b>        | EC <sub>50</sub> , 7 days: 1800 mg/l, Algae                                   |

### **12.2. Persistence and degradability**

**Persistence and degradability** Expected to be readily biodegradable.

#### **Ecological information on ingredients.**

#### **PROPAN-2-OL**

|                                      |                                         |
|--------------------------------------|-----------------------------------------|
| <b>Persistence and degradability</b> | The substance is readily biodegradable. |
| <b>Biological oxygen demand</b>      | 53 %                                    |

### **12.3. Bioaccumulative potential**

|                                  |                              |
|----------------------------------|------------------------------|
| <b>Bioaccumulative potential</b> | Bioaccumulation is unlikely. |
| <b>Partition coefficient</b>     | No information available.    |

#### **Ecological information on ingredients.**

#### **PROPAN-2-OL**

|                                  |                                     |
|----------------------------------|-------------------------------------|
| <b>Bioaccumulative potential</b> | The product is not bioaccumulating. |
| <b>Partition coefficient</b>     | log Pow: 0.05 OECD 107              |

### **12.4. Mobility in soil**

|                 |                      |
|-----------------|----------------------|
| <b>Mobility</b> | Miscible with water. |
|-----------------|----------------------|

#### **Ecological information on ingredients.**

#### **PROPAN-2-OL**

|                        |                                  |
|------------------------|----------------------------------|
| <b>Mobility</b>        | The product is soluble in water. |
| <b>Surface tension</b> | 22.7 mN/m @ 20°C                 |

### **12.5. Results of PBT and vPvB assessment**

|                                           |                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------|
| <b>Results of PBT and vPvB assessment</b> | This product does not contain any substances classified as PBT or vPvB. |
|-------------------------------------------|-------------------------------------------------------------------------|

#### **Ecological information on ingredients.**

#### **PROPAN-2-OL**

|                                           |                                                                                   |
|-------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Results of PBT and vPvB assessment</b> | This substance is not classified as PBT or vPvB according to current EU criteria. |
|-------------------------------------------|-----------------------------------------------------------------------------------|

### **12.6. Other adverse effects**

|                              |                           |
|------------------------------|---------------------------|
| <b>Other adverse effects</b> | No information available. |
|------------------------------|---------------------------|

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### Ecological information on ingredients.

#### PROPAN-2-OL

Other adverse effects      No data available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General information</b> | Waste is classified as hazardous waste. Highly flammable liquid and vapour. Do not puncture or incinerate, even when empty. Do not cut or weld used containers unless they have been thoroughly cleaned internally. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids. |
| <b>Disposal methods</b>    | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.                                                                                                                                                                                                                                                                                                               |

### SECTION 14: Transport information

#### 14.1. UN number

|                  |      |
|------------------|------|
| UN No. (ADR/RID) | 1219 |
| UN No. (IMDG)    | 1219 |
| UN No. (ICAO)    | 1219 |
| UN No. (ADN)     | 1219 |

#### 14.2. UN proper shipping name

|                                |                                 |
|--------------------------------|---------------------------------|
| Proper shipping name (ADR/RID) | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| Proper shipping name (IMDG)    | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| Proper shipping name (ICAO)    | ISOPROPANOL (ISOPROPYL ALCOHOL) |
| Proper shipping name (ADN)     | ISOPROPANOL (ISOPROPYL ALCOHOL) |

#### 14.3. Transport hazard class(es)

|                             |    |
|-----------------------------|----|
| ADR/RID class               | 3  |
| ADR/RID classification code | F1 |
| ADR/RID label               | 3  |
| IMDG class                  | 3  |
| ICAO class/division         | 3  |
| ADN class                   | 3  |

#### Transport labels



#### 14.4. Packing group

|                       |    |
|-----------------------|----|
| ADR/RID packing group | II |
| IMDG packing group    | II |

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ICAO packing group II

ADN packing group II

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS F-E, S-D

ADR transport category 2

Emergency Action Code •2YE

Hazard Identification Number 33  
(ADR/RID)

Tunnel restriction code (D/E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).  
Commission Regulation (EU) No 2015/830 of 28 May 2015.  
This product may impact SEVESO storage regulations.

**Restrictions (Annex XVII Regulation 1907/2006)** This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

### 15.2. Chemical safety assessment

Not applicable.

## SECTION 16: Other information

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### Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.  
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
 CAS: Chemical Abstracts Service.  
 DNEL: Derived No Effect Level.  
 IATA: International Air Transport Association.  
 IMDG: International Maritime Dangerous Goods.  
 Kow: Octanol-water partition coefficient.  
 LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).  
 PBT: Persistent, Bioaccumulative and Toxic substance.  
 PNEC: Predicted No Effect Concentration.  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.  
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.  
 vPvB: Very Persistent and Very Bioaccumulative.  
 IARC: International Agency for Research on Cancer.  
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.  
 cATpE: Converted Acute Toxicity Point Estimate.  
 BCF: Bioconcentration Factor.  
 BOD: Biochemical Oxygen Demand.  
 EC<sub>50</sub>: 50% of maximal Effective Concentration.  
 LOAEC: Lowest Observed Adverse Effect Concentration.  
 LOAEL: Lowest Observed Adverse Effect Level.  
 NOAEC: No Observed Adverse Effect Concentration.  
 NOAEL: No Observed Adverse Effect Level.  
 NOEC: No Observed Effect Concentration.  
 LOEC: Lowest Observed Effect Concentration.  
 DMEL: Derived Minimal Effect Level.  
 EL50: Exposure Limit 50  
 hPa: Hectopascal  
 LL50: Lethal Loading fifty  
 OECD: Organisation for Economic Co-operation and Development  
 POW: Octanol-water partition coefficient  
 SCBA: self-contained breathing apparatus  
 STP: Sewage Treatment Plant  
 VOC: Volatile Organic Compounds

### Classification abbreviations and acronyms

Acute Tox. = Acute toxicity  
 Aquatic Acute = Hazardous to the aquatic environment (acute)  
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

### Key literature references and sources for data

Supplier's information.

### Revision comments

This is the first issue.

### Revision date

04/06/2020

### Version number

1.000

### SDS number

60424

### SDS status

Approved.

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**Hazard statements in full**      H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

**Signature**      J Spenceley



## Exposure scenario

### Manufacture of substance - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|               |                                                                                                                                                                                                                                                                                    |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title    | Manufacture of substance - Industrial                                                                                                                                                                                                                                              |
| Process scope | Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities. |
| Main sector   | SU3 Industrial uses                                                                                                                                                                                                                                                                |
| Sector of use | SU8 Manufacture of bulk, large-scale chemicals (including petroleum products)<br>SU9 Manufacture of fine chemicals                                                                                                                                                                 |

#### Environment

|                                |                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC1 Manufacture of the substance<br>ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|

#### Worker

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Process category | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC15 Use as laboratory reagent. |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Manufacture of substance - Industrial

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use as an intermediate - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|               |                                                                                                                                                                                                                                                                                       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title    | Use as an intermediate - Industrial                                                                                                                                                                                                                                                   |
| Process scope | Use of substance as an intermediate (not related to Strictly Controlled Conditions). Includes recycling/recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container). |
| Main sector   | SU3 Industrial uses                                                                                                                                                                                                                                                                   |
| Sector of use | SU8 Manufacture of bulk, large-scale chemicals (including petroleum products)<br>SU9 Manufacture of fine chemicals                                                                                                                                                                    |

#### Environment

|                                |                           |
|--------------------------------|---------------------------|
| Environmental release category | ERC6a Use of intermediate |
|--------------------------------|---------------------------|

#### Worker

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Process category | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC15 Use as laboratory reagent. |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Use as an intermediate - Industrial

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Distribution of substance - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|               |                                                                                                                                                                                                                                    |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title    | Distribution of substance - Industrial                                                                                                                                                                                             |
| Process scope | Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities. |
| Main sector   | SU3 Industrial uses                                                                                                                                                                                                                |
| Sector of use | SU8 Manufacture of bulk, large-scale chemicals (including petroleum products)<br>SU9 Manufacture of fine chemicals                                                                                                                 |

#### Environment

|                                |                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC1 Manufacture of the substance<br>ERC2 Formulation into mixture<br>ERC3 Formulation into solid matrix<br>ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)<br>ERC5 Use at industrial site leading to inclusion into/onto article<br>ERC6a Use of intermediate<br>ERC7 Use of functional fluid at industrial site |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Worker

## Distribution of substance - Industrial

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC15 Use as laboratory reagent.</p> |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.  
Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.  
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

## **Distribution of substance - Industrial**



**Exposure scenario**  
**Formulation & (re)packing of substances and mixtures - Industrial**

**Identification**

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

**1. Title of exposure scenario**

|               |                                                                                                                                                                                                                                                                                                       |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title    | Formulation & (re)packing of substances and mixtures - Industrial                                                                                                                                                                                                                                     |
| Process scope | Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities. |
| Main sector   | SU3 Industrial uses                                                                                                                                                                                                                                                                                   |
| Sector of use | SU10 Formulation [mixing] of preparations and/or re-packaging                                                                                                                                                                                                                                         |

**Environment**

|                                |                               |
|--------------------------------|-------------------------------|
| Environmental release category | ERC2 Formulation into mixture |
|--------------------------------|-------------------------------|

**Worker**

## Formulation & (re)packing of substances and mixtures - Industrial

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC14 Tableting, compression, extrusion, pelletisation, granulation</p> <p>PROC15 Use as laboratory reagent.</p> |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.  
Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.  
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

## **Formulation & (re)packing of substances and mixtures - Industrial**

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Uses in Coatings - Industrial

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Uses in Coatings - Industrial                                                                                                                                                                                                                                                                                                                                          |
| Process scope                  | Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities. |
| Main sector                    | SU3 Industrial uses                                                                                                                                                                                                                                                                                                                                                    |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                        |
| Environmental release category | ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)                                                                                                                                                                                                                                                                         |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                        |

## Uses in Coatings - Industrial

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC15 Use as laboratory reagent.</p> |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

**Ventilation rate** Manual spraying Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system. PROC7 Industrial spraying Carry out in a vented booth or extracted enclosure.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

## Uses in Coatings - Industrial

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in Cleaning Agents - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in Cleaning Agents - Industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Process scope                  | Covers the use as a component of cleaning products, including transfer from storage, pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Main sector                    | SU3 Industrial uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Environmental release category | ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC7 Industrial spraying<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC10 Roller application or brushing<br>PROC13 Treatment of articles by dipping and pouring. |

## Use in Cleaning Agents - Industrial

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

**Ventilation rate** Cleaning with high-pressure washers Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Lubricants - Industrial

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Lubricants - Industrial                                                                                                                                                                                                             |
| Process scope                  | Covers the use of formulated lubricants in closed and open systems, including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes. |
| Main sector                    | SU3 Industrial uses                                                                                                                                                                                                                 |
| <u>Environment</u>             |                                                                                                                                                                                                                                     |
| Environmental release category | ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)<br>ERC7 Use of functional fluid at industrial site                                                                                   |
| <u>Worker</u>                  |                                                                                                                                                                                                                                     |

## Lubricants - Industrial

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC17 Lubrication at high energy conditions in metal working operations</p> <p>PROC18 General greasing/lubrication at high kinetic energy conditions</p> |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Provide extract ventilation to points where emissions occur.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

## Lubricants - Industrial

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



**Exposure scenario**  
**Metal working fluids / rolling oils - Industrial**

**Identification**

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

**1. Title of exposure scenario**

|                                |                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Metal working fluids / rolling oils - Industrial                                                                                                                                                                                                                                                                 |
| Process scope                  | Covers the use in formulated MWFs/rolling oils, including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils. |
| Main sector                    | SU3 Industrial uses                                                                                                                                                                                                                                                                                              |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                  |
| Environmental release category | ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)                                                                                                                                                                                                                   |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                  |

## Metal working fluids / rolling oils - Industrial

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC7 Industrial spraying</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC17 Lubrication at high energy conditions in metal working operations</p> |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.  
Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.

#### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Automate activity where possible.

#### Risk management measures

Use suitable eye protection.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

## Metal working fluids / rolling oils - Industrial

**Assessment method**

Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

**4. Guidance to check compliance with the exposure scenario (Health 1)**

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use as binders and release agents - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|               |                                                                                                                                                                                     |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title    | Use as binders and release agents - Industrial                                                                                                                                      |
| Process scope | Covers the use as binders and release agents, including material transfers, mixing, application (including spraying and brushing), mould forming and casting and handling of waste. |
| Main sector   | SU3 Industrial uses                                                                                                                                                                 |

#### Environment

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| Environmental release category | ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
|--------------------------------|------------------------------------------------------------------------------------------------|

#### Worker

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Process category | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC6 Calendering operations.<br>PROC7 Industrial spraying<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC10 Roller application or brushing<br>PROC14 Tableting, compression, extrusion, pelletisation, granulation |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 2. Conditions of use affecting exposure (Industrial - Environment 1)

## Use as binders and release agents - Industrial

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 2. Conditions of use affecting exposure (Workers - Health 1)

### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Manual spraying Carry out in a vented booth or extracted enclosure.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Automate activity where possible.

### Risk management measures

Use suitable eye protection.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Functional Fluids - Industrial

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Functional Fluids - Industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Process scope                  | Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment, including maintenance and related material transfers.                                                                                                                                                                                                                                                                                                                                                                                           |
| Main sector                    | SU3 Industrial uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Environmental release category | ERC7 Use of functional fluid at industrial site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) |

### 2. Conditions of use affecting exposure (Industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Workers - Health 1)

## Functional Fluids - Industrial

### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Use drum pumps or carefully pour from container.

### Risk management measures

Use suitable eye protection.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in laboratories - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                 |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in laboratories - Industrial                                                                                                |
| Process scope                  | Use of the substance within laboratory settings, including material transfers and equipment cleaning.                           |
| Main sector                    | SU3 Industrial uses                                                                                                             |
| <u>Environment</u>             |                                                                                                                                 |
| Environmental release category | ERC2 Formulation into mixture<br>ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
| <u>Worker</u>                  |                                                                                                                                 |
| Process category               | PROC10 Roller application or brushing<br>PROC15 Use as laboratory reagent.                                                      |

#### 2. Conditions of use affecting exposure (Industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Workers - Health 1)

##### Product characteristics

|                       |                                             |
|-----------------------|---------------------------------------------|
| Physical state        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| Concentration details | Covers concentrations up to 100 %.          |

##### Frequency and duration of use

## Use in laboratories - Industrial

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.  
Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands.

### Risk management measures

Use suitable eye protection.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.  
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Water treatment chemicals - Industrial

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Water treatment chemicals - Industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Process scope                  | Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Main sector                    | SU3 Industrial uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Environmental release category | ERC3 Formulation into solid matrix<br>ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC13 Treatment of articles by dipping and pouring. |

#### 2. Conditions of use affecting exposure (Industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Workers - Health 1)

## Water treatment chemicals - Industrial

### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Drain down system prior to equipment break-in or maintenance. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Store substance within a closed system.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Use drum pumps or carefully pour from container.

### Risk management measures

Use suitable eye protection.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in Coatings - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in Coatings - Professional                                                                                                                                                                                                                                                                                                                             |
| Process scope                  | Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods and film formation) and equipment cleaning, maintenance and associated laboratory activities. |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                                                                                                     |
| <b><u>Environment</u></b>      |                                                                                                                                                                                                                                                                                                                                                            |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                                                                                                                        |
| <b><u>Worker</u></b>           |                                                                                                                                                                                                                                                                                                                                                            |

## Use in Coatings - Professional

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC15 Use as laboratory reagent.</p> <p>PROC19 Manual activities involving hand contact</p> |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

|                              |                                             |
|------------------------------|---------------------------------------------|
| <b>Physical state</b>        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| <b>Concentration details</b> | Covers concentrations up to 100 %.          |

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

|                    |                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Temperature</b> | <p>Assumes use at not more than 20°C above ambient temperature, unless stated differently.</p> <p>Assumes a good basic standard of occupational hygiene is implemented.</p> |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Technical conditions and measures at process level (source) to prevent release

|                                      |                                                                                                                                                                                             |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technical protective measures</b> | Avoid direct eye contact with product, also via contamination on hands. Store substance within a closed system. Manual spraying Indoor. Carry out in a vented booth or extracted enclosure. |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Risk management measures

Use suitable eye protection.

Manual spraying

Outdoor.

Wear a respirator conforming to EN140 with Type A filter or better.

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

|                          |                        |
|--------------------------|------------------------|
| <b>Assessment method</b> | Used ECETOC TRA model. |
|--------------------------|------------------------|

## Use in Coatings - Professional

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in Cleaning Agents - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                        |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in Cleaning Agents - Professional                                                                                                                                                                                                                                  |
| Process scope                  | Covers the use as a component of cleaning products, including pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand). |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                 |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                        |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                                    |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                        |

## Use in Cleaning Agents - Professional

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC15 Use as laboratory reagent.</p> |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

**Ventilation rate** Spraying Indoor. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Store substance within a closed system.

#### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Spraying Outdoor. Avoid carrying out activities involving exposure for more than 15 minutes. Limit the substance content in the product to 1%.

#### Risk management measures

Use suitable eye protection.

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

## Use in Cleaning Agents - Professional

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Lubricants - Professional

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|               |                                                                                                                                                                                                                              |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title    | Lubricants - Professional                                                                                                                                                                                                    |
| Process scope | Covers the use of formulated lubricants in closed and open systems, including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil. |
| Main sector   | SU22 Professional uses                                                                                                                                                                                                       |

#### Environment

|                                |                                                                                                                                                                                                                                                                                                                |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)<br>ERC9a Widespread use of functional fluid (indoor)<br>ERC9b Widespread use of functional fluid (outdoor) |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Worker

## Lubricants - Professional

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC4 Chemical production where opportunity for exposure arises</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC17 Lubrication at high energy conditions in metal working operations</p> <p>PROC18 General greasing/lubrication at high kinetic energy conditions</p> <p>PROC20 Use of functional fluids in small devices</p> |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

|                              |                                             |
|------------------------------|---------------------------------------------|
| <b>Physical state</b>        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| <b>Concentration details</b> | Covers concentrations up to 100 %.          |

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

|                    |                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Temperature</b> | <p>Assumes use at not more than 20°C above ambient temperature, unless stated differently.</p> <p>Assumes a good basic standard of occupational hygiene is implemented.</p> |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Technical conditions and measures at process level (source) to prevent release

|                                      |                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technical protective measures</b> | <p>Avoid direct eye contact with product, also via contamination on hands. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.</p> <p>Provide extract ventilation to emission points when contact with warm (&gt; 50°C) lubricant is likely. Store substance within a closed system.</p> |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Organisational measures to prevent/limit releases, dispersion and exposure

|                                |                                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Organisational measures</b> | <p>Avoid carrying out activities involving exposure for more than 4 hours. Allow time for product to drain from workpiece. Retain drain-downs in sealed storage pending disposal or for subsequent recycle.</p> |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Risk management measures

Use suitable eye protection.

If above technical/organisational control measures are not feasible, then adopt following PPE:

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 3. Exposure estimation (Environment 1)

## Lubricants - Professional

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method**

Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



**Exposure scenario**  
**Metal working fluids / rolling oils - Professional**

**Identification**

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

**1. Title of exposure scenario**

|                                |                                                                                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Metal working fluids / rolling oils - Professional                                                                                                                                                                                                              |
| Process scope                  | Covers the use in formulated MWFs, including transfer operations, open and contained cutting/machining activities, automated and manual application of corrosion protections, draining and working on contaminated/ reject articles and disposal of waste oils. |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                          |
| <b><u>Environment</u></b>      |                                                                                                                                                                                                                                                                 |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                             |
| <b><u>Worker</u></b>           |                                                                                                                                                                                                                                                                 |

## Metal working fluids / rolling oils - Professional

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process category</b> | <p>PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions</p> <p>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions</p> <p>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition</p> <p>PROC5 Mixing or blending in batch processes</p> <p>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities</p> <p>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities</p> <p>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)</p> <p>PROC10 Roller application or brushing</p> <p>PROC11 Non industrial spraying</p> <p>PROC13 Treatment of articles by dipping and pouring.</p> <p>PROC17 Lubrication at high energy conditions in metal working operations</p> |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

|                              |                                             |
|------------------------------|---------------------------------------------|
| <b>Physical state</b>        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| <b>Concentration details</b> | Covers concentrations up to 100 %.          |

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

|                    |                                                                                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Temperature</b> | <p>Assumes use at not more than 20°C above ambient temperature, unless stated differently.</p> <p>Assumes a good basic standard of occupational hygiene is implemented.</p> |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Technical conditions and measures at process level (source) to prevent release

|                                      |                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technical protective measures</b> | <p>Avoid direct eye contact with product, also via contamination on hands. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.</p> <p>Spraying Carry out in a vented booth or extracted enclosure. Store substance within a closed system. Bulk transfers Clear transfer lines prior to de-coupling.</p> |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Organisational measures to prevent/limit releases, dispersion and exposure

|                                |                                                                                                                                                                                                          |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Organisational measures</b> | Avoid carrying out activities involving exposure for more than 4 hours. Allow time for product to drain from workpiece. Retain drain-downs in sealed storage pending disposal or for subsequent recycle. |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Risk management measures

Use suitable eye protection.

If above technical/organisational control measures are not feasible, then adopt following PPE:

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## Metal working fluids / rolling oils - Professional

### 3. Exposure estimation (Health 1)

**Assessment method**

Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use as binders and release agents - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use as binders and release agents - Professional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Process scope                  | Covers the use as binders and release agents, including material transfers, mixing, application by spraying, brushing and handling of waste.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b><u>Environment</u></b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b><u>Worker</u></b>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC6 Calendering operations.<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC10 Roller application or brushing<br>PROC11 Non industrial spraying<br>PROC14 Tableting, compression, extrusion, pelletisation, granulation |

## Use as binders and release agents - Professional

### 2. Conditions of use affecting exposure (Workers - Health 1)

#### Product characteristics

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

#### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

#### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

#### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.  
Spraying Carry out in a vented booth or extracted enclosure. Store substance within a closed system.

#### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Avoid carrying out activities involving exposure for more than 4 hours. Allow time for product to drain from workpiece. Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

#### Risk management measures

Use suitable eye protection.

If above technical/organisational control measures are not feasible, then adopt following PPE:

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in Agrochemicals - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in Agrochemicals - Professional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Process scope                  | Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging, including equipment clean-downs and disposal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b><u>Environment</u></b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b><u>Worker</u></b>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC11 Non industrial spraying<br>PROC13 Treatment of articles by dipping and pouring. |

#### 2. Conditions of use affecting exposure (Workers - Health 1)

##### Product characteristics

## Use in Agrochemicals - Professional

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Spraying/fogging by machine application Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of > 20. Store substance within a closed system.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Avoid carrying out activities involving exposure for more than 4 hours. Spraying/fogging by manual application Limit the substance content in the product to 25%. Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

### Risk management measures

Use suitable eye protection.

If above technical/organisational control measures are not feasible, then adopt following PPE:

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

## 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Functional Fluids - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Functional Fluids - Professional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Process scope                  | Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in professional equipment, including maintenance and related material transfers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Environmental release category | ERC9a Widespread use of functional fluid (indoor)<br>ERC9b Widespread use of functional fluid (outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)<br>PROC20 Use of functional fluids in small devices |

#### 2. Conditions of use affecting exposure (Workers - Health 1)

##### Product characteristics

## Functional Fluids - Professional

**Physical state** Liquid, vapour pressure 0.5 - 10 kPa at STP

**Concentration details** Covers concentrations up to 100 %.

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Store substance within a closed system.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Retain drain-downs in sealed storage pending disposal or for subsequent recycle. Carefully pour from containers.

### Risk management measures

Use suitable eye protection.

## 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### De-icing and anti-icing applications - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | De-icing and anti-icing applications - Professional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Process scope                  | Ice prevention and de-icing of vehicles, aircraft and other equipment by spraying.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Environmental release category | ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC11 Non industrial spraying |

#### 2. Conditions of use affecting exposure (Workers - Health 1)

##### Product characteristics

|                       |                                             |
|-----------------------|---------------------------------------------|
| Physical state        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| Concentration details | Covers concentrations up to 100 %.          |

##### Frequency and duration of use

## De-icing and anti-icing applications - Professional

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

**Temperature** Assumes use at not more than 20°C above ambient temperature, unless stated differently.  
Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Bulk transfers Clear transfer lines prior to de-coupling.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Avoid carrying out activities involving exposure for more than 1 hour. Spraying/fogging by machine application Ensure operation is undertaken outdoors. Stay upwind/keep distance from source.

### Risk management measures

Use suitable eye protection.

## 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.  
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in laboratories - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                          |
|--------------------------------|----------------------------------------------------------------------------------------------------------|
| Main title                     | Use in laboratories - Professional                                                                       |
| Process scope                  | Use of small quantities within laboratory settings, including material transfers and equipment cleaning. |
| Main sector                    | SU22 Professional uses                                                                                   |
| <u>Environment</u>             |                                                                                                          |
| Environmental release category | ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)         |
| <u>Worker</u>                  |                                                                                                          |
| Process category               | PROC10 Roller application or brushing<br>PROC15 Use as laboratory reagent.                               |

#### 2. Conditions of use affecting exposure (Workers - Health 1)

##### Product characteristics

|                       |                                             |
|-----------------------|---------------------------------------------|
| Physical state        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| Concentration details | Covers concentrations up to 100 %.          |

##### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

##### Other given operational conditions affecting workers exposure

|             |                                                                                         |
|-------------|-----------------------------------------------------------------------------------------|
| Temperature | Assumes use at not more than 20°C above ambient temperature, unless stated differently. |
|-------------|-----------------------------------------------------------------------------------------|

## Use in laboratories - Professional

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands.

### Risk management measures

Use suitable eye protection.

## 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

### **Assessment method**

Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Water treatment chemicals - Professional

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Water treatment chemicals - Professional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Process scope                  | Covers the use of the substance for the treatment of water in open and closed systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Main sector                    | SU22 Professional uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Environmental release category | ERC8f Widespread use leading to inclusion into/onto article (outdoor)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <u>Worker</u>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Process category               | PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions<br>PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition<br>PROC4 Chemical production where opportunity for exposure arises<br>PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities<br>PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities<br>PROC13 Treatment of articles by dipping and pouring. |

#### 2. Conditions of use affecting exposure (Workers - Health 1)

##### Product characteristics

|                       |                                             |
|-----------------------|---------------------------------------------|
| Physical state        | Liquid, vapour pressure 0.5 - 10 kPa at STP |
| Concentration details | Covers concentrations up to 100 %.          |

## Water treatment chemicals - Professional

### Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

### Other given operational conditions affecting workers exposure

#### Temperature

Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Assumes a good basic standard of occupational hygiene is implemented.

### Technical conditions and measures at process level (source) to prevent release

**Technical protective measures** Avoid direct eye contact with product, also via contamination on hands. Bulk transfers Clear transfer lines prior to de-coupling. Drum/batch transfers Use drum pumps or carefully pour from container.

### Organisational measures to prevent/limit releases, dispersion and exposure

**Organisational measures** Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

### Risk management measures

Use suitable eye protection.

## 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

## 3. Exposure estimation (Health 1)

#### Assessment method

Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

## 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Use in Coatings - Consumer

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title       | Use in Coatings - Consumer                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Process scope    | Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.                                                                                                                                                                                                                                                  |
| Product category | PC1 Adhesives, sealants.<br>PC4 Anti-freeze and de-icing products.<br>PC8 Biocidal products<br>PC9a Coatings and paints, thinners, paint removers.<br>PC9b Fillers, putties, plasters, modelling clay.<br>PC9c Finger paints.<br>PC15 Non-metal-surface treatment products.<br>PC18 Ink and toners.<br>PC23 Leather treatment products<br>PC24 Lubricants, greases and release products.<br>PC31 Polishes and wax blends.<br>PC34 Textile dyes and impregnating products |
| Main sector      | SU21 Consumer uses                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

### Environment

|                                |                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

## Use in Coatings - Consumer

### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

## 2. Conditions of use affecting exposure (Non-industrial - Health 1)

### Product characteristics

#### Physical state

Liquid, vapour pressure > 10 Pa (STP)

#### Concentration details

Covers concentrations up to 50 %. Unless otherwise stated.

PC1 Adhesives, sealants. Covers concentrations up to 30 %. PC8\_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners ) Covers concentrations up to 5 %. PC8\_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) Covers concentrations up to 15 %. PC9a\_2 Solvent-rich, high-solid, water-borne paint Covers concentrations up to 27.5 %. PC9b\_1 Fillers and putty PC9b\_2 Plasters and floor equalisers Covers concentrations up to 2 %. PC9b\_3 Modelling clay Covers concentrations up to 10 %. PC15 Non-metal-surface treatment products. Solvent-rich paint Covers concentrations up to 27.5 . PC18 Ink and toners. Covers concentrations up to 10 %. PC24 Lubricants, greases and release products. PC24\_1 Liquids Covers concentrations up to 100 %. PC24 Lubricants, greases and release products. PC24\_2 Pastes Covers concentrations up to 20 %.

### Amounts used

PC9b\_2 Plasters and floor equalisers  
For each use event, covers use amounts up to 13,800 g.  
PC1\_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)  
For each use event, covers use amounts up to 6,390 g.  
PC24\_1 Liquids  
For each use event, covers use amounts up to 2,200 g.  
PC4\_2 Pouring into radiator  
For each use event, covers use amounts up to 2,000 g.  
PC9a\_2 Solvent-rich, high-solid, water-borne paint  
PC9a\_3 Aerosol spray can  
PC9a\_4 Removers (paint-, glue-, wallpaper-, sealant-remover)  
PC31\_1 Polishes, wax/cream (floor, furniture, shoes)  
PC34 Textile dyes and impregnating products  
For each use event, covers use amounts up to 1,000 g.  
PC1\_3 Glue from spray  
PC1\_4 Sealants  
PC8 Biocidal products  
PC9b\_1 Fillers and putty  
PC18 Ink and toners.  
PC31\_2 Polishes, spray (furniture, shoes)  
PC24\_2 Pastes  
PC24\_3 Sprays  
For each use event, covers use amounts up to 100 g.  
PC4\_1 Washing car window  
PC4\_3 Lock de-icer  
PC9b\_3 Modelling clay  
PC9c Finger paints  
For each use event, covers use amounts up to 10 g.

### Frequency and duration of use

Covers use up to 1 time per day.  
Covers use up to 365 days/year.  
Unless otherwise stated.

## Use in Coatings - Consumer

PC8 Biocidal products Covers use up to 128 days/year. PC31\_1 Polishes, wax/cream (floor, furniture, shoes) Covers use up to 29 days/year. PC9b\_1 Fillers and putty PC9b\_2 Plasters and floor equalisers Covers use up to 12 days/year. PC24 Lubricants, greases and release products. PC24\_2 Pastes Covers use up to 10 days/year. PC31\_2 Polishes, spray (furniture, shoes) Covers use up to 8 days/year. PC1\_3 Glue from spray PC9a\_2 Solvent-rich, high-solid, water-borne paint PC24 Lubricants, greases and release products. PC24\_3 Sprays Covers use up to 6 days/year. PC24 Lubricants, greases and release products. PC24\_1 Liquids Covers use up to 4 days/year. PC9a\_4 Removers (paint-, glue-, wallpaper-, sealant-remover). Covers use up to 3 days/year. PC9a\_3 Aerosol spray can Covers use up to 2 days/year. PC1\_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers use up to 1 days/year.

### Human factors not influenced by risk management

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Potentially exposed body parts | PC1_1 Glues, hobby use PC1_3 Glue from spray PC1_4 Sealants PC9b_1 Fillers and putty Covers skin contact area up to 35.73 cm <sup>2</sup> . PC1_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers skin contact area up to 110 cm <sup>2</sup> . PC4_2 Pouring into radiator PC8 Biocidal products PC8_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC9a_2 Solvent-rich, high-solid, water-borne paint PC31 Polishes and wax blends. PC24_3 Sprays Covers skin contact area up to 430 cm <sup>2</sup> . PC4_3 Lock de-icer Covers skin contact area up to 214.4 cm <sup>2</sup> . PC8 Biocidal products PC8_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners ) PC9a_4 Removers (paint-, glue-, wallpaper-, sealant-remover) PC9b_2 Plasters and floor equalisers Covers skin contact area up to 857.5 cm <sup>2</sup> . PC9b_3 Modelling clay PC9c Finger paints. Covers skin contact area up to 254.4 cm <sup>2</sup> . PC18 Ink and toners. Covers skin contact area up to 71.4 cm <sup>2</sup> . PC24_1 Liquids PC24_2 Pastes Covers skin contact area up to 468 cm <sup>2</sup> . |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Other given operational conditions affecting Non-industrial exposure

|                  |                                                                                                                                      |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Temperature      | Assumes activities are at ambient temperature (unless stated differently).                                                           |
| Room size        | Covers use in room size of 20 m <sup>3</sup> . Unless otherwise stated.                                                              |
| Ventilation rate | Covers use under typical household ventilation. , or: Covers use in a one car garage (34 m <sup>3</sup> ) under typical ventilation. |

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

|                   |                                                                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessment method | Used ECETOC TRA model.<br><br>Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in Cleaning Agents - Consumer

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in Cleaning Agents - Consumer                                                                                                                                                                                                                                                              |
| Process scope                  | Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.                                                                                                        |
| Product category               | PC3 Air care products.<br>PC4 Anti-freeze and de-icing products.<br>PC8 Biocidal products<br>PC9a Coatings and paints, thinners, paint removers.<br>PC24 Lubricants, greases and release products.<br>PC35 Washing and cleaning products<br>PC38 Welding and soldering products, flux products |
| Main sector                    | SU21 Consumer uses                                                                                                                                                                                                                                                                             |
| <u>Environment</u>             |                                                                                                                                                                                                                                                                                                |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)                                                                                            |

#### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

##### Product characteristics

## Use in Cleaning Agents - Consumer

### Physical state

Liquid, vapour pressure > 10 Pa (STP)

### Concentration details

Covers concentrations up to 50 %. Unless otherwise stated.

PC9a\_2 Solvent-rich, high-solid, water-borne paint Covers concentrations up to 27.5 %.

PC8\_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners ) PC24 Lubricants, greases and release products.

PC24\_1 Liquids Covers concentrations up to 100 %. PC24 Lubricants, greases and release products. PC24\_2 Pastes Covers concentrations up to 20 %. PC35 Washing and cleaning products Covers concentrations up to 70 %.

### Amounts used

PC24 Lubricants, greases and release products.

PC24\_1 Liquids

For each use event, covers use amounts up to 2,200 g.

PC4 Anti-freeze and de-icing products.

PC4\_2 Pouring into radiator

For each use event, covers use amounts up to 2,000 g.

PC9a\_2 Solvent-rich, high-solid, water-borne paint

PC9a\_3 Aerosol spray can

PC9a\_4 Removers (paint-, glue-, wallpaper-, sealant-remover)

For each use event, covers use amounts up to 1,000 g.

PC8 Biocidal products

PC24 Lubricants, greases and release products.

PC24\_2 Pastes

PC24\_3 Sprays

PC35 Washing and cleaning products

PC38 Welding and soldering products, flux products

For each use event, covers use amounts up to 100 g.

PC4\_3 Lock de-icer

For each use event, covers use amounts up to 4 g.

PC3 Air care products.

For each use event, covers use amounts up to 1 g.

### Frequency and duration of use

Covers use up to 365 days/year.

Unless otherwise stated.

Covers use up to 1 time per day.

Unless otherwise stated.

PC3\_1 Air care, instant action (aerosol sprays)

PC3\_2 Air care, continuous action (solid and liquid)

Covers use up to 4 times per day.

PC8\_2 Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners ) PC8\_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC35 Washing and cleaning products Covers use up to 128 days/year. PC9a\_2 Solvent-rich, high-solid, water-borne paint PC24 Lubricants, greases and release products. PC24\_3 Sprays Covers use up to 6 days/year. PC9a\_3 Aerosol spray can Covers use up to 2 days/year. PC9a\_4 Removers (paint-, glue-, wallpaper-, sealant-remover). Covers use up to 3 days/year. PC24 Lubricants, greases and release products. PC24\_1 Liquids Covers use up to 4 days/year. PC24 Lubricants, greases and release products. PC24\_2 Pastes Covers use up to 10 days/year.

### Human factors not influenced by risk management

## Use in Cleaning Agents - Consumer

### Potentially exposed body parts

Covers skin contact area up to 857.5 cm<sup>2</sup>. Unless otherwise stated. PC24 Lubricants, greases and release products. PC24\_1 Liquids PC24\_2 Pastes Covers skin contact area up to 468 cm<sup>2</sup>. PC3\_1 Air care, instant action (aerosol sprays) PC4 Anti-freeze and de-icing products. PC4\_2 Pouring into radiator PC8 Biocidal products PC8\_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) PC9a\_2 Solvent-rich, high-solid, water-borne paint PC24 Lubricants, greases and release products. PC24\_3 Sprays PC35 Washing and cleaning products PC8\_3 Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) Covers skin contact area up to 428 cm<sup>2</sup>. PC4 Anti-freeze and de-icing products. PC4\_3 Lock de-icer Covers skin contact area up to 214.4 cm<sup>2</sup>. PC3\_2 Air care, continuous action (solid and liquid) Covers skin contact area up to 35.70 cm<sup>2</sup>.

### Other given operational conditions affecting Non-industrial exposure

|                  |                                                                                                                                      |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Temperature      | Assumes activities are at ambient temperature (unless stated differently).                                                           |
| Room size        | Covers use in room size of 20 m <sup>3</sup> . Unless otherwise stated.                                                              |
| Ventilation rate | Covers use under typical household ventilation. , or: Covers use in a one car garage (34 m <sup>3</sup> ) under typical ventilation. |

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

|                   |                                                                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessment method | Used ECETOC TRA model.<br><br>Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Lubricants - Consumer

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|                  |                                                                                                                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title       | Lubricants - Consumer                                                                                                                                                                                                |
| Process scope    | Covers the consumer use of formulated lubricants in closed and open systems, including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil. |
| Product category | PC1 Adhesives, sealants.<br>PC24 Lubricants, greases and release products.<br>PC31 Polishes and wax blends.                                                                                                          |
| Main sector      | SU21 Consumer uses                                                                                                                                                                                                   |

#### Environment

|                                |                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

#### Product characteristics

|                       |                                                            |
|-----------------------|------------------------------------------------------------|
| Physical state        | Liquid, vapour pressure > 10 Pa (STP)                      |
| Concentration details | Covers concentrations up to 30 %. Unless otherwise stated. |

## Lubricants - Consumer

PC24 Lubricants, greases and release products. PC24\_1 Liquids Covers concentrations up to 100 %. PC24 Lubricants, greases and release products. PC24\_3 Sprays PC31 Polishes and wax blends. Covers concentrations up to 50 %. PC24 Lubricants, greases and release products. PC24\_2 Pastes Covers concentrations up to 20 %.

### Amounts used

PC1\_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue)

For each use event, covers use amounts up to 6,390 g.

PC24 Lubricants, greases and release products.

PC24\_1 Liquids

For each use event, covers use amounts up to 2,200 g.

PC31\_1 Polishes, wax/cream (floor, furniture, shoes)

For each use event, covers use amounts up to 142 g.

PC1\_3 Glue from spray

PC1\_4 Sealants

PC24 Lubricants, greases and release products.

PC24\_2 Pastes

PC24\_3 Sprays

PC31\_2 Polishes, spray (furniture, shoes)

For each use event, covers use amounts up to 100 g.

PC1\_1 Glues, hobby use

For each use event, covers use amounts up to 9 g.

### Frequency and duration of use

Covers use up to 1 time per day.

PC1\_1 Glues, hobby use PC1\_4 Sealants Covers use up to 365 days/year. PC31\_1 Polishes, wax/cream (floor, furniture, shoes) Covers use up to 29 days/year. PC24 Lubricants, greases and release products. PC24\_2 Pastes Covers use up to 10 days/year. PC31\_2 Polishes, spray (furniture, shoes) Covers use up to 8 days/year. PC1\_3 Glue from spray PC24 Lubricants, greases and release products. PC24\_3 Sprays Covers use up to 6 days/year. PC24 Lubricants, greases and release products. PC24\_1 Liquids Covers use up to 4 days/year. PC1\_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers use up to 1 days/year.

### Human factors not influenced by risk management

#### **Potentially exposed body parts**

PC24 Lubricants, greases and release products. PC24\_1 Liquids PC24\_2 Pastes Covers skin contact area up to 468 cm<sup>2</sup>. PC24 Lubricants, greases and release products. PC24\_3 Sprays PC31 Polishes and wax blends. Covers skin contact area up to 430 cm<sup>2</sup>. PC1\_2 Glues DIY-use (carpet glue, tile glue, wood parquet glue) Covers skin contact area up to 110.00 cm<sup>2</sup>. PC1\_1 Glues, hobby use PC1\_3 Glue from spray PC1\_4 Sealants Covers skin contact area up to 35.70 cm<sup>2</sup>.

### Other given operational conditions affecting Non-industrial exposure

#### **Temperature**

Assumes activities are at ambient temperature (unless stated differently).

#### **Room size**

Covers use in room size of 20 m<sup>3</sup>. Unless otherwise stated.

#### **Ventilation rate**

Covers use under typical household ventilation. , or: Covers use in a one car garage (34 m<sup>3</sup>) under typical ventilation.

### **3. Exposure estimation (Environment 1)**

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### **3. Exposure estimation (Health 1)**

## Lubricants - Consumer

**Assessment method**

Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

**4. Guidance to check compliance with the exposure scenario (Health 1)**

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Use in Agrochemicals - Consumer

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title                     | Use in Agrochemicals - Consumer                                                                                                                                                                     |
| Process scope                  | Covers the consumer use in agrochemicals in liquid and solid forms.                                                                                                                                 |
| Product category               | PC12 Lawn and garden preparations (- fertilizers).<br>PC27 Plant protection products.                                                                                                               |
| Main sector                    | SU21 Consumer uses                                                                                                                                                                                  |
| <b><u>Environment</u></b>      |                                                                                                                                                                                                     |
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |

#### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

##### Product characteristics

|                       |                                                            |
|-----------------------|------------------------------------------------------------|
| Physical state        | Liquid, vapour pressure > 10 Pa (STP)                      |
| Concentration details | Covers concentrations up to 50 %. Unless otherwise stated. |

##### Amounts used

## Use in Agrochemicals - Consumer

For each use event, covers use amounts up to 50 g.

For each use event, avoid swallowing amounts more than 0.3 g.

### Frequency and duration of use

Covers use up to 1 time per day.

Covers use up to 365 days/year.

### Human factors not influenced by risk management

**Potentially exposed body parts**      Covers skin contact area up to 875.5 cm<sup>2</sup>.

### Other given operational conditions affecting Non-industrial exposure

**Temperature**      Assumes activities are at ambient temperature (unless stated differently).

**Room size**      Covers use in room size of 20 m<sup>3</sup>. Unless otherwise stated.

**Ventilation rate**      Covers use under typical household ventilation.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method**      Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Functional Fluids - Consumer

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                  |                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------|
| Main title       | Functional Fluids - Consumer                                                                         |
| Process scope    | Use of sealed items containing functional fluids e.g. transfer oils, hydraulic fluids, refrigerants. |
| Product category | PC16 Heat transfer fluids.<br>PC17 Hydraulic fluids.                                                 |
| Main sector      | SU21 Consumer uses                                                                                   |

#### Environment

|                                |                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC9a Widespread use of functional fluid (indoor)<br>ERC9b Widespread use of functional fluid (outdoor) |
|--------------------------------|---------------------------------------------------------------------------------------------------------|

#### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

##### Product characteristics

|                       |                                                             |
|-----------------------|-------------------------------------------------------------|
| Physical state        | Liquid, vapour pressure > 10 Pa (STP)                       |
| Concentration details | Covers concentrations up to 100 %. Unless otherwise stated. |

##### Amounts used

For each use event, covers use amounts up to 2,200 g.

##### Frequency and duration of use

## Functional Fluids - Consumer

Covers use up to 4 days/year.

Covers exposure up to 0.17 hours per event.

### Human factors not influenced by risk management

**Potentially exposed body parts**      Covers skin contact area up to 468 cm<sup>2</sup>.

### Other given operational conditions affecting Non-industrial exposure

**Temperature**      Assumes activities are at ambient temperature (unless stated differently).

**Room size**      Covers use in room size of 20 m<sup>3</sup>. Unless otherwise stated.

**Ventilation rate**      Covers use in a one car garage (34 m<sup>3</sup>) under typical ventilation.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method**      Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### De-icing and anti-icing applications - Consumer

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                                |                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| Main title                     | De-icing and anti-icing applications - Consumer                                                  |
| Process scope                  | De-icing of vehicles and similar equipment by spraying.                                          |
| Product category               | PC4 Anti-freeze and de-icing products.                                                           |
| Main sector                    | SU21 Consumer uses                                                                               |
| <b><u>Environment</u></b>      |                                                                                                  |
| Environmental release category | ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |

#### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

##### Product characteristics

|                       |                                                                                                                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical state        | Liquid, vapour pressure > 10 Pa (STP)                                                                                                                                                    |
| Concentration details | Covers concentrations up to 40 %. Unless otherwise stated. PC4_1 Washing car window<br>Covers concentrations up to 1 %. PC4_2 Pouring into radiator<br>Covers concentrations up to 10 %. |

##### Amounts used

For each use event, covers use amounts up to 2000 g.  
Unless otherwise stated.

## De-icing and anti-icing applications - Consumer

PC4\_1 Washing car window For each use event, covers use amounts up to 0.5 g. PC4\_3 Lock de-icer For each use event, covers use amounts up to 4 g.

### Frequency and duration of use

Covers use up to 365 days/year.

PC4\_1 Washing car window Covers exposure up to 0.02 hours per event. PC4\_2 Pouring into radiator Covers exposure up to 0.17 hours per event. PC4\_3 Lock de-icer Covers exposure up to 0.25 hours per event.

### Human factors not influenced by risk management

**Potentially exposed body parts** Covers skin contact area up to 428 cm<sup>2</sup>. Unless otherwise stated. PC4\_3 Lock de-icer Covers skin contact area up to 214.4 cm<sup>2</sup>.

### Other given operational conditions affecting Non-industrial exposure

**Temperature** Assumes activities are at ambient temperature (unless stated differently).

**Ventilation rate** Covers use in a one car garage (34 m<sup>3</sup>) under typical ventilation.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario

### Water treatment chemicals - Consumer

#### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

#### 1. Title of exposure scenario

|                  |                                                                                        |
|------------------|----------------------------------------------------------------------------------------|
| Main title       | Water treatment chemicals - Consumer                                                   |
| Process scope    | Covers the use of the substance for the treatment of water in open and closed systems. |
| Product category | PC36 Water softeners.<br>PC37 Water treatment chemicals.                               |
| Main sector      | SU21 Consumer uses                                                                     |

#### Environment

|                                |                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| Environmental release category | ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
|--------------------------------|--------------------------------------------------------------------------------------------------|

#### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

##### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

#### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

##### Product characteristics

|                       |                                                            |
|-----------------------|------------------------------------------------------------|
| Physical state        | Liquid, vapour pressure > 10 Pa (STP)                      |
| Concentration details | Covers concentrations up to 20 %. Unless otherwise stated. |

##### Amounts used

For each use event, covers use amounts up to 10 g.  
Unless otherwise stated.

## Water treatment chemicals - Consumer

### Frequency and duration of use

Covers use up to 365 days/year.

### Human factors not influenced by risk management

**Potentially exposed body parts** Covers skin contact area up to 6,600 cm<sup>2</sup>. Unless otherwise stated.

### Other given operational conditions affecting Non-industrial exposure

**Temperature** Assumes activities are at ambient temperature (unless stated differently).

**Room size** Covers use in room size of 20 m<sup>3</sup>.

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

**Assessment method** Used ECETOC TRA model.

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



## Exposure scenario Other Consumer Uses

### Identification

|                           |                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name              | Isopropanol                                                                                                                                                         |
| REACH registration number | 01-2119457558-25-XXXX                                                                                                                                               |
| CAS number                | 67-63-0                                                                                                                                                             |
| EC number                 | 200-661-7                                                                                                                                                           |
| EU index number           | 603-117-00-0                                                                                                                                                        |
| Supplier                  | Univar Solutions UK Ltd<br>Aquarius House<br>6 Mid Point Business Park<br>Bradford<br>BD3 7AY<br>+44 1274 267300<br>+44 1274 267306<br>SDS.EMEA@univarsolutions.com |

### 1. Title of exposure scenario

|                  |                                                                                                                                                                                                                                                                   |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main title       | Other Consumer Uses                                                                                                                                                                                                                                               |
| Process scope    | Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: for cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation. |
| Product category | PC28 Perfumes, fragrances.<br>PC39 Cosmetics, personal care.                                                                                                                                                                                                      |
| Main sector      | SU21 Consumer uses                                                                                                                                                                                                                                                |

#### Environment

|                                |                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental release category | ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)<br>ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 2. Conditions of use affecting exposure (Non-industrial - Environment 1)

#### Product characteristics

Not regarded as dangerous for the environment. No exposure scenario required.

### 2. Conditions of use affecting exposure (Non-industrial - Health 1)

#### Product characteristics

In accordance to the Article 14 (5b) of the REACH Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC.

## Other Consumer Uses

### 3. Exposure estimation (Environment 1)

As no environmental hazard was identified, no environmental-related exposure assessment and risk characterisation was performed.

### 3. Exposure estimation (Health 1)

No exposure assessment presented for human health.

### 4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.