SAFETY DATA SHEET

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

HV GREASE

Creation date	12. March 2019		
Revision date		Version	1.1

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

1.1. Product identifier HV GREASE

Substance / mixture: mixture

Number: 1 35445

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

Mixture's intended use: Grease.

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
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

RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic; Telephone number: +420 327 596 128 (7.30-16.00 hour)
Poisoning information centre, Na Bojišti 1, Praha, Czech Republic, Tel.: non-stop +420 224 919 293 or +420 224 915 402, Information on health risks only - acute poisoning of humans and animals.

SECTION 2: Hazards identification

2.1. Substance or mixture classification

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

The mixture is classified as dangerous.

Aerosol 1, H222, H229
Skin Irrit. 2, H315
Skin Sens. 1, H317
STOT SE 3, H336
Aquatic Chronic 3, H412

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

Most serious adverse physico-chemical effects

Extremely flammable aerosol. Pressurised container: May burst if heated.

Most serious adverse effects on human health and the environment

Causes skin irritation. May cause drowsiness or dizziness. May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
pentane
rosin; colophony

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful 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.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to in accordance with national regulations.

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.
CAS: 68476-85-7 EC: 270-704-2	Petroleum gases, liquefied	30-60	Flam. Gas 1, H220 Press. Gas (liquefied gas), H280	1
EC: 927-510-4 Registration number: 01-2119475515-33	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	10-30	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411	
CAS: 109-66-0 EC: 203-692-4 Registration number: 01-2119459286-30	pentane	5-10	Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411	1
CAS: 67-64-1 EC: 200-662-2 Registration number: 01-2119471330-49	acetone	1-5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	1

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
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	1
CAS: 8050-09-7 EC: 232-475-7	rosin; colophony	1-5	Skin Sens. 1, H317	1
Index: 601-085-00-2 CAS: 78-78-4 EC: 201-142-8	2-methylbutane	1-5	Flam. Liq. 1, H224 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411	1

Notes

1 Substance for which exposure limits of Community for working environment exist.

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

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

Inhalation

Transfer the affected person to the fresh air and ensure calm environment for body and mind. In the event of issues, find medical advice.

Skin contact

Immediately wash with water and soap and rinse thoroughly. In the event of issues, find medical advice.

Eye contact

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. In the event of issues, find medical advice.

Ingestion

Rinse out the mouth with clean water. DO NOT INDUCE VOMITING! In the event of issues, find medical advice.

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

Inhalation

May cause drowsiness or dizziness.

Skin contact

May cause an allergic skin reaction.

Eye contact

When intruding eyes, it can evoke irritation.

Ingestion

Nausea.

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.

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.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Extremely flammable aerosol. Pressurised container: May burst if heated. Remove all ignition sources. Use personal protective equipment for work. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Provide sufficient ventilation. Remove all ignition sources. 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. After removal of the product, wash the contaminated site with plenty of water.

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. Ensure good ventilation/exhaustion at the workplace. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Do not spray on an open flame or other ignition source. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Take precautionary measures against static discharge. Pressurised container: May burst if heated. Keep away from sources of heating, ignition and direct sunlight. Do not pierce or burn, even after use.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep away from sources of heating, ignition and direct sunlight.

Storage class	2B - Aerosols
Storage temperature	min 4 °C, max 40 °C

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.

European Union

Substance name (component)	Type	Time of exposure	Value	Note	Source
pentane (CAS: 109-66-0)	OEL	8 hours	3000 mg/m³		EU limits
	OEL	8 hours	1000 ppm		
acetone (CAS: 67-64-1)	OEL	8 hours	1210 mg/m³		EU limits
	OEL	8 hours	500 ppm		

United Kingdom of Great Britain and Northern Ireland

Substance name (component)	Type	Time of exposure	Value	Note	Source
Petroleum gases, liquefied (CAS: 68476-85-7)	WEL	8 hours	1750 mg/m³		GBR
	WEL	15 minutes	2180 mg/m³		
	WEL	8 hours	1000 ppm		
	WEL	15 minutes	1250 ppm		
pentane (CAS: 109-66-0)	WEL	8 hours	1800 mg/m³		GBR
	WEL	8 hours	600 ppm		
acetone (CAS: 67-64-1)	WEL	8 hours	1210 mg/m³		GBR
	WEL	15 minutes	3620 mg/m³		
	WEL	8 hours	500 ppm		
	WEL	15 minutes	1500 ppm		
propan-2-ol (CAS: 67-63-0)	WEL	8 hours	999 mg/m³		GBR
	WEL	15 minutes	1250 mg/m³		
	WEL	8 hours	400 ppm		
	WEL	15 minutes	500 ppm		
rosin; colophony (CAS: 8050-09-7)	WEL	8 hours	0,05 mg/m³	Capable of causing occupational asthma.	GBR
	WEL	15 minutes	0,15 mg/m³	Capable of causing occupational asthma.	
2-methylbutane (CAS: 78-78-4)	WEL	8 hours	600 ppm		GBR
	WEL	8 hours	1800 mg/m³		

DNEL

2-methylbutane

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	3000 mg/m³	Systemic chronic effects	
Workers	Dermal	432 mg/kg	Systemic chronic effects	
Consumers	Inhalation	643 mg/m³	Systemic chronic effects	
Consumers	Dermal	214 mg/kg	Systemic chronic effects	
Consumers	Oral	214 mg/kg/24hour	Systemic chronic effects	

acetone

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	62 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	62 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	186 mg/kg bw/day	Systemic chronic effects	
Workers	Inhalation	2420 mg/m³	Local acute effects	
Consumers	Inhalation	200 mg/m³	Systemic chronic effects	
Workers	Inhalation	1210 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	447 mg/m³	Systemic chronic effects	
Workers	Inhalation	2085 mg/m³	Systemic chronic effects	

pentane

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	3000 mg/m³	Systemic chronic effects	
Consumers	Inhalation	643 mg/m³	Systemic chronic effects	
Workers	Dermal	432 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	214 mg/kg bw/day	Systemic chronic effects	
Consumers	Oral	214 mg/kg bw/day	Systemic chronic effects	

propan-2-ol

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	26 mg/kg bw/day	Systemic chronic effects	
Consumers	Dermal	319 mg/kg bw/day	Systemic chronic effects	
Workers	Dermal	888 mg/kg bw/day	Systemic chronic effects	
Consumers	Inhalation	89 mg/m³	Local chronic effects	
Workers	Inhalation	500 mg/kg	Systemic chronic effects	

rosin; colophony

Workers / consumers	Route of exposure	Value	Effect	Determining method
Workers	Inhalation	117 mg/m³	Systemic chronic effects	
Workers	Dermal	17 mg/kg/24hour	Systemic chronic effects	
Consumers	Inhalation	35 mg/m³	Systemic chronic effects	
Consumers	Dermal	10 mg/kg/24hour	Systemic chronic effects	
Consumers	Oral	10 mg/kg/24hour	Systemic chronic effects	

PNEC

acetone

Route of exposure	Value	Determining method
Seawater	1.06 mg/l	
Sea sediments	3.04 mg/kg of dry substance of sediment	
Soil (agricultural)	33.3 mg/kg of dry substance of soil	
Freshwater environment	10.6 mg/l	
Microorganisms in wastewater treatment plants	29.5 mg/l	

pentane

Route of exposure	Value	Determining method
Freshwater environment	0.23 mg/l	
Microorganisms in wastewater treatment plants	3.6 mg/l	
Freshwater sediment	1.2 mg/kg of dry substance of sediment	
Soil (agricultural)	0.55 mg/kg of dry substance of soil	

propan-2-ol

Route of exposure	Value	Determining method
Freshwater environment	140.9 mg/l	
Water (occasional leak)	140.9 mg/l	
Seawater	140.9 mg/l	
Microorganisms in wastewater treatment plants	2251 mg/l	
Freshwater sediment	552 mg/kg of dry substance of sediment	
Sea sediments	552 mg/kg of dry substance of sediment	
Soil (agricultural)	28 mg/kg of dry substance of soil	
Food chain	160 mg/kg of food	

rosin; colophony

Route of exposure	Value	Determining method
Freshwater environment	0.0016 mg/l	
Seawater	0.00016 mg/l	
Water (occasional leak)	0.016 mg/l	
Microorganisms in wastewater treatment plants	1000 mg/l	
Freshwater sediment	0.007 mg/kg	
Sea sediments	0.0007 mg/kg	
Soil (agricultural)	0.00045 mg/kg	

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tightly sealed goggles.

Skin protection

Protective gloves. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Material of gloves: Rubber (natural, latex). Neoprene. PVC.
Other protection: protective workwear.

Respiratory protection

Under regular circumstances it is not necessary.

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

Appearance	aerosol
Physical state	liquid at 20°C
color	white
Odour	mild
Odour threshold	data not available
pH	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Evaporation rate	non-applicable
Flammability (solid, gas)	Extremely flammable aerosol.
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available

Decomposition temperature	data not available
Viscosity	data not available
Explosive properties	data not available
Oxidising properties	data not available

data not available

9.2. Other information

Density	data not available
ignition temperature	data not available

SECTION 10: Stability and reactivity

10.1. Reactivity

When used in the standard way, there is not any dangerous reaction with other substances.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

not available

10.4. Conditions to avoid

Keep away from sources of heating, ignition and direct sunlight.

10.5. Incompatible materials

Unknown.

10.6. Hazardous decomposition products

Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2-methylbutane

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	2001 mg/kg		Rat	
Inhalation	LD_{50}	21 mg/kg		Rat	
Oral	ATE	2001 mg/kg			
Inhalation	ATE	21 mg/kg			

acetone

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	5800 mg/kg		Rat	
Dermal	LD_{50}	15800 mg/kg		Rabbit	
Inhalation	LC_{50}	76 mg/l		Rat	
Oral	ATE	5800 mg/kg			
Dermal	ATE	15800 mg/kg			
Inhalation	ATE	76 mg/l			

pentane

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	2001 mg/kg		Rat	
Oral	ATE	2001 mg/kg			
Dermal	LD_{50}	2001 mg/kg		Rabbit	

pentane

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Dermal	ATE	2001 mg/kg			
Inhalation (vapor)	LD_{50}	6 mg/l		Rat	

propan-2-ol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	4700 mg/kg		Rat	
Dermal	LD_{50}	16.4 mg/kg		Rabbit	
Oral	ATE	4700 mg/kg			

rosin; colophony

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD_{50}	2500 mg/kg		Rat	
Dermal	LD_{50}	2000.1 mg/kg		Rat	
Oral	ATE	2500 mg/kg			
Dermal	ATE	2000.1 mg/kg			

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/irritation
Based on available data the classification criteria are not met.

Respiratory or skin sensitisation
May cause an allergic skin reaction.

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
Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Harmful to aquatic life with long lasting effects.

2-methylbutane

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	4.26 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC_{50}	2.3 mg/l	48 hour	Invertebrates (Daphnia magna)	
EC_{50}	10.7 mg/l	72 hour	Algae (Selenastrum capricornutum)	

acetone

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	5540 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
LC_{50}	11000 mg/l	96 hour	Fishes (Alburnus alburnus)	
NOEC	430 mg/l	96 hour	Algae	

pentane

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	4.26 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC_{50}	2.7 mg/l	48 hour	Invertebrates (Daphnia magna)	
EC_{50}	10.7 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

propan-2-ol

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	9640 mg/l	96 hour	Fishes (Pimephales promelas)	
EC_{50}	9714 mg/l		Invertebrates (Daphnia magna)	
EC_{50}	>100 mg/l	48 hour	Invertebrates (Daphnia magna)	
EC_{50}	>100 mg/l	72 hour	Algae (Scenedesmus subspicatus)	
IC_{50}	>100 mg/l	72 hour	Algae	

Chronic toxicity

acetone

Parameter	Value	Time of exposure	Species	Environment
NOEC	2212 mg/l	8 day	Invertebrates	

12.2. Persistence and degradability

Biodegradability

acetone

Parameter	Value	Time of exposure	Environment	Result
				Easily biodegradable

pentane

Parameter	Value	Time of exposure	Environment	Result
				Biodegradable

propan-2-ol

Parameter	Value	Time of exposure	Environment	Result
				Biodegradable

The mixture is biodegradable.

12.3. Bioaccumulative potential

propan-2-ol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]	Source
						No bioaccumulation potential.

No bioaccumulation potential.

12.4. Mobility in soil

propan-2-ol

Parameter	Value	Environment	Surrounding temperature	Source
				The substance is soluble in water.

The product has poor water-solubility.

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. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste.

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

16 03 05 organic wastes containing dangerous substances

Packaging waste type code

15 01 11 metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

SECTION 14: Transport information

14.1. UN number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2 Gases

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

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

not available

Additional information

Hazard identification No.	(Kemler Code)
UN number	**1950**
Classification code	5F
Safety signs	2.1

Road transport - ADR

Excepted quantities	E0
Tunnel restriction code	(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.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

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

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.

H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful 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.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to in accordance with national regulations.

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

EUH 066	Repeated exposure may cause skin dryness or cracking.

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	Identification code for each substance listed in EINECS
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC_{50}	Concentration causing 50% blockade
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
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
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

Aerosol	Aerosol
Aquatic Chronic	Hazardous to the aquatic environment
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Gases under pressure
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.

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.