



SAFETY DATA SHEET XIAMETER OFS 6032 SILANE

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

1.1. Product identifier

Product name	XIAMETER OFS 6032 SILANE
Product number	11311
Synonyms; trade names	XM OFS-6032 SILANE, DOW CORNING Z 6032 SILANE

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

Identified uses	Industrial application Chemical Intermediate Surface coating
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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
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
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Sds No.	11311
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Acute Tox. 4 - H302 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 1 - H370 STOT RE 2 - H373
Environmental hazards	Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word

Danger

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Hazard statements	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H311+H331 Toxic in contact with skin or if inhaled. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H370 Causes damage to organs (Eyes, Central nervous system). H373 May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with local regulations.
Contains	METHANOL, AMINOSILANE HYDROCHLORIDE, N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

2.3. Other hazards

Product is a static accumulator This product does not contain any substances classified as PBT or vPvB. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

METHANOL CAS number: 67-56-1 EC number: 200-659-6 Acute Toxicity Estimate (oral): 100 mg/l, Oral, Acute Toxicity Estimate (dermal): 300 mg/kg, Dermal, Acute Toxicity Estimate (inhalation): 3 mg/l, , Vapour STOT SE 1 - H370 ≥ 10 % STOT SE 2 - H371 ≥ 3 - < 10 %	>= 53.0 - <= 63.0 % REACH registration number: 01-2119433307-44-XXXX
Classification Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	

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AMINOSILANE HYDROCHLORIDE

>= 27.0 - <= 37.0 %

CAS number: 171869-89-9

EC number: 605-620-0

REACH registration number: 01-2120774417-46-XXXX

Acute Toxicity Estimate (oral): 1897 - 2574 mg/kg

Acute Toxicity Estimate (dermal): > 2000 mg/kg

Acute Toxicity Estimate (inhalation): > 1.49 - < 2.44 mg/l Dust/Mist 4 hours

Classification

Flam. Liq. 2 - H225

Acute Tox. 4 - H302

Acute Tox. 4 - H332

Eye Dam. 1 - H318

Skin Sens. 1B - H317

STOT SE 1 - H370

Aquatic Chronic 2 - H411

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

>= 8.0 - <= 12.0 %

CAS number: 1760-24-3

EC number: 217-164-6

REACH registration number: 01-2119970215-39-XXXX

Acute Toxicity Estimate (oral): 2295 mg/kg

Acute Toxicity Estimate (dermal): > 2000 mg/kg

Acute Toxicity Estimate (inhalation): 1.49 - 2.44 mg/l Dust/Mist 4 hours

Classification

Acute Tox. 4 - H332

Eye Dam. 1 - H318

Skin Sens. 1B - H317

STOT RE 2 - H373

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

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aid personnel should wear appropriate protective equipment during any rescue. Wear protective clothing as described in Section 8 of this safety data sheet.

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Get medical attention immediately.

Ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention immediately.

Skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention immediately. Wash clothing and clean shoes thoroughly before reuse. Provide shower facilities near the workplace.

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Eye contact 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 immediately.

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

General information	Causes damage to organs (Eyes, Central nervous system).
Inhalation	Toxic if inhaled. May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.
Ingestion	Harmful if swallowed.
Skin contact	Toxic in contact with skin. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

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

Notes for the doctor	Treat symptomatically. If in doubt, get medical attention promptly. Avoid vomiting and stomach flushing because of the risk of aspiration.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemicals, sand, dolomite etc.
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	When heated and in case of fire, toxic vapours/gases may be formed. Highly flammable liquid and vapour. May travel considerable distance to source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours may form explosive mixtures with air.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Chlorine. Methanol. Oxides of the following substances: Carbon. Nitrogen. Silicon.

5.3. Advice for firefighters

Protective actions during firefighting	No action shall be taken without appropriate training or involving any personal risk. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Do not use water jet as an extinguisher, as this will spread the fire. Contain and collect extinguishing water. Avoid the spillage or runoff entering drains, sewers or watercourses. Evacuate area.
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	Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Eliminate all sources of ignition. Ground/bond container and receiving equipment. Vapours may form explosive mixtures with air. Avoid the spillage or runoff entering drains, sewers or watercourses.
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6.2. Environmental precautions

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Environmental precautions Toxic to aquatic life with long lasting effects. 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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Use only non-sparking tools. Absorb spillage with inert, damp, non-combustible material. Use water spray to reduce vapours. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Container must be kept tightly closed when not in use. Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. Avoid spilling. Avoid release to the environment. Use only non-sparking tools. Observe good chemical hygiene practices. Product residues retained in emptied containers can be hazardous. Use explosion-proof electrical, ventilating and lighting equipment. Ground/bond container and receiving equipment. Product is a static accumulator. Static electricity and formation of sparks must be prevented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Only store in correctly labelled containers. Store locked up. Avoid heat, flames and other sources of ignition. Store away from the following materials: Strong oxidising agents. Organic Peroxide Flammable solid Pyrophoric substance Self-heating In Contact with Water Emits Flammable Gas Explosive Class 2: Gases

Storage class Flammable liquid storage. Toxic 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

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

Ingredient comments Observe any occupational exposure limits for the product or ingredients.

METHANOL (CAS: 67-56-1)

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DNEL	Workers - Inhalation; Long term systemic effects: 130 mg/m³ Workers - Inhalation; Short term systemic effects: 130 mg/m³ Workers - Inhalation; Long term local effects: 130 mg/m³ Workers - Inhalation; Short term local effects: 130 mg/m³ Workers - Dermal; Long term systemic effects: 20 mg/m³ Workers - Dermal; Long term systemic effects: 20 mg/kg/day General population - Inhalation; Long term systemic effects: 26 mg/m³ General population - Inhalation; Short term systemic effects: 26 mg/m³ General population - Inhalation; Long term local effects: 26 mg/m³ General population - Inhalation; Short term local effects: 26 mg/m³ General population - Dermal; Long term systemic effects: 5 mg/kg/day General population - Dermal; Short term systemic effects: 5 mg/kg/day General population - Oral; Long term systemic effects: 5 mg/kg/day General population - Oral; Short term systemic effects: 5 mg/kg/day
DMEL	Workers - Dermal; Long term systemic effects: 40 mg/kg/day
PNEC	- Fresh water; 20.8 mg/l - marine water; 2.08 mg/l - Intermittent release; 1540 mg/l - STP; 100 mg/l - Sediment (Freshwater); 77 mg/kg - Sediment (Marinewater); 7.7 mg/kg - Soil; 100 mg/kg

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE (CAS: 1760-24-3)

Ingredient comments	No exposure limits known for ingredient(s).
DNEL	Workers - Inhalation; Short term systemic effects: 260 mg/m³ Workers - Inhalation; Short term local effects: 5.36 mg/m³ Workers - Inhalation; Long term systemic effects: 260 mg/m³ Workers - Inhalation; Long term local effects: 0.6 mg/m³ Consumer - Inhalation; Short term systemic effects: 50 mg/m³ Consumer - Inhalation; Long term systemic effects: 50 mg/m³ Consumer - Oral; Long term systemic effects: 8 mg/kg/day Consumer - Inhalation; Long term local effects: 0.1 mg/m³
PNEC	- Fresh water; 0.062 mg/l Intermittent release; 0.62 mg/l - marine water; 0.0062 mg/l - STP; 25 mg/l - Sediment (Freshwater); 0.22 mg/kg - Sediment (Marinewater); 0.022 mg/kg - Soil; 0.0085 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

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Eye/face protection	The following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	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. The selected gloves should have a breakthrough time of at least 4 hours. Butyl rubber. Rubber (natural, latex). Neoprene. Nitrile rubber. Polyethylene. Polyvinyl chloride (PVC). Chlorinated polyethylene (CPE) Thickness: > 0.35 mm To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Wear self-contained breathing apparatus. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green-yellow. to Reddish. Amber.
Odour	Alcoholic.
Odour threshold	No information available.
pH	Not applicable. Insoluble in water.
Melting point	No information available.
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	>= 65°C @ 760 mm Hg
Flash point	12.7°C Pensky-Martens closed cup.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.90

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Bulk density	No information available.
Solubility(ies)	Insoluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	2 cSt @ 25°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not available.
Refractive index	No information available.
Particle size	Not applicable.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	The following materials may react with the product: Strong oxidising agents. Will decompose at temperatures exceeding 150°C. When heated, vapours/gases hazardous to health may be formed. Formaldehyde Vapours may form explosive mixtures with air. Highly flammable liquid and vapour.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Chlorine. Methanol. Oxides of the following substances: Carbon. Nitrogen. Silicon.
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SECTION 11: Toxicological information

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11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Toxic in contact with skin.

ATE dermal (mg/kg) 566.04

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Toxic if inhaled.

ATE inhalation (vapours mg/l) 5.66

ATE inhalation (dusts/mists mg/l) 3.46

Skin corrosion/irritation

Animal data Information given is applicable to the major ingredient. May be slightly irritating to skin. Redness.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

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 Causes damage to organs (Eyes, Central nervous system).

Target organs Eyes Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.

Aspiration hazard

Aspiration hazard Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Toxicokinetics

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation

Toxic if inhaled. May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.

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Ingestion	Harmful if swallowed.
Skin contact	Toxic in contact with skin. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.
Acute and chronic health hazards	Causes damage to organs (Eyes, Central nervous system).
Target organs	Eyes Central nervous system Respiratory tract

Toxicological information on ingredients.

METHANOL

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Skin corrosion/irritation

Skin corrosion/irritation Not irritating. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Not irritating. Rabbit

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. Gene mutation: Negative.

Genotoxicity - in vivo DNA damage and/or repair: Negative. Mouse

Carcinogenicity

Carcinogenicity NOAEL 466 mg/kg/day, Oral, Rat

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development Embryotoxicity: - : , Oral, Mouse Negative. Fetotoxicity: - : , Oral, Mouse Positive.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 1 - H370

Target organs Central nervous system Eyes

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL 2340 mg/kg, Oral, Monkey NOAEL 1.06 mg/l, Inhalation, Rat 90 days

Target organs Eyes Central nervous system

Aspiration hazard

Aspiration hazard No information available.

Toxicokinetics

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation Toxic by inhalation. Drowsiness, dizziness, disorientation, vertigo.

Ingestion Toxic if swallowed. May cause unconsciousness, blindness and possibly death.

Skin contact Toxic in contact with skin.

Eye contact May cause temporary eye irritation.

Target organs Kidneys Liver Heart & cardiovascular system

Medical considerations Liver and/or kidney damage.

AMINOSILANE HYDROCHLORIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,897.0

Species Rat

Notes (oral LD₅₀) Harmful if swallowed. LD₅₀ 1897 mg/kg, Oral, Rat Female LD₅₀ 2574 mg/kg, Oral, Rat Male

ATE oral (mg/kg) 1,897.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit OECD 402

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Harmful if inhaled. LC₅₀ > 1.49 - < 2.44 mg/l, 4 hours, Dust/Mist Rat OECD 403

ATE inhalation (dusts/mists mg/l) 1.49

Skin corrosion/irritation

Skin corrosion/irritation May be slightly irritating to skin. Redness.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

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Skin sensitisation	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Causes damage to organs (Central nervous system) if inhaled.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
Toxicokinetics	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Inhalation	Harmful if inhaled. Causes damage to organs (Central nervous system) if inhaled.
Ingestion	Harmful if swallowed.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,295.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 2295 mg/kg, Oral, Rat

ATE oral (mg/kg) 2,295.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 2.44

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Species	Rat
Notes (inhalation LC₅₀)	Harmful by inhalation. LC ₅₀ 1.49 - 2.44 mg/l, 4 hours, Dust/Mist Rat OECD 403
ATE inhalation (dusts/mists mg/l)	2.44
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	May be slightly irritating to skin. Redness.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause an allergic skin reaction. Guinea pig
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
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Toxicokinetics	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Inhalation	Harmful if inhaled. May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.
Ingestion	May cause discomfort if swallowed.
Skin contact	May cause an allergic skin reaction. May be slightly irritating to skin. Redness.
Eye contact	Causes serious eye damage. May cause permanent damage if eye is not immediately irrigated. May cause chemical eye burns.

XIAMETER OFS 6032 SILANE

SECTION 12: Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

METHANOL

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

AMINOSILANE HYDROCHLORIDE

Ecotoxicity Toxic to aquatic life with long lasting effects.

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

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

12.1. Toxicity

Toxicity Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

METHANOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
NOEC, 200 hour: 15800 mg/l, Oryzias latipes (Red killifish)
LC₅₀, 96 hour: > 100 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 10000 mg/l, Daphnia magna
EC₅₀, 96 hour: 22200 - 23400 mg/l, Freshwater invertebrates
Daphnia obtusa - Neonate
EC₅₀, 48 hour: 2500 mg/l, Marinewater invertebrates
Crangon Crangon (Common sand shrimp)

Acute toxicity - aquatic plants EC₅₀, 96 hours: 22000 mg/l, Selenastrum capricornutum
EC₅₀, 96 hour: 16.912 mg/l, Marinewater algae
Ulva pertusa
Chronic, NOEC, 96 hour: 9.96 mg/l, Marinewater algae
Ulva pertusa

Acute toxicity - microorganisms IC₅₀, 15 hour: 20000 mg/l,
IC₅₀, 3 hour: > 1000 mg/l,

AMINOSILANE HYDROCHLORIDE

Toxicity Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish This information is based on test data from similar products
LC₅₀, 96 hours: 75 mg/l, Cyprinus carpio (Common carp)

Acute toxicity - aquatic invertebrates This information is based on test data from similar products
EC₅₀, 48 hours: 74 mg/l, Daphnia magna

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Acute toxicity - aquatic plants This information is based on test data from similar products
ErC50, 72 hours: 69 mg/l, Desmodesmus subspicatus

This information is based on test data from similar products
NOEC, 72 hours: 10 mg/l, Desmodesmus subspicatus

Acute toxicity - microorganisms This information is based on test data from similar products
EC₅₀, 3 hours: 569 mg/l, Activated sludge
OECD 209

Chronic aquatic toxicity

Chronic toxicity - fish early life stage This information is based on test data from similar products
NOEC, 28 days: 5 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates This information is based on test data from similar products
NOEC, 21 days: 0.32 mg/l, Daphnia magna

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Toxicity Not considered toxic to fish.

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

METHANOL

Persistence and degradability The product is readily biodegradable.

Biodegradation Water - Degradation (%) 71.5: 5 days
Water - Degradation (%) 95: 20 days

AMINOSILANE HYDROCHLORIDE

Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation 17 - 29 %:
OECD 301B

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Persistence and degradability Not readily biodegradable.

Biodegradation - Degradation 39%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

METHANOL

Bioaccumulative potential The product is not bioaccumulating. BCF: < 10, Leuciscus idus (Golden orfe)

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Partition coefficient log Pow: -0.82 / -0.66

AMINOSILANE HYDROCHLORIDE

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: > 2.21 - < 6.93 Estimated value.

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Bioaccumulative potential The product is not bioaccumulating. BCF: <100,

Partition coefficient log Pow: < 3 Estimated value.

12.4. Mobility in soil

Mobility Insoluble in water.

Ecological information on ingredients.

METHANOL

Mobility The product is soluble in water.

AMINOSILANE HYDROCHLORIDE

Mobility No information available.

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Mobility Not considered mobile.

Adsorption/desorption coefficient - Koc: > 5000 @ 20°C Estimated value.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

METHANOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

AMINOSILANE HYDROCHLORIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

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Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Ecological information on ingredients.

METHANOL

Cod 1.42

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

AMINOSILANE HYDROCHLORIDE

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

N-(3-TRIMETHOXYSILYL)PROPYL)ETHYLENEDIAMINE

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 1992

UN No. (IMDG) 1992

UN No. (ICAO) 1992

UN No. (ADN) 1992

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, TOXIC, N.O.S. (CONTAINS METHANOL, AMINOSILANE HYDROCHLORIDE)

Proper shipping name (IMDG) FLAMMABLE LIQUID, TOXIC, N.O.S. (CONTAINS METHANOL, AMINOSILANE HYDROCHLORIDE)

Proper shipping name (ICAO) FLAMMABLE LIQUID, TOXIC, N.O.S. (CONTAINS METHANOL, AMINOSILANE HYDROCHLORIDE)

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Proper shipping name (ADN) FLAMMABLE LIQUID, TOXIC, N.O.S. (CONTAINS METHANOL, AMINOSILANE HYDROCHLORIDE)

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID subsidiary risk	6.1
ADR/RID classification code	FT1
ADR/RID label	3
IMDG class	3
IMDG subsidiary risk	6.1
ICAO class/division	3
ICAO subsidiary risk	6.1
ADN class	3
ADN subsidiary risk	6.1

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•3WE
Hazard Identification Number (ADR/RID)	336
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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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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) 2020/878 of 18 June 2020 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: 69
Seveso Directive - Control of major accident hazards	H2 4130.2 P5c E2

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

Canada - DSL/NDL

All the ingredients are listed or exempt.
DSL

US - TSCA

All the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

Philippines – PICCS

All the ingredients are listed or exempt.

New Zealand - NZIOC

All the ingredients are listed or exempt.

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.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: 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.
 EC₅₀: 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.

Classification procedures according to Regulation (EC) 1272/2008

Flam. Liq. 2 - H225: On basis of test data. Acute Tox. 4 - H302: On basis of test data. Acute Tox. 3 - H331: Calculation method. Acute Tox. 3 - H311: Calculation method. Eye Dam. 1 - H318: Calculation method. Skin Sens. 1 - H317: On basis of test data. STOT SE 1 - H370: On basis of test data. STOT RE 2 - H373: Calculation method. Aquatic Chronic 2 - H411: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

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Revision date	17/11/2022
Version number	4.000
Supersedes date	16/08/2018
SDS number	11311
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H331 Toxic if inhaled. H332 Harmful if inhaled. H370 Causes damage to organs (Eyes, Central nervous system). H370 Causes damage to organs if inhaled. H373 May cause damage to organs through prolonged or repeated exposure if inhaled. H373 May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled. H411 Toxic to aquatic life with long lasting effects.
Signature	Lisa Bland

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



Exposure scenario

Use as a fuel in industrial settings

Identification

Product name	Methanol
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EC number	200-659-6
EU index number	603-001-00-X
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. Title of exposure scenario

Main title	Use as a fuel in industrial settings
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC16 Use of fuels PROC19 Manual activities involving hand contact

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

Control of environmental exposure

Use as a fuel in industrial settings

No exposure assessment presented for the environment.

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

Product characteristics

Physical state	Liquid
Vapour pressure	169.27 hPa @ 25°C
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

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

Human factors not influenced by risk management

Potentially exposed body parts	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC16 Use of fuels Palm of one hand. Covers skin contact area up to 240 cm². PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Palm of both hands. Covers skin contact area up to 480 cm². PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Both hands. Covers skin contact area up to 960 cm². PROC19 Manual activities involving hand contact Hands and forearms. Covers skin contact area up to 1980 cm².
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Other given operational conditions affecting workers exposure

Setting	Indoor.
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Technical conditions and measures at process level (source) to prevent release

Technical protective measures	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Local exhaust ventilation - efficiency of at least [%]: 90 PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Local exhaust ventilation - efficiency of at least [%]: 97
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Risk management measures

PROC19 Manual activities involving hand contact
Wear suitable gloves tested to EN374.

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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4. Guidance to check compliance with the exposure scenario (Health 1)

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

Identification

Product name	Methanol
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EC number	200-659-6
EU index number	603-001-00-X
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. Title of exposure scenario

Main title	Use as a fuel in professional settings
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor) ERC8e Widespread use of 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 PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC16 Use of fuels PROC19 Manual activities involving hand contact

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

Control of environmental exposure

Use as a fuel in professional settings

No exposure assessment presented for the environment.

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

Product characteristics

Physical state	Liquid
Vapour pressure	169.27 hPa @ 25°C
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

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

Human factors not influenced by risk management

Potentially exposed body parts	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC16 Use of fuels Palm of one hand. Covers skin contact area up to 240 cm². PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Palm of both hands. Covers skin contact area up to 480 cm². PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Both hands. Covers skin contact area up to 960 cm². PROC19 Manual activities involving hand contact Hands and forearms. Covers skin contact area up to 1980 cm².
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Other given operational conditions affecting workers exposure

Setting	Indoor.
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Technical conditions and measures at process level (source) to prevent release

Technical protective measures	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Local exhaust ventilation - efficiency of at least [%]: 80
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Risk management measures

PROC19 Manual activities involving hand contact
Wear suitable gloves tested to EN374.

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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4. Guidance to check compliance with the exposure scenario (Health 1)

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Professional use in oilfield drilling and production operations

Identification

Product name	Methanol
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EC number	200-659-6
EU index number	603-001-00-X
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. Title of exposure scenario

Main title	Professional use in oilfield drilling and production operations
Process scope	Oil field well drilling and production operations (including drilling muds and well cleaning), including material transfers, onsite formulation, well head operations, shaker room activities and related maintenance.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC9b Widespread use of functional fluid (outdoor)
<u>Worker</u>	
Process category	PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

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

Control of environmental exposure

No exposure assessment presented for the environment.

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

Product characteristics

Physical state	Liquid
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Professional use in oilfield drilling and production operations

Vapour pressure 169.27 hPa @ 25°C

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

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

Human factors not influenced by risk management

Potentially exposed body parts PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Palm of both hands. Covers skin contact area up to 480 cm². PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Both hands. Covers skin contact area up to 960 cm².

Other given operational conditions affecting workers exposure

Setting Indoor.

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

Technical protective measures PROC4 Chemical production where opportunity for exposure arises Local exhaust ventilation - efficiency of at least [%]: 80

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

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

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Consumer use of fuels indoors

Identification

Product name	Methanol
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EC number	200-659-6
EU index number	603-001-00-X
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. Title of exposure scenario

Main title	Consumer use of fuels indoors
Product category	PC13 Fuels.
Main sector	SU21 Consumer uses
<u>Environment</u>	
Environmental release category	ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

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

Control of environmental exposure (Non-industrial)

No exposure assessment presented for the environment.

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

Product characteristics

Physical state	Liquid
Vapour pressure	169 hPa @ 25°C
Concentration details	Concentration of substance in product: 80%

Amounts used

Amount per use: 16.2 g

Frequency and duration of use

Consumer use of fuels indoors

Covers frequency up to 2 days/week, , .
Covers exposure up to 10 minutes per event.
Application duration: 10 minutes

Other given operational conditions affecting Non-industrial exposure

Setting Indoor.
Room size 20 m³
Release area: 2 cm²

Other given operational conditions affecting Non-industrial exposure

Consumer information Avoid using without gloves. When not in use, keep containers tightly closed.

3. Exposure estimation (Health 1)

Assessment method ConsExpo v4.1

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

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure scenario

Consumer use of fuels outdoors

Identification

Product name	Methanol
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EC number	200-659-6
EU index number	603-001-00-X
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. Title of exposure scenario

Main title	Consumer use of fuels outdoors
Product category	PC13 Fuels.
Main sector	SU21 Consumer uses
<u>Environment</u>	
Environmental release category	ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor)

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

Control of environmental exposure (Non-industrial)

No exposure assessment presented for the environment.

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

Product characteristics

Physical state	Liquid
Vapour pressure	169 hPa @ 25°C
Concentration details	Concentration of substance in product: 100%

Frequency and duration of use

Covers frequency up to 240 days/week, days/year, , .
Covers exposure up to 15 minutes per event.

Human factors not influenced by risk management

Consumer use of fuels outdoors

Potentially exposed body parts Palm of one hand. Covers skin contact area up to 240 cm².

Other given operational conditions affecting Non-industrial exposure

Setting Outdoor.

3. Exposure estimation (Health 1)

Assessment method ConsExpo v4.1

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

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.