

SAFETY DATA SHEET

METHANOL LRG

According to Regulation (EC) No 1907/2006, Annex II Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name	METHANOL LRG
Product number	1209
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EU index number	603-001-00-X
EC number	200-659-6

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

Identified uses	Solvent. Laboratory reagent.
Uses advised against	Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier

Reagent Chemical Services
18 Aston Fields Road
Whitehouse Industrial Estate
Runcorn
Cheshire WA7 3DL

T: 01928 716903 (08.30 - 17.00)
F: 01928 716425
E: info@reagent.co.uk

1.4. Emergency telephone number

Emergency telephone	OHES Environmental Ltd 24-7 Tel. 0333 333 9939 (24 hour)
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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. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330 STOT SE 1 - H370
Environmental hazards	Not Classified

2.2. Label elements

EC number	200-659-6
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METHANOL LRG

Pictogram



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.
 H301+H311 Toxic if swallowed or in contact with skin.
 H330 Fatal if inhaled.
 H370 Causes damage to organs .

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P314 Get medical advice/ attention if you feel unwell.
 P405 Store locked up.
 P501 Dispose of contents / container to hazardous waste depot.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P260 Do not breathe vapours.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P330 Rinse mouth.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/ doctor if you feel unwell.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	METHANOL LRG
REACH registration number	01-2119433307-44-XXXX
EU index number	603-001-00-X
CAS number	67-56-1
EC number	200-659-6

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. Keep affected person away from heat, sparks and flames. Consult a physician for specific advice. Show this Safety Data Sheet to the medical personnel.

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Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
Ingestion	Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Keep affected person warm and at rest. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately.
Eye contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that airborne contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Toxic by inhalation. Vapours may cause drowsiness and dizziness. Unconsciousness. Headache. Nausea, vomiting.
Ingestion	Toxic if swallowed. Swallowing concentrated chemical may cause severe internal injury. Nausea, vomiting. Pneumonia may be the result if vomited material containing solvents reaches the lungs.
Skin contact	Toxic in contact with skin. Repeated exposure may cause skin dryness or cracking.
Eye contact	May cause irritation, lachrymation and blurred vision.

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

Notes for the doctor	Treat symptomatically.
Specific treatments	No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	The product is highly flammable. Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

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Protective actions during firefighting	Fight fire from safe distance or protected location. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Wear chemical protective suit. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.
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	Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Take precautionary measures against static discharges. Avoid inhalation of vapours and contact with skin and eyes. Treat the spilled material according to the instructions in the clean-up section. Wash thoroughly after dealing with a spillage.
For emergency responders	Wear protective clothing as described in Section 8 of this safety data sheet. Treat the spilled material according to the instructions in the clean-up section. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions	To prevent release, place container with damaged side up. Do not discharge into drains or watercourses or onto the ground. Use appropriate containment to avoid environmental contamination.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Stop leak if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Small Spillages: Absorb small quantities with paper towels and evaporate in a safe place. Large Spillages: To prevent release, place container with damaged side up. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Dispose of contents/container in accordance with local regulations. Clean contaminated objects and areas thoroughly, observing environmental regulations. Wash thoroughly after dealing with a spillage.
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6.4. Reference to other sections

Reference to other sections	Refer to sections 8 and 13 for additional information.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Do not handle until all safety precautions have been read and understood. Avoid inhalation of vapours and contact with skin and eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Earth container and transfer equipment to eliminate sparks from static electricity. Use explosion-proof electrical, ventilating and lighting equipment.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Clean equipment and the work area every day. Take off immediately all contaminated clothing and wash it before reuse. Care should be taken to avoid contact with contaminants when removing contaminated clothing.

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. Keep away from oxidising materials, heat and flames. Earth container and transfer equipment to eliminate sparks from static electricity. Store away from incompatible materials (see Section 10).
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Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

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

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

WEL = Workplace Exposure Limit

DNEL

Workers - Inhalation; Long term systemic effects: 260 mg/m³
 Workers - Inhalation; Short term systemic effects: 260 mg/m³
 Workers - Inhalation; Long term local effects: 260 mg/m³
 Workers - Inhalation; Short term local effects: 260 mg/m³
 Workers - Dermal; Long term systemic effects: 40 mg/kg/day
 Workers - Dermal; Short term systemic effects: 40 mg/kg/day
 General population - Inhalation; Long term systemic effects: 50 mg/m³
 General population - Inhalation; Short term systemic effects: 50 mg/m³
 General population - Inhalation; Long term local effects: 50 mg/m³
 General population - Inhalation; Short term local effects: 50 mg/m³
 General population - Dermal; Long term systemic effects: 8 mg/kg/day
 General population - Dermal; Short term systemic effects: 8 mg/kg/day
 General population - Oral; Long term systemic effects: 8 mg/kg/day
 General population - Oral; Short term systemic effects: 8 mg/kg/day

PNEC

- Fresh water; 20.8 mg/l
 - Marine water; 2.08 mg/l
 - STP; 100 mg/l
 - Sediment (Freshwater); 77 mg/kg
 - Sediment (Marinewater); 7.7 mg/kg
 - Soil; 100 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Use explosion-proof general and local exhaust ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection

Wear protective gloves. 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 breakthrough time for any glove material may be different for different glove manufacturers. It should be noted that liquid may penetrate the gloves. For exposure up to 4 hours, wear gloves made of the following material: Butyl rubber. Viton rubber (fluoro rubber). Thickness: ~ 0.7 mm Frequent changes are recommended.

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Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. For the greatest protection, clothing should include anti-static overalls, boots and gloves. Wear suitable protective clothing made of the following material: Butyl rubber. Viton rubber (fluoro rubber).
Hygiene measures	Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Organic vapour filter.
Environmental exposure controls	See section 6 for details.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	Approx. -98°C
Initial boiling point and range	Approx. 65°C @ 760 mm Hg
Flash point	9.7°C PMCC (Pensky-Martens closed cup).
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No.
Vapour pressure	169.27 hPa @ 25°C
Vapour density	~ 1.11
Relative density	~ 0.790 - 0.793 @ @ 20°C
Bulk density	Scientifically unjustified.
Solubility(ies)	> = 1000 g/l water @ 20°C Soluble in the following materials: Acetone. Chloroform. Ethanol. Ether.
Partition coefficient	log Pow: ~ -0.74 REACH dossier information.
Auto-ignition temperature	455°C REACH dossier information.
Decomposition Temperature	No specific test data are available.
Viscosity	0.544 - 0.59 mPa s @ 25°C REACH dossier information.
Explosive properties	No specific test data are available.

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Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	None.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react violently with the product: Oxidising materials. Strong acids. Strong alkalis.
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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 violently with the product: Strong acids. Strong alkalis. Strong oxidising agents. Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented.
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10.5. Incompatible materials

Materials to avoid	Avoid contact with the following materials: Strong acids. Strong alkalis. Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)	LD0 2528 mg/kg, Oral, Rat
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ATE oral (mg/kg)	100.0
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Acute toxicity - dermal

Notes (dermal LD₅₀)	No information available.
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ATE dermal (mg/kg)	300.0
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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l)	43.68
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Species	Rat
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Notes (inhalation LC₅₀)	REACH dossier information.
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ATE inhalation (vapours mg/l)	3.0
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Skin corrosion/irritation

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Human skin model test	No information available.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No specific test data are available.
<u>Skin sensitisation</u>	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.
Genotoxicity - in vivo	Micronucleus assay: Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	NOAEC >1.3 mg/l, Inhalation, Mouse
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility:, One-generation study - NOAEL <1000 mg/kg, Oral, Mouse P
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 5.98 mg/l, Oral, Rat
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Conclusive data but not sufficient for classification.
Target organs	Central nervous system
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEC 6.66 mg/l, Inhalation, Rat
Target organs	Central nervous system Eyes
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
Inhalation	Toxic by inhalation. A single exposure may cause the following adverse effects: Vapours may cause headache, fatigue, dizziness and nausea. Prolonged or repeated exposure may cause the following adverse effects: Central nervous system depression.
Ingestion	Toxic if swallowed. A single exposure may cause the following adverse effects: May cause nausea, headache, dizziness and intoxication. Prolonged or repeated exposure may cause the following adverse effects: Central nervous system depression. Unconsciousness, possibly death.
Skin contact	Toxic in contact with skin. May be absorbed through the skin. Prolonged skin contact may cause redness and irritation.
Eye contact	Irritating to eyes.
Route of entry	Inhalation Skin absorption Ingestion.
Target organs	Central nervous system Eyes

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish LC₅₀, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 96 hours: 18260 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 22000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EC ₅₀ , 15 hours: 20000 mg/l, Activated sludge
Acute toxicity - terrestrial	NOEC, 35 days: 10000 mg/kg,
Chronic toxicity - fish early life stage	EC ₅₀ , 200 hours: 14536 mg/l, Oryzias latipes (Red killifish)

12.2. Persistence and degradability

Phototransformation	Air - Degradation (%) 50: 17.2 days
Stability (hydrolysis)	Scientifically unjustified.
Biodegradation	Water - Degradation 82.7: 5 days The substance is readily biodegradable.
Biological oxygen demand	1.236 g O ₂ /g substance

12.3. Bioaccumulative potential

Bioaccumulative potential	Scientifically unjustified. BCF: 1,
Partition coefficient	log Pow: ~ -0.74 REACH dossier information.

12.4. Mobility in soil

Mobility	The product is miscible with water and may spread in water systems.
Adsorption/desorption coefficient	Expected to have a low potential for adsorption.
Henry's law constant	0.461 Pa m ³ /mol @ 25°C
Surface tension	No specific test data are available.

12.5. Results of PBT and vPvB assessment

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

Other adverse effects	None known.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	When handling waste, the safety precautions applying to handling of the product should be considered. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.
Disposal methods	Reuse or recycle products wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1230
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UN No. (IMDG)	1230
UN No. (ICAO)	1230
UN No. (ADN)	1230

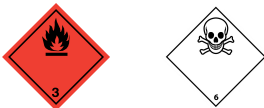
14.2. UN proper shipping name

Proper shipping name (ADR/RID)	METHANOL
Proper shipping name (IMDG)	METHANOL
Proper shipping name (ICAO)	METHANOL
Proper shipping name (ADN)	METHANOL

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
ADN packing group	II
ICAO packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Hazard Identification Number (ADR/RID)	336

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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.

SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended). Dangerous Substances and Explosive Atmospheres Regulations 2002.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	DNEL: Derived No Effect Level. DMEL: Derived Minimal Effect Level. PNEC: Predicted No Effect Concentration. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Flam. Liq. = Flammable liquid
General information	Only trained personnel should use this material.
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/
Classification procedures according to Regulation (EC) 1272/2008	Acute Tox. 3 - H301, Flam. Liq. 2 - H225, Acute Tox. 1 - H330, Acute Tox. 3 - H311, STOT SE 1 - H370: On basis of test data.

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Revision date	20/08/2018
Revision	2
Supersedes date	25/10/2017
SDS number	21039
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H330 Fatal if inhaled. H370 Causes damage to organs .

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.