SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

CLEAN

Creation date	25th February 2022
Revision date	Version 3.0

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

1.1. Product identifier

Substance / mixture	mixture
Number	1 02.0021 - 5 l; 1 02.0022 - 10 l; 1 02.0023 - 30 l (kanystr)
UFI	4CX3-FXK7-Y208-RGH7

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

Mixture's intended use

Degreasing agent.

Mixture uses advised against

For professional use only.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name	RETECH, s.r.o.
Address	Vackova 1541/4, Praha 5 - Stodůlky, 155 00 Czech Republic
Identification number (CRN)	25018205
VAT Reg No	CZ25018205
Phone	+420327596428
E-mail	info@retech.cz
Web address	www.retech.com

Competent person responsible for the safety data sheet

Name	RETECH, s.r.o.
E-mail	info@retech.cz

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Flam. Liq. 2, H225
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336
Aquatic Chronic 2, H411

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse physico-chemical effects

Highly flammable liquid and vapour.

Most serious adverse effects on human health and the environment

May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
propan-2-ol

Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
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.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapours/spray.
P273	Avoid release to the environment.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a doctor.
P403+P235	Store in a well-ventilated place. Keep cool.

Supplemental information

EUH208	Contains d-limonene. May produce an allergic reaction.

>=30 % aliphatic hydrocarbons, perfumes, Linalool, Citronellol, Hexyl cinnamal, Limonene

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
EC: 921-024-6 Registration number: 01-2119475514-35	hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	40-50	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	
EC: 927-510-4 Registration number: 01-2119475515-33	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	40-50	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	
Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25	propan-2-ol	1-<5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Index: 601-029-00-7 CAS: 5989-27-5 EC: 227-813-5 Registration number: 01-2119529223-47	d-limonene	0,1-<1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free. In the event of unconsciousness, do not provide food by mouth. Remove contaminated clothes immediately.

If inhaled

Transfer the affected person to the fresh air and ensure calm environment for body and mind. If the victim is not breathing, perform artificial respiration. If aspiration into the lungs is suspected, e.g. when vomitting, admit to hospital immediately. In the event of issues, find medical help.

If on skin

Remove contaminated clothes immediately. Wash with plenty of soap and water.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Ensure calm environment for body and mind. Rinse out the mouth with clean water. DO NOT INDUCE VOMITING! If the affected person vomits, make sure to prevent inhalation of the vomit. Do not provide anything to eat or drink. Provide medical treatment. Bring an original container with the label and the Safety Data Sheet of the given substance as appropriate.

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

If inhaled

May cause drowsiness or dizziness. Vapours have a narcotic effect and may cause respiratory irritation. Nausea. Unconsciousness.

If on skin

Causes skin irritation.

If in eyes

not available

If swallowed

If swallowed or in case of vomiting, danger of entering the lungs. If the affected person vomits, make sure to prevent inhalation of the vomit (as there is a danger of lung damage after inhalation of these liquids in the airways also in infinitesimal amount). Symptoms of poisoning may manifest after many hours, medical supervision is necessary for 48 hours after the accident. Irritation of the digestion system can occur.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, foam, powder. Water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Dispose of contaminated extinguishing water and remains after the fire in accordance with the official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not inhale vapours. Provide sufficient ventilation. Use personal protective equipment for work. Remove all ignition sources. Do not eat, drink and smoke during work. Keep unprotected persons away. Vapors from gases are heavier than air. Prevent vapors from entering drains. Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water. Explosion risk. Risk of formation of explosive vapours above water surface.

6.3. Methods and material for containment and cleaning up

Use explosion-proof electrical equipment. Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use personal protective equipment as per Section 8. Do not inhale vapours. Do not inhale aerosols. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Buildup of explosive mixtures possible without sufficient ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical equipment. Take action to prevent static discharges. Do not use compressed air for filling, emptying or another handling. Ensure that there is no splashes. Observe valid legal regulations on safety and health protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands and exposed parts of the body thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not expose to temperatures exceeding 50 °C. Protect from sunlight. Once the product is used, the package has to be tightly closed so that leakage of the mixture is prevented. Use explosion-proof electrical equipment. Protect against strong acids and oxidizing agents. Keep only in original packaging.

Content	Packaging type	Material of package
5 l	jerry can	
30 l	jerry can	
10 l	jerry can	

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

DNEL

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	699 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	699 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	773 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	608 mg/m³	Systemic chronic effects	
Workers	Inhalation	2035 mg/m³	Systemic chronic effects	

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	149 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	149 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	300 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	477 mg/m³	Systemic chronic effects	
Workers	Inhalation	2085 mg/m³	Systemic chronic effects	

propan-2-ol

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Dermal	888 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	500 mg/m³	Systemic chronic effects	

PNEC

propan-2-ol

Route of exposure	Value	Determining method
Freshwater environment	140.9 mg/l	
Seawater	140.9 mg/l	
Freshwater sediment	552 mg/kg	
Sea sediments	552 mg/kg	
Soil (agricultural)	28 mg/kg	

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. Use personal protective equipment for work. Prevent contact with skin and eyes. Remove contaminated clothes immediately. Wash contaminated clothing before reuse. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Do not inhale gases and vapours. Do not inhale aerosols. Do not store together with food, drink and animal feed.

Eye/face protection

In case of splash use safety glasses. Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product. EN ISO 374-1. Material of gloves: Nitrile rubber, NBR. Butyl rubber. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Wash contaminated reusable gloves with water before removing and store in a well-ventilated place.
When handling in long-term or repeatedly, use protective gloves:
Nitrile rubber (Penetration time of glove material: ≥480 min. Recommended thickness of the material: ≥ 0.55 mm).
PVA (Penetration time of glove material: ≥480 min. Recommended thickness of the material: ≥ 0.15 mm).
Fluororubber (Penetration time of glove material: ≥480 min. Recommended thickness of the material: ≥ 0.5 mm).
In case of splash use:
Nitrile rubber (Penetration time of glove material: >60 min. Recommended thickness of the material: ≥ 0.38 mm).
Neoprene (Penetration time of glove material: >60 min. Recommended thickness of the material: ≥0.75 mm).
Other protection: protective workwear and footwear. Wash contaminated clothing before reuse.

Respiratory protection

Use a mask with filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Filter A. Filter A/P2. The protection provided by masks is in any case limited.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	83-108 °C (Uhlovodíky C7; ISO 3405)
Boiling point or initial boiling point and boiling range	61-94 °C (Uhlovodíky C6-C7; ISO 3405)
Boiling point or initial boiling point and boiling range	82-83 °C (propan-2-ol)
Flammability	inflammable
Lower and upper explosion limit	data not available
Flash point	-16 °C (Uhlovodíky C7; ISO 13736)
Flash point	-35 °C (Uhlovodíky C6-C7; ISO 13736)
Flash point	13 °C (propan-2-ol)
Auto-ignition temperature	>230 °C
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	insoluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	<70 hPa at 20 °C (Uhlovodíky C7)
Vapour pressure	113 hPa at 20 °C (Uhlovodíky C6-C7)
Density and/or relative density	
Density	0,70 g/cm³
Form	liquid

data not available

9.2. Other information

Evaporation rate	2-3 (EtEt=1 DIN 53170)
Explosive properties	The product does not have explosive properties but can be explosive when blended with air.
Content of organic solvents (VOC)	1 kg/kg

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable and no degradation occurs under normal use.

10.2. Chemical stability

The product is stable and no degradation occurs under normal use.

10.3. Possibility of hazardous reactions

Protect against strong acids and oxidizing agents.

10.4. Conditions to avoid

Protect against flames, sparks, overheating. Take action to prevent static discharges.

10.5. Incompatible materials

Protect against strong acids and oxidizing agents.

10.6. Hazardous decomposition products

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	>5840 mg/kg bw		Rat	
Dermal	LD_{50}	>2920 mg/kg bw	24 hour	Rat	
Inhalation (vapor)	LC_{50}	>25200 mg/m³	4 hour	Rat	

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	>5840 mg/kg bw		Rat	
Dermal	LD_{50}	>2920 mg/kg bw	24 hour	Rat	
Inhalation (vapor)	LC_{50}	>23300 mg/m³	4 hour	Rat	

propan-2-ol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	>2000 mg/kg		Rat	
Dermal	LD_{50}	>2000 mg/kg		Rabbit	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

May cause drowsiness or dizziness.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Toxic to aquatic life with long lasting effects.

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Parameter	Method	Value	Time of exposure	Species	Environment
EbL 50	OECD 201	10-30 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
EL 50	OECD 202	3 mg/l	48 hour	Daphnia (Daphnia magna)	
ErL 50	OECD 201	30-100 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
LL 50	OECD 203	11.4 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Parameter	Method	Value	Time of exposure	Species	Environment
LL 50	OECD 203	>13.4 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EL 50	OECD 202	3 mg/l	48 hour	Daphnia (Daphnia magna)	
ErL 50	OECD 201	10-30 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

propan-2-ol

Parameter	Method	Value	Time of exposure	Species	Environment
EC_{50}		>100 mg/l	48 hour	Invertebrates (Daphnia magna)	
LD_{50}		>100 mg/l	48 hour	Fishes (Leuciscus idus)	
EC_{50}		>100 mg/l	72 hour	Algae (Scenedesmus subspicatus)	

Chronic toxicity

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
NOEL	OECD 201	3 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)		Indicator of growth
NOELR	OECD 211	1 mg/l	21 day	Daphnia (Daphnia magna)		
NOELR		2.04 mg/l	28 day	Fishes (Oncorhynchus mykiss)		QSAR

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Parameter	Method	Value	Time of exposure	Species	Environment	Determining method
NOELR	OECD 201	6.3 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)		Indicator of growth
EL 50	OECD 202	1 mg/l	21 day	Daphnia (Daphnia magna)		
NOELR		1.53 mg/l	28 day	Fishes (Oncorhynchus mykiss)		QSAR

12.2. Persistence and degradability

Biodegradability

hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301F	98 %	28 day		Easily biodegradable

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Parameter	Method	Value	Time of exposure	Environment	Result
	OECD 301F	98 %	28 day		Easily biodegradable

not available

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

The product is insoluble in water. Floats on water.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

07 01 04 other organic solvents, washing liquids and mother liquors *

14 06 03 other solvents and solvent mixtures *

Packaging waste type code

15 01 10 packaging containing residues of or contaminated by hazardous substances *

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

UN 3295

14.2. UN proper shipping name

HYDROCARBONS, LIQUID, N.O.S. (hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

II - substances presenting medium danger

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.	
UN number	3295
Classification code	F1
Safety signs	3+hazardous for the environment

Road transport - ADR

Limited quantities	1 L
Excepted quantities	E2
Transport category	3

Railway transport - RID

Marine transport - IMDG

EmS (emergency plan)	F-E, S-D

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th 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, as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as ammended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapours/spray.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352	IF ON SKIN: Wash with plenty of water.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a doctor.
P273	Avoid release to the environment.
P403+P235	Store in a well-ventilated place. Keep cool.

A list of additional standard phrases used in the safety data sheet

EUH208	Contains d-limonene. May produce an allergic reaction.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EL_{50}	Effective Loading for 50% of the tested organisms
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
LL_{50}	Lethal Loading for 50% of tested organisms
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
NOEL	No observed effect level
NOELR	No Observed Effect Loading Rate
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration

ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 3.0 replaces the SDS version from 15 March 2021. Changes were made in sections 2, 3, 8, 11, 12, 13 and 16.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.