

This safety data sheet was created pursuant to the requirements of:  
UK REACH Regulations (SI 2019/758 as amended)

Revision date 26-Mar-2026

Revision Number 3

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

### 1.1. Product identifier

Product Code(s) 48879  
Safety data sheet number 48879  
Product Name BETAPRIME 5500

Pure substance/mixture Mixture

Contains BUTANONE

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

Recommended use Primer  
Surface coating  
Automotive

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

#### Supplier

Univar Solutions UK Ltd  
Aquarius House  
6 Mid Point Business Park  
Bradford  
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com  
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

### 1.4. Emergency telephone number

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

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

|                                                  |                     |
|--------------------------------------------------|---------------------|
| Flammable liquids                                | Category 2 - (H225) |
| Serious eye damage/eye irritation                | Category 2 - (H319) |
| Respiratory sensitisation                        | Category 1 - (H334) |
| Specific target organ toxicity — single exposure | Category 3 - (H336) |
| Category 3 Narcotic effects                      |                     |

### 2.2. Label elements

Contains BUTANONE



### Signal word

Danger

### Hazard statements

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapour

EUH208 - Contains DIPHENYLMETHANE-4,4'-DIISOCYANATE; 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE; DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE. May produce an allergic reaction.

EUH066 - Repeated exposure may cause skin dryness or cracking

### Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor

P370 + P378 - In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam to extinguish

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P501 - Dispose of contents/ container to an approved waste disposal plant

### Additional information

As from 24 August 2023 adequate training is required before industrial or professional use.

### 2.3. Other hazards

As from 24 August 2023 adequate training is required before industrial or professional use. The product does not contain any substance(s) classified as PBT or vPvB. This product does not contain any known or suspected endocrine disruptors. Product is a static accumulator.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

| Chemical name       | Weight-% | EC No (EU Index No)         | UK REACH registration number | Classification according to GB CLP (SI 2020/1567 as amended)               | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---------------------|----------|-----------------------------|------------------------------|----------------------------------------------------------------------------|------------------------------------|----------|----------------------|
| BUTANONE<br>78-93-3 | 50 - 60% | 201-159-0<br>(606-002-00-3) | 01-1376353405-7-XXX<br>X     | Flam. Liq. 2 (H225)<br>Eye Irrit. 2 (H319)<br>STOT SE 3 (H336)<br>(EUH066) | -                                  | -        | -                    |
| METHYLENEDIPH       | >=1 -    | -                           | -                            | Not Classified                                                             | -                                  | -        | -                    |

|                                                                                 |                     |                                 |   |                                                                                                                                                                             |                                                                                                                                                                                                                                                  |   |   |
|---------------------------------------------------------------------------------|---------------------|---------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| ENYL<br>DIISOCYANATE,<br>GLYCEROL<br>PROPOXYLATED,<br>COPOLYMER<br>68877-65-6   | <10%                |                                 |   |                                                                                                                                                                             |                                                                                                                                                                                                                                                  |   |   |
| DIPHENYLMETHA<br>NE-4,4'-DIISOCYA<br>NATE<br>101-68-8                           | > 0.1 - <<br>1.0%   | 202-966-0<br>(615-005-00<br>-9) | - | Acute Tox. 4 (H332)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Resp. Sens. 1 (H334)<br>Skin Sens. 1 (H317)<br>Carc. 2 (H351)<br>STOT SE 3 (H335)<br>STOT RE 2 (H373) | Eye Irrit.2;<br>H319:C >= 5 %<br>STOT SE3;<br>H335:C >= 5 %<br>Skin Irrit.2;<br>H315:C >= 5 %<br>Resp. Sens.1;<br>H334:C >= 0.1<br>%<br>Oral ATE: ><br>5,000 mg/kg<br>Inhalation ATE:<br>1.5 mg/l<br>(dust/mist)<br>Dermal ATE: ><br>9,400 mg/kg | - | - |
| 3-ISOCYANATOME<br>THYL-3,5,5-TRIME<br>THYLCYCLOHEXYL<br>ISOCYANATE<br>4098-71-9 | >= 0.25 -<br>< 0.5% | 223-861-6                       | - | Acute Tox. 1 (H330)<br>Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Resp. Sens. 1 (H334)<br>Skin Sens. 1 (H317)<br>STOT SE 3 (H335)<br>Aquatic Chronic 2<br>(H411)        | Resp. Sens.1;<br>H334:C >= 0.5<br>%<br>Skin Sens.1;<br>H317:C >= 0.5%<br><br>Oral ATE: 4827<br>mg/kg<br><br>Dermal ATE: ><br>7,000 mg/kg<br><br>Inhalation ATE:<br>0.04 mg/l<br>(dust/mist)                                                      | - | - |
| DIMETHYLBIS[(1-O<br>XONEODECYL)OX<br>Y] STANNANE<br>68928-76-7                  | 0.025%              | 273-028-6                       | - | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Skin Sens. 1A (H317)<br>Repr. 2 (H361d)<br>STOT RE 1 (H372)<br>Aquatic Chronic 3<br>(H412)                                   | -                                                                                                                                                                                                                                                | - | - |

**Full text of H- and EUH-phrases: see section 16**

This product does not contain candidate substances of very high concern at a concentration >= 0.1% (UK REACH Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General advice

Show this safety data sheet to the doctor in attendance. Use personal protection

recommended in Section 8.

|                                           |                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                         | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If breathing has stopped, give artificial respiration. Get medical attention immediately.                                                                                                                                                                            |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.                                                              |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Get medical attention if symptoms occur.                                            |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.                                                                                                                                                                                                                               |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Avoid breathing vapours or mists. |

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

|                   |                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b> | Coughing and/or wheezing. Difficulty in breathing. May cause drowsiness or dizziness. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. |
| <b>Eyes</b>       | Causes serious eye irritation. Burning sensation. May cause redness and tearing of the eyes.                                                                                                                                                                                                                                                                                                        |
| <b>Dermal</b>     | The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals. Hives. Itching. Rashes. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.                                                                    |

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

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note to doctors</b> | NOTE! Effects may be delayed. Keep affected person under observation. Maintain adequate ventilation and oxygenation of the patient. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Delayed pulmonary edema may occur. Keep victim under observation. May cause respiratory sensitization or asthma-like symptoms. Excessive exposure may aggravate pre-existing asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

|                                       |                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>   | Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam. |
| <b>Large Fire</b>                     | CAUTION: Use of water spray when fighting fire may be inefficient.                    |
| <b>Unsuitable extinguishing media</b> | Do not scatter spilled material with high pressure water streams.                     |

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

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific hazards arising from the chemical</b> | To avoid fire or explosion, ground and bond container and receiving equipment (and ground personnel) before transferring material. Take precautionary measures against static discharge. Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Thermal decomposition can lead to release of irritating and toxic gases and vapours. Heating will cause pressure rise with risk of bursting. Vapours may travel to areas away from work site before igniting/flashing back to vapour source. |
| <b>Hazardous combustion products</b>              | Carbon oxides. Nitrogen oxides (NOx).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**5.3. Advice for firefighters**

|                                                                       |                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special protective equipment and precautions for fire-fighters</b> | Evacuate personnel to safe areas. Cool containers with flooding quantities of water until well after fire is out. Collect contaminated fire extinguishing water separately. Do not allow it to enter drains or surface water. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>     | Use non sparking handtools and explosion-proof electric equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapours or mists. |
| <b>Other information</b>        | Ventilate the area. Refer to protective measures listed in Sections 7 and 8.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>For emergency responders</b> | Use personal protection recommended in Section 8.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**6.2. Environmental precautions**

|                                  |                                                                                                                                                      |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental precautions</b> | Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|

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

|                                        |                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods for containment</b>         | Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.                                                                       |
| <b>Methods for cleaning up</b>         | Ground and bond containers when transferring material. Pump with explosion-proof equipment. If available, use foam to smother or suppress. For waste disposal, see section 13. |
| <b>Prevention of secondary hazards</b> | Clean contaminated objects and areas thoroughly observing environmental regulations.                                                                                           |

**6.4. Reference to other sections**

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| <b>Reference to other sections</b> | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--------------------------------------------------------------------------|

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling****Advice on safe handling**

Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid prolonged or repeated contact with skin. Do not swallow. Wash thoroughly after handling. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. Never use air pressure for transferring product.

**General hygiene considerations**

Ensure that eyewash stations and safety showers are close to the workstation location. Remove contaminated clothing and protective equipment before entering eating areas. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

**7.2. Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Flammable mixtures may exist within the vapor space of containers at room temperature. Keep at temperatures between 5 and 25 °C. Store away from incompatible materials. See section 10 for more information.

**7.3. Specific end use(s)****Specific use(s)**

See section 1 for more information.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure Limits**

| Chemical name                                                                     | United Kingdom                                                                                    |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| BUTANONE<br>78-93-3                                                               | TWA: 200 ppm<br>TWA: 600 mg/m <sup>3</sup><br>STEL: 300 ppm<br>STEL: 899 mg/m <sup>3</sup><br>Sk* |
| METHYLENEDIPHENYL DIISOCYANATE, GLYCEROL<br>PROPOXYLATED, COPOLYMER<br>68877-65-6 | TWA: 0.02 mg/m <sup>3</sup><br>STEL: 0.07 mg/m <sup>3</sup>                                       |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE<br>101-68-8                                     | TWA: 0.02 mg/m <sup>3</sup><br>STEL: 0.07 mg/m <sup>3</sup><br>Sen+                               |

|                                                                         |                                                                        |
|-------------------------------------------------------------------------|------------------------------------------------------------------------|
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL<br>ISOCYANATE<br>4098-71-9 | TWA: 0.02 mg/m <sup>3</sup><br>STEL: 0.07 mg/m <sup>3</sup>            |
| DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE<br>68928-76-7                  | TWA: 0.1 mg/m <sup>3</sup><br>STEL: 0.2 mg/m <sup>3</sup><br>(As Sn) * |

#### Biological occupational exposure limits

| Chemical name                                                           | United Kingdom                                                                                      |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| BUTANONE<br>78-93-3                                                     | 70 µmol/L - urine (Butan-2-one) - post shift                                                        |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE<br>101-68-8                           | 1 µmol isocyanate-derived diamine/mol creatinine in urine<br>(At the end of the period of exposure) |
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL<br>ISOCYANATE<br>4098-71-9 | 1 mmol isocyanate-derived diamine/mol creatinine - urine<br>( ) - end of the period of exposure     |
| DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE<br>68928-76-7                  | 1 µmol isocyanate-derived diamine/mol creatinine in urine<br>(At the end of the period of exposure) |

#### Derived No Effect Level (DNEL) - Workers

| Chemical name                                                        | Oral | Dermal             | Inhalation                                                    |
|----------------------------------------------------------------------|------|--------------------|---------------------------------------------------------------|
| BUTANONE<br>78-93-3                                                  |      | 1161 mg/kg [4] [6] | 600 mg/m <sup>3</sup> [4] [6]                                 |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE<br>101-68-8                        |      |                    | 50 µg/m <sup>3</sup> [5] [6]<br>100 µg/m <sup>3</sup> [5] [7] |
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE<br>4098-71-9 |      |                    | 0.0453 mg/m <sup>3</sup> [5] [6]                              |

|     |                          |
|-----|--------------------------|
| [4] | Systemic health effects. |
| [5] | Local health effects.    |
| [6] | Long term.               |
| [7] | Short term.              |

#### Derived No Effect Level (DNEL) - General Public

| Chemical name                                 | Oral             | Dermal            | Inhalation                                                   |
|-----------------------------------------------|------------------|-------------------|--------------------------------------------------------------|
| BUTANONE<br>78-93-3                           | 31 mg/kg [4] [6] | 412 mg/kg [4] [6] | 106 mg/m <sup>3</sup> [4] [6]                                |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE<br>101-68-8 |                  |                   | 25 µg/m <sup>3</sup> [5] [6]<br>50 µg/m <sup>3</sup> [5] [7] |

|     |                          |
|-----|--------------------------|
| [4] | Systemic health effects. |
| [5] | Local health effects.    |
| [6] | Long term.               |
| [7] | Short term.              |

#### Predicted No Effect Concentration (PNEC)

| Chemical name                                                                | Freshwater  | Freshwater<br>(intermittent release) | Marine water | Marine water<br>(intermittent release) | Air |
|------------------------------------------------------------------------------|-------------|--------------------------------------|--------------|----------------------------------------|-----|
| BUTANONE<br>78-93-3                                                          | 55.8 mg/l   | 55.8 mg/l                            | 55.8 mg/l    |                                        |     |
| DIPHENYLMETHANE-4,4'-<br>-DIISOCYANATE<br>101-68-8                           | 0,0037 mg/l | 0,037 mg/l                           | 0,00037 mg/l |                                        |     |
| 3-ISOCYANATOMETHYL-<br>3,5,5-TRIMETHYLCYCLO<br>HEXYL ISOCYANATE<br>4098-71-9 | 0.06 mg/l   | 0.27 mg/L                            | 0.006 mg/l   | 0.04 mg/L                              |     |

| Chemical name                                                                | Freshwater<br>sediment    | Marine sediment           | Sewage treatment | Soil               | Food chain      |
|------------------------------------------------------------------------------|---------------------------|---------------------------|------------------|--------------------|-----------------|
| BUTANONE<br>78-93-3                                                          | 284.7 mg/kg               | 284.7 mg/kg               | 709 mg/l         | 22.5 mg/kg         | 1000 mg/kg food |
| DIPHENYLMETHANE-4,4'-<br>-DIISOCYANATE<br>101-68-8                           | 11.7 mg/kg<br>sediment dw | 1.17 mg/kg<br>sediment dw | 1 mg/L           | 2.33 mg/kg soil dw |                 |
| 3-ISOCYANATOMETHYL-<br>3,5,5-TRIMETHYLCYCLO<br>HEXYL ISOCYANATE<br>4098-71-9 | 218.92 mg/kg              | 21.89 mg/kg               | 10.6 mg/L        | 44.01 mg/kg        | 10.6 mg/l       |

## 8.2. Exposure controls

### Engineering controls

Ensure adequate ventilation. Local and General Ventilation. Take action to prevent static discharges. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

#### Eye/face protection

Use eye protection according to EN 166. Use eye protection according to EN ISO 16321-1.

#### Hand protection

Wear suitable gloves. do not use. Polyvinyl chloride (PVC). Gloves must conform to standard EN 374.

| Gloves               |                                                                   |                 |                    |
|----------------------|-------------------------------------------------------------------|-----------------|--------------------|
| Duration of contact  | PPE - Glove material                                              | Glove thickness | Break through time |
| Long term (repeated) | Butyl rubber<br>Polyethylene/Ethylene Vinyl<br>Alcohol (PE/EVAL). | 0.35 mm         | 240 minutes        |

### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapour sorbent and a particle filter.

### General hygiene considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove contaminated clothing and protective equipment before entering eating areas. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be

allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

## SECTION 9: Physical and chemical properties

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

|                 |                          |
|-----------------|--------------------------|
| Physical state  | Liquid                   |
| Appearance      | Liquid                   |
| Colour          | Black                    |
| Odour           | Characteristic.          |
| Odour threshold | No information available |

| Property                                | Values                   | Remarks • Method          |
|-----------------------------------------|--------------------------|---------------------------|
| Melting point / freezing point          |                          | No information available. |
| Initial boiling point and boiling range | 80 °C                    |                           |
| Flammability                            |                          | No information available. |
| Flammability Limit in Air               |                          | No information available. |
| Upper flammability or explosive limits  | 11.5%                    |                           |
| Lower flammability or explosive limits  | 8%                       |                           |
| Flash point                             | -10 - °C                 | Closed cup.               |
| Autoignition temperature                | 400 °C                   |                           |
| Decomposition temperature               |                          | No information available. |
| pH                                      |                          | No information available. |
| pH (as aqueous solution)                |                          | No information available. |
| Kinematic viscosity                     |                          | No information available. |
| Dynamic viscosity                       |                          | No information available. |
| Water solubility                        | Insoluble in water       |                           |
| Solubility(ies)                         |                          | No information available. |
| Partition coefficient                   |                          | No information available. |
| Vapour pressure                         | 150 hPa                  |                           |
| Relative density                        | 0.95                     |                           |
| Bulk density                            |                          | No information available  |
| Liquid Density                          | No information available | No information available  |
| Relative vapour density                 | 2.5                      |                           |
| Particle characteristics                |                          | No information available. |
| Particle Size                           | No information available |                           |
| Particle Size Distribution              | No information available |                           |
| Explosive properties                    | No information available |                           |
| Oxidising properties                    | No information available |                           |

### 9.2. Other information 1 (butyl acetate = 1)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

|            |                                 |
|------------|---------------------------------|
| Reactivity | Stable under normal conditions. |
|------------|---------------------------------|

### 10.2. Chemical stability

|           |                                 |
|-----------|---------------------------------|
| Stability | Stable under normal conditions. |
|-----------|---------------------------------|

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Hazardous polymerisation does not occur.

### 10.4. Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Heat, flames and sparks. Excessive heat. static discharge (electrostatic discharge).

### 10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapours. Carbon oxides. Nitrogen oxides (NOx).

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

#### Information on likely routes of exposure

#### **Product Information**

|                     |                                                                                                                                                                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness. (based on components). |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.                                                                                     |
| <b>Skin contact</b> | Not classified. Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.                                                                                       |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.                                                                                                |

#### Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Coughing and/or wheezing.

#### Acute toxicity

#### **Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

#### **Component Information**

| Chemical name                     | Oral LD50            | Dermal LD50             | Inhalation LC50                      |
|-----------------------------------|----------------------|-------------------------|--------------------------------------|
| BUTANONE                          | = 2193 mg/kg ( Rat ) | > 8049 mg/kg (Rabbit)   | = 32 mg/l ( Mouse ) 4h               |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | >5000 mg/kg ( Rat )  | > 9400 mg/kg ( Rabbit ) | = 11 mg/l 4h<br>2.24 mg/l ( Rat ) 1h |

|                                                         |                      |                         |                         |
|---------------------------------------------------------|----------------------|-------------------------|-------------------------|
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE | = 4825 mg/kg ( Rat ) | > 7000 mg/kg ( Rabbit ) | = 0.04 mg/L ( Rat ) 4 h |
| DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE                | = 894 mg/kg (Rat)    | > 2000 mg/kg ( Rat )    | -                       |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Skin corrosion/irritation**

Based on available data the classification criteria are not met.

**BUTANONE (78-93-3)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                                                                                                                           |
|--------|---------|----------------|----------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
|        |         |                |                |               | Brief contact is essentially non-irritating to skin. Prolonged contact may cause redness and irritation. Dryness and/or cracking. |

**DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                                                             |
|--------|---------|----------------|----------------|---------------|---------------------------------------------------------------------|
|        |         |                |                |               | Prolonged contact may cause redness and irritation. May stain skin. |

**3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                             |
|--------|---------|----------------|----------------|---------------|-------------------------------------|
|        |         |                |                |               | Brief contact may cause skin burns. |

**DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                                                     |
|--------|---------|----------------|----------------|---------------|-------------------------------------------------------------|
|        |         |                |                |               | Brief contact may cause skin irritation with local redness. |

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.**BUTANONE (78-93-3)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                        |
|--------|---------|----------------|----------------|---------------|--------------------------------|
|        |         |                |                |               | Causes serious eye irritation. |

**DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                            |
|--------|---------|----------------|----------------|---------------|------------------------------------|
|        |         |                |                |               | May cause moderate eye irritation. |

**3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)**

| Method | Species | Exposure route | Effective dose | Exposure time | Results                                        |
|--------|---------|----------------|----------------|---------------|------------------------------------------------|
|        |         |                |                |               | Severe eye irritation. Risk of corneal damage. |

## DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)

| Method | Species | Exposure route | Effective dose | Exposure time | Results                         |
|--------|---------|----------------|----------------|---------------|---------------------------------|
|        |         |                |                |               | May cause slight eye irritation |

**Respiratory or skin sensitisation** respiratory sensitiser:.

## BUTANONE (78-93-3)

| Method   | Species    | Exposure route | Results               |
|----------|------------|----------------|-----------------------|
| OECD 406 | Guinea pig | Dermal         | Not a skin sensitiser |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method | Species | Exposure route | Results                                                                   |
|--------|---------|----------------|---------------------------------------------------------------------------|
|        |         |                | May cause an allergic skin reaction                                       |
|        |         |                | May cause allergy or asthma symptoms or breathing difficulties if inhaled |

## 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)

| Method | Species    | Exposure route | Results                                                                   |
|--------|------------|----------------|---------------------------------------------------------------------------|
|        | Guinea pig | Dermal         | Sensitising                                                               |
|        |            |                | May cause allergy or asthma symptoms or breathing difficulties if inhaled |

## DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)

| Method | Species    | Exposure route | Results                             |
|--------|------------|----------------|-------------------------------------|
|        | Guinea pig |                | May cause an allergic skin reaction |

**Germ cell mutagenicity** Based on available data the classification criteria are not met.

## Component Information

## BUTANONE (78-93-3)

| Method | Species      | Results       |
|--------|--------------|---------------|
|        | in vitro     | Not mutagenic |
|        | Animal Data. | Negative      |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method | Species  | Results                                                                                    |
|--------|----------|--------------------------------------------------------------------------------------------|
|        | in vitro | In vitro genetic toxicity studies were negative in some cases and positive in other cases. |

## 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)

| Method | Species      | Results                                                                      |
|--------|--------------|------------------------------------------------------------------------------|
|        | in vitro     | Some positive data exist, but the data are not sufficient for classification |
|        | Animal Data. | Negative                                                                     |

## DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)

| Method | Species | Results                                                                                    |
|--------|---------|--------------------------------------------------------------------------------------------|
|        |         | In vitro genetic toxicity studies were negative in some cases and positive in other cases. |

|  |  |                                                               |
|--|--|---------------------------------------------------------------|
|  |  | Negative Did not show mutagenic effects in animal experiments |
|--|--|---------------------------------------------------------------|

**Carcinogenicity**

Based on available data the classification criteria are not met.

## Component Information

## BUTANONE (78-93-3)

| Method | Species | Results          |
|--------|---------|------------------|
|        |         | Not Carcinogenic |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method | Species | Results                                                                                                                                                                                                                                                                                                                            |
|--------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | Rat     | Lung tumours have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m <sup>3</sup> ) for their lifetime. Tumours occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI |

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name                     | United Kingdom |
|-----------------------------------|----------------|
| DIPHENYLMETHANE-4,4'-DIISOCYANATE | Carc. 2        |

**Reproductive toxicity**

Based on available data the classification criteria are not met.

## BUTANONE (78-93-3)

| Method | Species | Results                                                                   |
|--------|---------|---------------------------------------------------------------------------|
|        |         | This product does not contain any known or suspected reproductive hazards |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method | Species      | Results  |
|--------|--------------|----------|
|        | Animal Data. | Negative |

**STOT - single exposure**

May cause drowsiness or dizziness.

## BUTANONE (78-93-3)

| Method | Species | Exposure route | Effective dose | Exposure time | Results                                                  |
|--------|---------|----------------|----------------|---------------|----------------------------------------------------------|
|        |         | Inhalation     |                |               | May cause drowsiness or dizziness Central nervous system |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method | Species | Exposure route | Effective dose | Exposure time | Results                          |
|--------|---------|----------------|----------------|---------------|----------------------------------|
|        |         | Inhalation     |                |               | May cause respiratory irritation |

## 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)

| Method | Species | Exposure route | Effective dose | Exposure time | Results                          |
|--------|---------|----------------|----------------|---------------|----------------------------------|
|        |         |                |                |               | May cause respiratory irritation |

**STOT - repeated exposure**

Based on available data the classification criteria are not met.

## Component Information

## DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)

| Method | Species | Exposure route | Effective dose | Exposure time | Results                                                                                                                          |
|--------|---------|----------------|----------------|---------------|----------------------------------------------------------------------------------------------------------------------------------|
|        |         |                |                |               | In animals, effects have been reported on the following organs: Blood<br>Kidney Liver<br>Immune system<br>Central nervous system |

**Aspiration hazard**

Based on available data the classification criteria are not met.

**Other adverse effects**

No information available.

**SECTION 12: Ecological information****12.1. Toxicity****Ecotoxicity**

The product contains no substances known to be hazardous to health or to the environment in concentrations which need to be taken into account.

## BUTANONE (78-93-3)

| Method                                                                        | Species                         | Endpoint type | Effective dose | Exposure time | Results |
|-------------------------------------------------------------------------------|---------------------------------|---------------|----------------|---------------|---------|
| OECD Test No. 203: Fish, Acute Toxicity Test                                  | Pimephales promelas             | LC50          | 2993 mg/L      | 96 hours      |         |
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test                     | Daphnia magna                   | EC50          | 308 mg/L       | 48 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test | Pseudokirchneriella subcapitata | ErC50         | 2029 mg/L      | 96 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test | Pseudokirchneriella subcapitata | NOEC          | 1240 mg/L      | 96 hours      |         |
|                                                                               | Bacteria                        | EC50          | > 1000 mg/L    | 96 hours      |         |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method                                                                        | Species                 | Endpoint type | Effective dose | Exposure time | Results                                                   |
|-------------------------------------------------------------------------------|-------------------------|---------------|----------------|---------------|-----------------------------------------------------------|
| Bacteria toxicity                                                             | activated sludge        | EC50          | >100 mg/L      | 3 hours       | Based on data from similar materials                      |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test | Desmodesmus subspicatus | NOEC          | >1640 mg/L     | 72 hours      | Growth inhibition<br>Based on data from similar materials |
| OECD Test No. 202:                                                            | Daphnia magna           | EC50          | >1000 mg/L     | 24 hours      | Based on data from                                        |

|                                                    |                     |      |              |          |                                      |
|----------------------------------------------------|---------------------|------|--------------|----------|--------------------------------------|
| Daphnia sp., Acute Immobilisation Test             |                     |      |              |          | similar materials                    |
| OECD Test No. 203: Fish, Acute Toxicity Test       | Danio rerio         | LC50 | >1000 mg/L   | 96 hours | Based on data from similar materials |
| Toxicity to soil-dwelling organisms                | Eisenia fetida      | EC50 | > 1000 mg/kg | 14 days  | Based on data from similar materials |
| Toxicity to terrestrial plants                     | Avena sativa (oats) | EC50 | 1000 mg/L    |          | Growth inhibition                    |
| Toxicity to terrestrial plants                     | Lactuca sativa      | EC50 | 1000 mg/L    |          | Growth inhibition                    |
| OECD Test No. 211: Daphnia magna Reproduction Test | Daphnia magna       | NOEC | 10 mg/L      | 21 days  |                                      |

## 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)

| Method | Species                 | Endpoint type | Effective dose | Exposure time | Results |
|--------|-------------------------|---------------|----------------|---------------|---------|
|        | Cyprinus carpio         | LC50          | > 208 mg/L     | 96 hours      |         |
|        | Daphnia magna           | EC50          | 27 mg/L        | 48 hours      |         |
|        | Desmodesmus subspicatus | EC50          | > 70 mg/L      | 72 hours      |         |
|        | Desmodesmus subspicatus | NOEC          | 4.4 mg/L       | 72 hours      |         |
|        | Bacteria                | EC10          | 554 mg/L       | 6 hours       |         |

## DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)

| Method                                                                                       | Species                  | Endpoint type | Effective dose | Exposure time | Results |
|----------------------------------------------------------------------------------------------|--------------------------|---------------|----------------|---------------|---------|
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test or Equivalent.                     | Daphnia magna            | EC50          | 39 mg/L        | 48 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test or Equivalent. | Scenedesmus subspicatus  | ErC50         | 7.6 mg/L       | 72 hours      |         |
|                                                                                              | Bacteria                 | EC50          | 14 mg/L        | 3 hours       |         |
| OECD Test No. 203: Fish, Acute Toxicity Test                                                 | Pimephales promelas      | LC50          | >1000 mg/L     | 96 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test                | Raphidocelis subcapitata | NOEC          | 4.3 mg/L       | 72 hours      |         |

| Chemical name                                           | Algae/aquatic plants                                    | Fish | Toxicity to microorganisms | Crustacea |
|---------------------------------------------------------|---------------------------------------------------------|------|----------------------------|-----------|
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE | EC50: =118.7mg/L (72h, <i>Desmodesmus subspicatus</i> ) | -    | -                          | -         |

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

## BUTANONE (78-93-3)

| Method                                                                                   | Exposure time | Value              | Results               |
|------------------------------------------------------------------------------------------|---------------|--------------------|-----------------------|
| OECD Test No. 301D: Ready Biodegradability: Closed Bottle Test (TG 301 D) or Equivalent. | 28 days       | 98% Biodegradation | Readily biodegradable |

## DIPHENYLMETHANE-4,4'-DIISOCYANATE (101-68-8)

| Method                                                                 | Exposure time | Value             | Results                   |
|------------------------------------------------------------------------|---------------|-------------------|---------------------------|
| OECD Test No. 302C: Inherent Biodegradability: Modified MITI Test (II) | 28 days       | 0% Biodegradation | Not readily biodegradable |

## 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE (4098-71-9)

| Method | Exposure time | Value             | Results                   |
|--------|---------------|-------------------|---------------------------|
|        | 28 days       | 0% Biodegradation | Not readily biodegradable |

## DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE (68928-76-7)

| Method                                                                    | Exposure time | Value             | Results                   |
|---------------------------------------------------------------------------|---------------|-------------------|---------------------------|
| OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B) | 28 days       | 0% Biodegradation | Not readily biodegradable |

**12.3. Bioaccumulative potential**

**Bioaccumulation** No information available.

**Component Information**

| Chemical name                                           | Partition coefficient |
|---------------------------------------------------------|-----------------------|
| BUTANONE                                                | 0.29                  |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE                       | 4.51                  |
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE | 0.99                  |
| DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE                | 5.503                 |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

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

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

| Chemical name                                           | PBT and vPvB assessment         |
|---------------------------------------------------------|---------------------------------|
| BUTANONE                                                | The substance is not PBT / vPvB |
| DIPHENYLMETHANE-4,4'-DIISOCYANATE                       | The substance is not PBT / vPvB |
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYL ISOCYANATE | The substance is not PBT / vPvB |
| DIMETHYLBIS[(1-OXONEODECYL)OXY] STANNANE                | The substance is not PBT / vPvB |

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Waste from residues/unused products**

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Empty containers retain product residue and can be hazardous. Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

## SECTION 14: Transport information

### IATA

|                                   |                  |
|-----------------------------------|------------------|
| 14.1 UN number or ID number       | UN1139           |
| 14.2 UN proper shipping name      | COATING SOLUTION |
| 14.3 Transport hazard class(es)   | 3                |
| 14.4 Packing group                | II               |
| 14.5 Environmental hazards        | No               |
| 14.6 Special precautions for user |                  |
| Special Provisions                | A3               |
| ERG Code                          | 3L               |

### IMDG

|                                                              |                          |
|--------------------------------------------------------------|--------------------------|
| 14.1 UN number or ID number                                  | UN1139                   |
| 14.2 UN proper shipping name                                 | COATING SOLUTION         |
| 14.3 Transport hazard class(es)                              | 3                        |
| 14.4 Packing group                                           | II                       |
| 14.5 Environmental hazards                                   | No                       |
| 14.6 Special precautions for user                            |                          |
| Special Provisions                                           | None                     |
| EmS-No                                                       | F-E, S-E                 |
| 14.7 Maritime transport in bulk according to IMO instruments | No information available |

### RID

|                                   |                  |
|-----------------------------------|------------------|
| 14.1 UN number or ID number       | UN1139           |
| 14.2 UN proper shipping name      | COATING SOLUTION |
| 14.3 Transport hazard class(es)   | 3                |
| 14.4 Packing group                | II               |
| 14.5 Environmental hazards        | No               |
| 14.6 Special precautions for user |                  |
| Special Provisions                | 640C             |
| Classification code               | F1               |

### ADR

|                                   |                  |
|-----------------------------------|------------------|
| 14.1 UN number or ID number       | UN1139           |
| 14.2 UN proper shipping name      | COATING SOLUTION |
| 14.3 Transport hazard class(es)   | 3                |
| 14.4 Packing group                | II               |
| 14.5 Environmental hazards        | No               |
| 14.6 Special precautions for user |                  |
| Special Provisions                | 640C             |
| Classification code               | F1               |
| Tunnel restriction code           | (D/E)            |

## SECTION 15: Regulatory information

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

#### National regulations

#### **Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

#### **Product restricted per REACH Annex XVII: 3**

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---------------|-------------------------------------------|--------------------------------------------------------|
|---------------|-------------------------------------------|--------------------------------------------------------|

|                                                                         |    |   |
|-------------------------------------------------------------------------|----|---|
| DIPHENYLMETHANE-4,4'-DIISOCYANATE -<br>101-68-8                         | 56 | - |
| 3-ISOCYANATOMETHYL-3,5,5-TRIMETHYLCYCL<br>OHEXYL ISOCYANATE - 4098-71-9 | 74 | - |
| DIMETHYLBIS[(1-OXONEODECYL)OXY]<br>STANNANE - 68928-76-7                | 20 | - |

**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

Not applicable

**Named dangerous substances per COMAH Regulations 2015 (as amended)**

Not applicable

**The Ozone-Depleting Substances Regulations 2015**

Not applicable

**The Biocidal Products Regulations 2001 (as amended)**

Not applicable

**The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

**Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)**

Not applicable

**International Inventories****TSCA**

Contact supplier for inventory compliance status

**DSL/NDL**

Contact supplier for inventory compliance status

**EINECS/ELINCS**

Contact supplier for inventory compliance status

**ENCS**

Contact supplier for inventory compliance status

**IECSC**

Contact supplier for inventory compliance status

**KECI**

Contact supplier for inventory compliance status

**PICCS**

Contact supplier for inventory compliance status

**AIIC**

Contact supplier for inventory compliance status

**NZIoC**

Contact supplier for inventory compliance status

**Legend:****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AIIC** - Australian Inventory of Industrial Chemicals**NZIoC** - New Zealand Inventory of Chemicals**15.2. Chemical safety assessment****Chemical Safety Report**

No information available

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet**

**Full text of H-Statements referred to under section 3**

EUH066 - Repeated exposure may cause skin dryness or cracking  
 H225 - Highly flammable liquid and vapour  
 H302 - Harmful if swallowed  
 H315 - Causes skin irritation  
 H317 - May cause an allergic skin reaction  
 H319 - Causes serious eye irritation  
 H330 - Fatal if inhaled  
 H332 - Harmful if inhaled  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
 H335 - May cause respiratory irritation  
 H336 - May cause drowsiness or dizziness  
 H351 - Suspected of causing cancer  
 H361d - Suspected of damaging the unborn child  
 H372 - Causes damage to organs through prolonged or repeated exposure  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H411 - Toxic to aquatic life with long lasting effects  
 H412 - Harmful to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend Section 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |
| +       | Sensitisers                 |      |                                  |

Revision Note [SDS sections updated 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16](#)

**Classification procedure**

|                                                                 |                    |
|-----------------------------------------------------------------|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity                                             | Calculation method |
| Acute dermal toxicity                                           | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - vapour                              | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitisation                                       | Calculation method |
| Skin sensitisation                                              | Calculation method |
| Mutagenicity                                                    | Calculation method |
| Carcinogenicity                                                 | Calculation method |
| Reproductive toxicity                                           | Calculation method |
| STOT - single exposure                                          | Calculation method |
| STOT - repeated exposure                                        | Calculation method |
| Acute aquatic toxicity                                          | Calculation method |
| Chronic aquatic toxicity                                        | Calculation method |
| Aspiration hazard                                               | Calculation method |
| Ozone                                                           | Calculation method |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Prepared By** Amy Whitfield

**Revision date** 26-Mar-2026

**Training Advice** <https://isopa-aisbl.idloom.events/?lang=en>

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)**  
**Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**