



Safety Data Sheet

according to Regulation (EU) 2015/830 Reference number: KEMETYL 67 EU Issue date: 11/28/2022 Version: 1.0

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

: Mixture : Shell Antifog

1.1. Product identifier

Product form		
Trade name		

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

1.2.1. Relevant identified uses

Intended for general public Use of the substance/mixture

: The product is used as antifog.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Kemetyl Kimya San.Tic.Ltd.Şti. Küçükbakkalköy Mahallesi Dereboyu Caddesi No:3A Brandium AVYM R/5 Blok K:13 D:82 Ataşehir, İstanbul T +90-216 455 1641 - 42 <u>salesKTR@kemetyl.com - www.kemetyl.com.tr</u>

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Turkey	Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzıssıhha Merkezi Başkanlığı	Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara	114	Information is provided to public and medical personnel on poisoning incidents via 114.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Serious eye damage/eye irritation, Category 2	H319
Full text of H-statements: see section 16	

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No	o. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS07

Signal word (CLP) Hazard statements (CLP) Warning
H226 - Flammable liquid and vapour.
H319 - Causes serious eye irritation.

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Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand.
	P102 - Keep out of reach of children.
	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P264 - Wash hands, forearms and face thoroughly after handling.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Child-resistant fastening	: Not applicable
Tactile warning	: Not applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
WATER	CAS-No.: 7732-18-5 EC-No.: 231-791-2	65 – 80	Not classified
ethanol; ethyl alcohol	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610- 43	20 – 35	Flam. Liq. 2, H225 Eye Irrit. 2, H319
SODIUM LAURETH SULFATE	CAS-No.: 68585-34-2 EC-No.: 500-223-8	0.1 – 0.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. People with over sensibility problems are not allowed to work or be exposed to the product. In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Place the affected person in the recovery position. If breathing stops, give artificial respiration. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. Get medical attention if symptoms occur.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Consult an ophtalmologist if irritation persists.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell. If swallowed: rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting.

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

Symptoms/effects after eye contact

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

: Eye irritation.

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Foam. Carbon dioxide. Dry powder. Dry powder. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
Unsuitable extinguishing media	: Strong water jet.
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard	: Flammable liquid and vapour. Contact with combustible material may cause fire.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Precautionary measures fire	: Keep away from combustible materials. Approach from upwind.
Firefighting instructions	: Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. Keep upwind. Use water spray or fog for cooling exposed containers. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: High temperature decomposition products are harmful by inhalation. Inhalation of vapour can cause breathing difficulties.

SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Protective equipment Emergency procedures	 Wear recommended personal protective equipment. Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Avoid contact with skin, eyes and clothing. 	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection. Only qualified personnel equipped with suitable protective equipment may intervene.	
Emergency procedures	: Keep public away from danger area. Evacuate unnecessary personnel. Stop leak if safe to do so. Do not touch spilled material. Avoid contact with skin and eyes. Ventilate area.	

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses. Do not discharge into drains or waterways without neutralizing.

accumulation can be dangerous.

Prevent from entering sewers, basements and workpits, or any place where its

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6.3. Methods and material for containment and cleaning up

	 Comply with the safety intructions. Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Clean up any spills as soon as possible, using an absorbent material to collect it. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or
Other information	 universal binding agents). Sweep or shovel spills into appropriate container for disposal. Minimise generation of dust. Dispose of materials or solid residues at an authorized site. Dispose of contaminated materials in accordance with current regulations.

6.4. Reference to other sections

For further information refer to section 13. Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station.
Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid dust formation. Avoid prolonged and repeated contact with skin. Contaminated work clothing should not be allowed out of the workplace. Do not spray on an open flame or other ignition source.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inclu-	ding any incompatibilities
Technical measures	: Ground/bond container and receiving equipment. Ensure adequate ventilation, especially in confined areas. Comply with applicable regulations.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Incompatible products	: Strong acids. Strong bases. Strong oxidizing agents.
Incompatible materials	: Extremely high or low temperatures.
Heat and ignition sources	 Do not smoke. Keep away from sources of ignition. Keep away from heat and direct sunlight.
Information on mixed storage	: Keep away from food, drink and animal feeding stuffs.
Storage area	: Avoid: Extremely high or low temperatures. Heat and ignition sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing.

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Protective goggles. Safety glasses. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses. Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection:

Protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

Do not eat, drink or smoke during use. Always wash hands after handling the product. Avoid contact with skin and eyes. Avoid contact during pregnancy/while nursing.

Other information:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Colour	: Liquid : clear.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 7.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 29 – 36 °C
Auto-ignition temperature	: No data available

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Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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11.1. Information on toxicological effects		
Acute toxicity (oral) :	Not classified	
Acute toxicity (dermal) :	Not classified	
Acute toxicity (inhalation) :	Not classified	
SODIUM LAURETH SULFATE (68585-34-2)		
LD50 oral	> 2000 mg/kg bodyweight	
ethanol; ethyl alcohol (64-17-5)		
LD50 oral rat	7060 mg/kg	
LD50 oral	10470 mg/kg bodyweight	
LD50 dermal	15800 mg/kg bodyweight	
LC50 Inhalation - Rat (Dust/Mist)	> 99999 mg/l/4h	

ATE CLP (dermal)

ATE CLP (oral)

7060 mg/kg bodyweight

15800 mg/kg bodyweight

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WATER (7732-18-5)	
LD50 oral	> 90000 mg/kg bodyweight
LD50 dermal	> 90000 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
	pH: 7.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7.5
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term : (acute)	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Not classified
SODIUM LAURETH SULFATE (68585-34-2)	
EC50 - Other aquatic organisms [1]	> 1 mg/l EC50 waterflea (48 h)
EC50 - Other aquatic organisms [2]	> 1 mg/l IC50 algea (72 h) mg/l
ethanol; ethyl alcohol (64-17-5)	
LC50 - Fish [1]	14200 mg/l

5012 mg/l EC50 waterflea (48 h)

275 mg/l IC50 algea (72 h) mg/l

12.2. Persistence and degradability

No additional information available

EC50 - Other aquatic organisms [1]

EC50 - Other aquatic organisms [2]

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)

Sewage disposal recommendations Product/Packaging disposal recommendations

Additional information

published in the Official Journal numbered 29314 on April 2, 2015.
Disposal must be done according to official regulations.
Completely empty the packaging prior to decontamination. Comply with applicable

: Disposal must be done according to official regulations. Waste Management Regulation

regulations for solid waste disposal. : Flammable vapours may accumulate in the container. Empty containers should be taken for

recycling, recovery or waste in accordance with local regulation.

FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol)

: UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol), 3, III, (D/E)
: UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol), 3, III
: UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol), 3, III
: UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol), 3, III
: UN 1993 FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol), 3, III

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number

UN-No. (ADR) UN-No. (IMDG)	-	UN 1993 UN 1993
UN-No. (IATA)	:	UN 1993
UN-No. (ADN) UN-No. (RID)	-	UN 1993 UN 1993

14.2. UN proper shipping name

Proper Shipping Name (ADR)
Proper Shipping Name (IMDG)
Proper Shipping Name (IATA)
Proper Shipping Name (ADN)
Proper Shipping Name (RID)
Transport document description (ADR)
Transport document description (IMDG)
Transport document description (IATA)
Transport document description (ADN)
Transport document description (RID)

14.3. Transport hazard class(es)

ADR

IMDG

Transport hazard class(es) (ADR) Danger labels (ADR)

Transport hazard class(es) (IMDG)

Danger labels (IMDG)

: 3 : 3 : 3

: 3

: 3

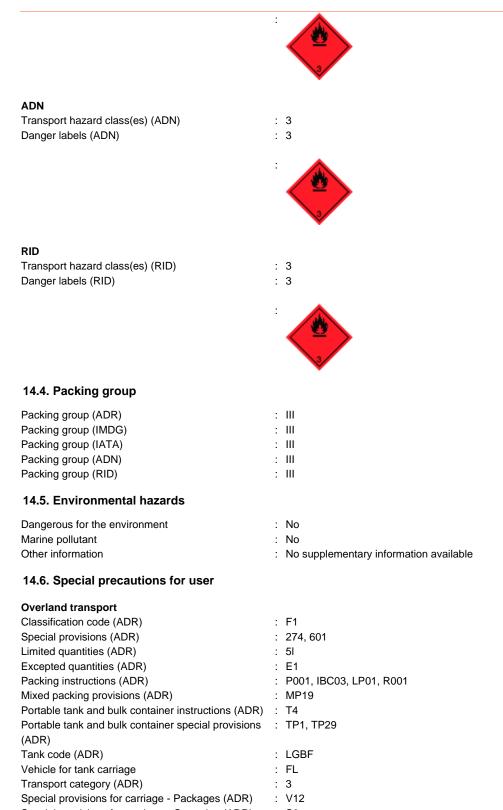
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ΙΑΤΑ

Transport hazard class(es) (IATA)	
Danger labels (IATA)	

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Special provisions for carriage - Operation (ADR) : S2 Hazard identification number (Kemler No.) 30 : 30 1993

Tunnel restriction code (ADR)

: D/E

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Transport by sea	
Special provisions (IMDG)	: 223, 274, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: A
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3L
Inland waterway transport	
Classification code (ADN)	: F1
Special provisions (ADN)	: 274, 601
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: F1
Special provisions (RID)	: 274, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions	: TP1, TP29
(RID)	
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	Shell Antifog ; ethanol; ethyl alcohol

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EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	Shell Antifog ; SODIUM LAURETH SULFATE ; ethanol; ethyl alcohol
40.	ethanol; ethyl alcohol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Regulation on Health and Safety Precautions When Working with Chemical Substances published in the Official Journal numbered 28733 on August 12, 2013

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail

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Abbreviations and acronyms	
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class
BCF	Bioconcentration factor
IARC	International Agency for Research on Cancer
OECD	Organisation for Economic Co-operation and Development
STP	Sewage treatment plant
TLM	Median Tolerance Limit
BOD	Biochemical oxygen demand (BOD)
CAS	Chemical Abstracts Service (division of the American Chemical Society)
IOELV	Indicative Occupational Exposure Limit Value
N.O.S.	Not Otherwise Specified
Pow (log)	n-octanol/water partition coefficient
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
COD	Chemical oxygen demand (COD)

Data sources

: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. ECHA (European Chemicals Agency). Supplier's safety documents.

Full text of H- and EUH-statements	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.