SAFETY DATA SHEET

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

SCREENBOND 2/5

Creation date	31st May 2022		
Revision date		Version	3.0

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

1.1. Product identifier — SCREENBOND 2/5

Substance / mixture — mixture

Number — R 34807 (290 ml); R 34805 (400 ml)

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

Mixture's intended use

Barrier (Sealant). For professional use only.

The use descriptors

SU 17	General manufacture, e.g. machinery, equipment, vehicles, other transport equipment
SU 19	Building and construction work
PROC 8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC 8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC 10	Roller application or brushing
ERC 5	Use at industrial site leading to inclusion into/onto article
ERC 8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)

Mixture uses advised against

not available

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 not classified as dangerous according to Regulation (EC) No 1272/2008.

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

2.2. Label elements

Supplemental information

EUH210	Safety data sheet available on request.
EUH208	Contains Trimethoxyvinylsilane, N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.

2.3. Other hazards

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. 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. Product reacts slowly with water (ambient humidity) turning into a rubbery solid and producing methanol.

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
Index: 015-013-00-7 CAS: 78-40-0 EC: 201-114-5 Registration number: 01-2119492852-28-0000	triethyl phosphate	5-<6	Acute Tox. 4, H302 Eye Irrit. 2, H319	
CAS: 1333-86-4 EC: 215-609-9 Registration number: 01-2119384822-32	carbon black	1-<1,5		
CAS: 2768-02-7 EC: 220-449-8 Registration number: 01-2119513215-52	Trimethoxyvinylsilane	0,89-<1	Flam. Liq. 3, H226 Skin Sens. 1, H317 Acute Tox. 4, H332	
CAS: 1760-24-3 EC: 217-164-6 Registration number: 01-2119970215-39	N-(3-(trimethoxysilyl)propyl) ethylenediamine	0,8-<0,9	Skin Sens. 1B, H317 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT RE 2, H373	
CAS: 52829-07-9 EC: 258-207-9 Registration number: 01-2119537297-32	Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	0,15-<0,2	Eye Dam. 1, H318 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411	
Index: 603-001-00-X CAS: 67-56-1 EC: 200-659-6	methanol	0-<0,05	Flam. Liq. 2, H225 Acute Tox. 3, H301, H311, H331 STOT SE 1, H370 Specific concentration limit: STOT SE 2, H371: C ≥ 3 %	1

Notes

1 Substance with a Union workplace exposure limit.

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 inhaled

Terminate the exposure immediately; move the affected person to fresh air. In the event of issues, find medical advice.

If on skin

Remove contaminated clothes. Immediately wash with water and soap and rinse thoroughly. In the event of issues, find medical advice. Wash contaminated clothing before reuse.

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.

If swallowed

Rinse out the mouth with clean water.

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

If inhaled

not available

If on skin

not available

If in eyes

not available

If swallowed

not available

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

In the event of issues, find medical advice. Provide medical treatment if skin irritation persists.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, foam, powder. Water mist.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

Do not breathe smoke.

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. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground 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

Prevent other leakage. Use personal protective equipment as per Section 8. Do not get in eyes, on skin, or on clothing.

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

Ventilate the room. 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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Provide sufficient ventilation. Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air. Take action to prevent static discharges. Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container. Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Keep away from heat and other ignition sources. Protect from sunlight. Store away from incompatible materials.

Storage class 10 - Other combustible liquids

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

European Union **Commission Directive 2006/15/EC**

Substance name (component)	Type	Value	Note
methanol (CAS: 67-56-1)	OEL 8 hours	260 mg/m³	Skin
	OEL 8 hours	200 ppm	

DNEL

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

Workers / consumers	Route of exposure	Value	Effect	Determining method	Source
Consumers	Oral	1 mg/kg	Systemic acute effects		
Consumers	Inhalation	1.4 mg/m³	Systemic acute effects		
Consumers	Dermal	1 mg/kg	Systemic acute effects		
Consumers	Oral	1 mg/kg	Systemic chronic effects		
Consumers	Inhalation	1.4 mg/m³	Systemic chronic effects		
Consumers	Dermal	1 mg/kg	Systemic chronic effects		
Workers	Inhalation	5.6 mg/m³	Systemic acute effects		
Workers	Dermal	2 mg/kg	Systemic acute effects		
Workers	Inhalation	5.6 mg/m³	Systemic chronic effects		
Workers	Dermal	2 mg/kg	Systemic chronic effects		

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Workers / consumers	Route of exposure	Value	Effect	Determining method	Source
Consumers	Inhalation	8.7 mg/m³	Systemic chronic effects		
Workers	Inhalation	35.3 mg/m³	Systemic chronic effects		
Consumers	Dermal	17 mg/kg bw/day	Systemic acute effects		
Consumers	Dermal	2.5 mg/kg bw/day	Systemic chronic effects		
Workers	Dermal	5 mg/kg bw/day	Systemic acute effects		
Workers	Dermal	5 mg/kg bw/day	Systemic acute effects		

triethyl phosphate

Workers / consumers	Route of exposure	Value	Effect	Determining method	Source
Consumers	Oral	5 mg/kg bw/day	Systemic acute effects		
Consumers	Oral	1 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	1.74 mg/m³	Systemic chronic effects		
Consumers	Dermal	1 mg/kg bw/day	Systemic chronic effects		
Workers	Inhalation	9.9 mg/m³	Systemic chronic effects		
Workers	Dermal	2 mg/kg bw/day	Systemic chronic effects		

Trimethoxyvinylsilane

Workers / consumers	Route of exposure	Value	Effect	Determining method	Source
Consumers	Oral	0.3 mg/kg bw/day	Systemic chronic effects		
Consumers	Inhalation	93.4 mg/m³	Systemic acute effects		
Consumers	Inhalation	1.04 mg/m³	Systemic chronic effects		
Consumers	Dermal	26.9 mg/kg/24hour	Systemic acute effects		
Consumers	Dermal	0.3 mg/kg/24hour	Systemic chronic effects		
Workers	Inhalation	4.9 mg/m³	Systemic chronic effects		
Workers	Dermal	0.69 mg/kg/24hour	Systemic chronic effects		

PNEC

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

Route of exposure	Value	Determining method	Source
Freshwater environment	0.005 mg/l		
Seawater	0.0005 mg/l		
Freshwater sediment	8.02 mg/kg		
Sea sediments	0.802 mg/kg		
Microorganisms in wastewater treatment plants	1 mg/l		
Food chain	1.6 mg/kg		

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Value	Determining method	Source
Freshwater environment	0.062 mg/l		
Seawater	0.0062 mg/l		
Freshwater sediment	0.22 mg/kg		
Sea sediments	0.022 mg/kg		
Water (intermittent release)	0.62 mg/l		
Microorganisms in wastewater treatment plants	25 mg/l		
Soil (agricultural)	0.0085 mg/kg		

triethyl phosphate

Route of exposure	Value	Determining method	Source
Freshwater environment	0.632 mg/l		
Seawater	0.0632 mg/l		
Microorganisms in wastewater treatment plants	298.5 mg/l		
Freshwater sediment	5 mg/kg		
Sea sediments	0.5 mg/kg		
Microorganisms in wastewater treatment plants	0.64 mg/kg		

Trimethoxyvinylsilane

Route of exposure	Value	Determining method	Source
Freshwater environment	0.34 mg/l		
Seawater	0.034 mg/l		
Microorganisms in wastewater treatment plants	110 mg/l		
Freshwater sediment	0.27 mg/kg of dry substance of sediment		
Water (intermittent release)	3.4 mg/l		
Soil (agricultural)	0.046 mg/kg of dry substance of soil		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation.

Eye/face protection

Tightly sealed goggles. EN166 - Personal Eye Protection Standard.

Skin protection

Hand protection: Protective gloves resistant to the product. Category III. EN ISO 374-1. Material of gloves: Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.3 mm. Penetration time of glove material: > 480 min. When handling in long-term or repeatedly, use protective gloves: Butylrubber. Recommended thickness of the material: ≥ 0.4 mm. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: Wear category I professional long-sleeved overalls and safety footwear (see Regulation (EU) 2016/425 and standard EN ISO 20344). Contaminated skin should be washed thoroughly.

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. EN143 - Respiratory protective devices - Gas filter(s) and combined filter(s).

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	black
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	The product is non-flammable. (A10 - Regulation EC 440/2008)
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Viscosity	230000 - 330000 cps (UNI EN ISO 3219 - Rotational viscometer)
Solubility in water	data not available
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	

Relative density	1,44-1,48 (ISO 1183-1 A)
Form	paste

9.2. Other information

Evaporation rate	data not available
Vapour density	insoluble
Content of organic solvents (VOC)	5 %
Max. VOC content in the product in its ready to use condition	73,5 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Product reacts slowly with water (ambient humidity) turning into a rubbery solid and producing methanol.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

Protect from moisture.

10.5. Incompatible materials

Water.

10.6. Hazardous decomposition products

Dangerous outcomes such as carbon monoxide and carbon dioxide, heavy smoke and nitrogen oxides are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

Acute toxicity

Based on available data the classification criteria are not met.

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD_{50}	3700 mg/kg		Rat		
Dermal	LD_{50}	>3170 mg/kg		Rat		
Inhalation (dust/mist)	LD_{50}	0.5 mg/l		Rat		

carbon black

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD_{50}	>8000 mg/kg		Rat		
Dermal	LD_{50}	>3000 mg/kg		Rabbit		
Inhalation (dust/mist)	LC_{50}	>27 mg/l	1 hour	Rat		

methanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	STA	100 mg/kg				estimate from table 3.1.2 of Annex I of the CLP

methanol

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Dermal	STA	300 mg/kg				estimate from table 3.1.2 of Annex I of the CLP
Inhalation (dust/mist)	STA	0.501 mg/l				estimate from table 3.1.2 of Annex I of the CLP
Inhalation (vapor)	STA	3 mg/l				estimate from table 3.1.2 of Annex I of the CLP
Inhalation (gases)	STA	700 ppm				estimate from table 3.1.2 of Annex I of the CLP

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD_{50}	2295 mg/kg		Rat		
Dermal	LD_{50}	>2000 mg/kg		Rabbit		
Inhalation	LC_{50}	1.49 mg/l	4 hour	Rat		
Inhalation (vapor)	STA	11 mg/l				estimate from table 3.1.2 of Annex I of the CLP

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

triethyl phosphate

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD_{50}	1600 mg/kg		Rat		
Dermal	LD_{50}	>20000 mg/kg		Rabbit		
Inhalation	LC_{50}	>8817 mg/m³		Rat		

Trimethoxyvinylsilane

Route of exposure	Parameter	Value	Time of exposure	Species	Sex	Source
Oral	LD_{50}	7178 mg/kg		Rat		
Dermal	LD_{50}	3200 mg/kg		Rabbit		
Inhalation	LD_{50}	16.8 mg/l	4 hour	Rat		

Skin corrosion/irritation

Based on available data the classification criteria are not met.

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
Based on available data the classification criteria are not met.
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.

11.2. Information on other hazards
not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	4.4 mg/l	96 hour	Fishes (Branchydanio rerio)	
EC_{50}	0.57 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	1.9 mg/l	72 hour	Algae (Scenedesmus subspicatus)	

carbon black

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	>1000 mg/l	96 hour	Fishes (Branchydanio rerio)	
EC_{50}	>10000 mg/l	72 hour	Algae (Scenedesmus subspicatus)	

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	344 mg/l	96 hour	Fishes (Branchydanio rerio)	
EC_{50}	81 mg/l	48 hour	Invertebrates (Daphnia magna)	
EC_{50}	126 mg/l	72 hour	Algae (Scenedesmus subspicatus)	

triethyl phosphate

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	>100 mg/kg	96 hour	Fishes (Danio rerio)	
EC_{50}	901 mg/l	72 hour	Algae (Desmodesmus subspicatus)	
EC 10	127 mg/l	72 hour	Algae (Desmodesmus subspicatus)	

Trimethoxyvinylsilane

Parameter	Value	Time of exposure	Species	Environment
LC_{50}	191 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	

Chronic toxicity

triethyl phosphate

Parameter	Value	Time of exposure	Species	Environment
NOEC	31.6 mg/l		Daphnia (Daphnia magna)	

Trimethoxyvinylsilane

Parameter	Value	Time of exposure	Species	Environment
NOEC	25 mg/l		Algae (Selenastrum capricornutum)	

More information

Prevent other leakage. Inform respective authorities in case of seepage into water course or sewage system.

12.2. Persistence and degradability

Biodegradability

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

Parameter	Value	Time of exposure	Environment	Result
				Hardly biodegradable

methanol

Parameter	Value	Time of exposure	Environment	Result
				Easily biodegradable

N-(3-(trimethoxysilyl)propyl)ethylenediamine

Parameter	Value	Time of exposure	Environment	Result
				Hardly biodegradable

Trimethoxyvinylsilane

Parameter	Value	Time of exposure	Environment	Result
				Hardly biodegradable

Data not available.

12.3. Bioaccumulative potential

methanol

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Kow	-0.77				
BCF	0.2				

Not available.

12.4. Mobility in soil

Not available.

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

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. 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

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances *

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Packaging waste type code

15 01 02 plastic packaging

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

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SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

No.

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

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

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

EUH210	Safety data sheet available on request.
EUH208	Contains Trimethoxyvinylsilane, N-(3-(trimethoxysilyl)propyl)ethylenediamine. 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
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
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
NOEC	No observed effect concentration
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

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Repr.	Reproductive toxicity
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
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 29 October 2019. Changes were made in sections 2, 3, 8, 9, 11, 12, 13, 15 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.