1 - Identification of the substance and/or mixture by the company

1.1 Product Identification

Product name : SILIKONprofi ALCOXY-F
Product designation : SILIKONprofi
Product shape : Mixture
DoP-Number : SP0021002
Article number (GTIN/EAN) : See imprint product
Batch-Number : See imprint product

1.2 Applications of the substance and/or mixture

Relevant identified uses of the substance or mixture and uses advised against
No further information available.

Use of the substance or mixture
Industrial use

1.3 Details of the supplier providing the safety data sheet

Manufacturer / Supplier
S-Polytec GmbH
Im Schlop 11
D - 47559 Kranenburg
Telephone : +49 2826 - 308 905-0

Informing department
Department S-Polybond Adhesives
Mr. Dipl. Ing (FH) Andreas Schröder
Telephone : +49 2826 - 308 905-0
Email : spolybond@s-polytec.de

1.4 Emergency number

Advice centre for poisoning, Mainz
Telephone : +49 131 - 19 240

2 - Possible hazards

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Not classified.

Harmful physio-chemical effects and adverse effects on human health and the environment.
No further information available.

2.2 Labelling element

Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP Regulation.

Hazard pictograms
not required

Signal word : not required

Hazard statements

EUH208	Contains N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine, 3-aminopropyltriethoxysilane, N-(3-(trimethoxysilyl)propyl) ethylenediamine, trimethoxyvinylsilan. May cause allergic reactions.
EUH210	Safety data sheet available on request.
EUH211	Caution! Spraying may produce hazardous respirable droplets. Do not inhale aerosol or mist.

2 - Possible hazards

2.3 Other hazards

Results of PBT and vPvB assessment
This substance/mixture does not meet the PBT criteria of REACH, Annex XIII.
This substance/mixture does not meet the vPvB criteria of REACH Regulation, Annex XIII.

3 - Composition / Information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Ingredients:

CAS : 2768-02-7 EC-Nr. : 220-449-8 REACH-Nr. : 01-2119513215-52	vinyltrimethoxysilane Flam. Liq. 3, H226; Acute Tox. 4 (Inhalation), H332; STOT RE 2, H373	2.5% - 5%
CAS : 13463-67-7 EC-Nr. : 236-675-5 EC-Indexnr. : 022-006-002 REACH-Nr. : 01-2119489379-17	Titanium dioxide (Anmerkung W, Anmerkung 10) Carc. 2, H351	1% - 2.5%
CAS : 35141-30-1 EC-Nr. : 252-390-9	N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine Eye Dam. 1, H318; Skin Sens. 1, H317	0.1% - 1 %
CAS : 1 760-24-3 EC-Nr. : 217-164-6 REACH-Nr. : 01-2119970215-39	N-(3-(Trimethoxysilyl)propyl) ethylendiamin Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335	0.1% - 1 %
CAS : 919-30-2 EC-Nr. : 213-048-4 EC-Indexnr. : 612-108-00-0 REACH-Nr. : 01-2119480479-24	3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin Acute Tox. 4 (Oral), H302; Skin Corr. 1B, H314; Skin Sens. 1, H317	0.1% - 1 %

Specific concentration limits:

CAS : 1 760-24-3 EC-Nr. : 217-164-6 REACH-Nr. : 01-2119970215-39	N-(3-(Trimethoxysilyl)propyl) ethylendiamin Eye Irrit. 2, H319 : Skin Sens. 1, H317 :	 2.5 ≤C < 100 2.5 ≤C < 100

Note 10 : The classification as „carcinogenic by inhalation“ applies only to mixtures in the form of powder containing at least 1 % titanium dioxide in particulate form or incorporated in particles with an aerodynamic diameter of ≤ 10 µm.

Note W : It has been found that there is a risk of carcinogenic effects of this substance when respirable dust is inhaled in quantities that lead to significant impairment of the natural cleaning mechanisms for particles in the lungs.
This note is intended to describe the specific toxicity of the substance and is not a criterion for classification under this Regulation.

Additional information : For the wording of the listed hazard statements see section 16.

4 - First aid measures

4.1 Description of first aid measures

after inhalation : Remove affected person to fresh air and ensure unobstructed breathing.

after skin contact : In case of contact with skin, wash immediately with plenty of soap and water.

after eye contact : Rinse opened eye immediately with plenty of water.
If pain or redness persists, seek medical attention.

after ingestion : Rinse out mouth.

4 - First aid measures

4.2 Symptoms and effects

Most important symptoms and effects, both acute and delayed

after inhalation : Under normal conditions of use, no appreciable risk is to be expected from inhalation.

after skin contact : Under normal conditions of use, no significant skin exposure is expected.

after eye contact : Under normal conditions of use, no appreciable risk is to be expected from eye contact.

after ingestion : No appreciable risk to health from ingestion to be expected under normal conditions of use.

4.3 Indication of any immediate medical attention and special treatment needed

No further information available.

5 - Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media
All extinguishing media are permissible.

Unsuitable extinguishing media
None known.

5.2 Special hazards arising from the substance or mixture

Fire hazard
The material is not combustible.

Explosion hazard
The product is not explosive.

5.3 Advice for firefighters

No further information available.

6 - Accidental release measures

6.1 Personal precautions

General precautions : Provide cleaning personnel with appropriate protection.

Personnel not trained for emergencies
Protective equipment : Use personal protective clothing, see section 8.

Emergency personnel
Protective equipment : For further information see section 8 „Exposure controls/personal protective equipment“.

6.2 Environmental precautions

Avoid release to the environment.
Collect waste in suitable and labelled containers and dispose of in accordance with local legislation.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Sweep or shovel spillage into a container suitable for disposal.

6.4 Reference to other sections

Other information : See section 8 „Exposure controls/personal protective equipment“. Protective equipment“. For further information on disposal see section 13.

7 - Handling and storage

7.1 1 Precautions for safe handling

Precautions for safe handling
Use prescribed personal protective equipment.

Hygiene measures
Wash hands and other exposed parts of the body with mild soap and water before eating, drinking or smoking and when leaving the workplace.

Use temperature : +5 °C to +40 °C

7.2 Conditions for safe storage, taking into account incompatibilities

Storage conditions : Store only in the original container in a cool, well-ventilated place.

Maximum storage time : 15 months

Storage temperature : +5 °C to +25 °C

7.3 Specific end uses

No further information available.

8 - Limitation and supervision of exposure / Personal protective equipment

8.1 Parameters to be monitored

No further information available.

8.2 Limitation and supervision of personal protective equipment

Suitable technical control equipment:
Ensure good ventilation of the workplace.
Emergency eye showers should be available in the immediate vicinity of possible exposure.

Respiratory protection
Under normal conditions of use and with adequate ventilation, no special respiratory protection equipment is required.

Hand protection
Disposable gloves according to EN 374

Glove material	: Nitrile rubber (NBR)
Permentation	: 6 (> 480 minutes)
Thickness	: > 0.1 mm

Consult glove manufacturer for penetration time.
Please follow the manufacturer‘s instructions for permeability and breakthrough time.
Gloves must be replaced after each use and when signs of wear or perforation appear.

Eye protection
Safety glasses with side protection according to EN 166.

Skin and body protection
Under normal conditions of use, special clothing/skin protection equipment is not required.

Consumer exposure controls
Remove all contaminated clothing immediately.
Avoid contact with eyes and skin.
Wash hands and other exposed body parts with soap and water when leaving the workplace.
Do NOT eat, drink or smoke while working.

Other information
Wash contaminated clothing before reuse.

9 - Physical and chemical properties

9.1 General information on basic physical and chemical properties

Physical state	Liquid
Appearance	Paste
Colour	According to product specification
Odour	Characteristic
Odour threshold	No data available
pH value	No data available
Evaporation rate (butyl acetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density at 20 °C	1.2 g/cm³
Solubility in water at 20 °C	Insoluble
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
Explosion limits	No data available

9.2 Other information on basic physical and chemical properties

No further information available.

10 - Stability and reactivity

10.1 Reactivity

No dangerous reactions are known under normal conditions of use.

10.2 Chemical stability

Stable at room temperature under normal conditions of use.

10.3 Possibility of hazardous reactions

No hazardous reactions under normal conditions.

10.4 Conditions to avoid

No further information available.

10.5 Incompatible materials

No further information available.

10.6 Hazardous decomposition products

No decomposition under normal conditions.

11 - Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)		
Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)
Inhalative	LC50 / 4h	1.49 mg/l (rat, dust/mist)

vinyltrimethoxysilane (2768-02-7)		
Oral	LD50	7120 mg/kg (rat)
Dermal	LD50	3540 mg/kg (rabbit)
Inhalative	LC50 / 4h	2773 ppm (rat, OECD-Method 403)
Inhalative	LC50 / 4h	16.80 mg/l (rat, dust/mist)

N-(3-(Trimethoxysilyl)propyl) ethylendiamin (1760-24-3)		
Oral	LD50	2295 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit, EPA OPPTS 870.1200)
Inhalative	LC50	1.49 - 2.44 mg/l (rat, air, EPA OPPTS 870.1300 , OECD-Method 403)
Inhalative	LC50 / 4h	> 1.49 mg/l (rat, dust/mist)

3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin (919-30-2)		
Oral	LD50	2.69 mg/kg (rat)
Inhalative	LC50	> 5 ppm (rat)

Titanium dioxide (13463-67-7)		
Oral	LD50	> 5000 mg/kg (rat, EPA OPPTS 870.1100, OECD-Method 425)
Dermal	LD50	>10000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50	> 6.82 mg/l (rat)
Inhalative	LC50 / 4h	> 6.82 mg/l (rat, dust/mist)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Respiratory/skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin (919-30-2)		
Oral	NOAEL	> 43.8 mg/kg (animal, body weight, chronic, 2 years)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity : Not classified (Based on available data, the classification criteria are not met)

In case of single exposure

Specific target organ toxicity : Not classified (Based on available data, the classification criteria are not met)

In case of repeated exposure

N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)		
Oral	NOAEL / 90days	500 mg/kg (rat, body weight/day)

vinyltrimethoxysilane (2768-02-7)		
Oral	NOAEL / 90days	200 mg/kg (rat, body weight/day)

Aspiration hazard : Not classified

11 - Toxicological information

11.1 Information on toxicological effects

N-(3-(Trimethoxysilyl)propyl) ethylendiamin (1760-24-3)		
Oral	NOAEL / 90days	≥ 500 mg/kg (rat, body weight, OECD-Method 422)
Dermal	NOAEL / 90days	≥ 1545 mg/kg (rat, body weight)

3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin (919-30-2)		
Oral	LOAEL / 90days	≥ 600 mg/kg (rat, body weight/day)
Oral	NOAEL / 90days	≥ 200 mg/kg (animal, body weight, subchronical)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

12 - Environmental information

12.1 Toxicity

Hazardous to the aquatic environment, short term (acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment longterm (chronic) : Not classified (Based on available data, the classification criteria are not met)

N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)	
LC50	597 mg/l (fish 1, OECD-Method 203)
EC50	81 mg/l (crustaceans 1, OECD-Method 202)
EC50 / 72 h	126 mg/l (algae 1, Method EU C.3)
NOEC chronic	> 1 mg/l (crustaceans, OECD-Method 211)

vinyltrimethoxysilane (2768-02-7)	
LC50	191.0 mg/l (fish 1)
EC50	167.0 mg/l (crustaceans 1, daphnia magna)
EC50 / 72 h	> 957 mg/l (algae 1)
ErC 50	> 100 mg/l (algae 1, OECD-Method 201)
NOEC chronic	25 mg/l (algae 1)

N-(3-(Trimethoxysilyl)propyl) ethylendiamin (1760-24-3)	
LC50	597 mg/l (fish 1, Danio rerio)
EC50	81 mg/l (crustaceans 1, daphnia magna)
EC50 / 72 h	126 mg/l (algae 1, desmodesmus subspicatus)
EC50 / 72 h	352 mg/l (algae 2, desmodesmus subspicatus)
ErC 50	8.8 mg/l (algae, OECD-Method 201)
NOEC chronic	> 1 mg/l
NOEC chronic	3.1 mg/l (algae, OECD-Method 201)

3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin (919-30-2)	
LC50	> 100 mg/l (fish 1, brachydanio rerio)
EC50	> 100 mg/l (crustaceans 1, daphnia magna)
EC50 / 72 h	> 100 mg/l (algae 1, pseudokirchneriella subcapitata)
NOEC chronic	1.3 mg/l (72h, algae, desmodesmus subspicatus)

Titanium dioxide (13463-67-7)	
LC50	155 mg/l (fish 1, japanese medaka)
LC50	> 10000 mg/l (fish 2)
EC50	19.3 mg/l (crustaceans 1, daphnia magna)
EC50	27.8 mg/l (crustaceans 2, daphnia magna)
EC50	> 1000 mg/l (other aquatic organisms 1)
EC50	61 mg/l (other aquatic organisms 2)
EC50 / 72 h	> 100 mg/l (algae 1, pseudokirchneriella subcapitata)
NOEC chronic	≥ 2.92 mg/l (21d, crustaceans 1, daphnia magna)
NOEC chronic	5600 mg/l (algae)

12 - Environmental information

12.2 Persistence and degradability

N-(3-(Trimethoxysilyl)propyl) ethylendiamin (1760-24-3)	
Biodegradation	39 % (OECD-Method 301A)

3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin (919-30-2)	
Persistence and degradability	not readily biodegradable, hydrolysis in water
Biodegradation	67 % / 28d (OECD-Method 301A)

Titanium dioxide (13463-67-7)	
Persistence and degradability	not readily biodegradable

12.3 Bioaccumulation potential

3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin (919-30-2)	
Bioconcentration factor (BCF REACH)	3.4 (carp, cyprinus carpio)
Bioaccumulation potential	not bioaccumulative

12.4 Mobility on soil

No further information available.

12.5 Results of PBT and vPvB assessment

Mixture S-Polybond SILIKONprofi Alcoxy-F

PBT This substance/mixture does not meet the PBT criteria of REACH, Annex XIII.
vPvB This substance/mixture does not meet the vPvP criteria of REACH Regulation, Annex XIII.

Component vinyltrimethoxysilane (2768-02-7)

PBT This substance/mixture does not meet the PBT criteria of REACH, Annex XIII.
vPvB This substance/mixture does not meet the vPvP criteria of REACH Regulation, Annex XIII.

Component N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine (35141-30-1)

PBT This substance/mixture does not meet the PBT criteria of REACH, Annex XIII.
vPvB This substance/mixture does not meet the vPvP criteria of REACH Regulation, Annex XIII.

12.6 Other adverse effects

No further information available.

13 - Notes on disposal

13.1 Waste treatment procedures

Local regulations (waste)
Disposal must be carried out in accordance with official regulations.

Recommendations for product/packaging waste disposal
Empty remaining packaging before disposal. Empty containers should be reused, reconditioned or disposed of in accordance with local regulations. Recycle in an approved incinerator or incinerate.

EAK-code

08 04 09* - Waste adhesives and sealants containing organic solvents or other dangerous substances.
08 04 10 - Waste adhesives and sealants other than those mentioned in 08 04 09.

14 - Transport information

14.1 UN number

Not applicable.

14.2 Proper UN shipping name

Not applicable.

14 - Transport information

14.3 Transport hazard classes

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Environmentally hazardous : no
No further information available.

14.6 Special precautions for user

-Overland transport
Transport regulations (ADR) : No data available.

14.7 Bulk-transport according to Annex II of the MARPOL Convention and according to the IBC Code

Not applicable.

15 - Legal regulations

15.1 Regulations on safety, health and environmental protection/ Specific legislation for the substance or mixture

EU Regulations
The following restrictions of use (Annex XVII) according to Regulation (EC) No 1907/2006 (REACH) are applicable:

3(a) Substances or mixtures meeting the criteria of any of the following hazard levels or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 Categories 1 and 2, 2.15 Types A to F	Methanol; Methylalkohol ; Toluol ; vinyltrimethoxysilane ; tetramethyl orthosilicate ; 2-Propanol; Isopropylalkohol; Isopropanol;
3(b) Substances or mixtures meeting the criteria of any of the following hazard levels or categories in accordance with Annex I to Regulation (EC) No. 1272/2008: Hazard classes 3.1 to 3.6, 3.7 Impairment of sexual function and fertility and of development development, 3.8 excluding narcotic effects, 3.9 and 3.10	Methanol; Methylalkohol ; N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine ; 3-Aminopropyltriethoxysilan; 3-(Triethoxysilan)-propan-1-amin ; N-(3-(Trimethoxysilyl) propyl) ethylendiamin ; 3-(trimethoxysilyl) propylamine ; Toluol ; vinyltrimethoxysilane ; tetramethyl orthosilicate ; dioctyl tin oxide ; 2-Propanol; Isopropylalkohol; Isopropanol ; Dichlordioctylstannan ; bis(2-ethylhexyl) hydrogen phosphate;
3(c) Substances or mixtures meeting the criteria of any of the following hazard levels or categories set out in Annex I to Regulation (EC) No. 1272/2008: Hazard class 4.1	Dichlordioctylstannan;
40. substances classified as flammable gases of category 1 or 2, as flammable liquids of category 1 or 2, as flammable liquids of category 1 or 2. Flammable liquids of categories 1, 2 or 3, as flammable solids of solids of categories 1 or 2, as substances and mixtures which are flammable in flammable gases in contact with water, of categories 1, 2 or 3, as pyrophoric liquids of category 1 or as spontaneously combustible (pyrophoric) solids of category 1 whether or not they are classified in Annex VI Part 3 of Regulation (EC) No 1272/2008.	Methanol; Methylalkohol ; Toluol ; vinyltrimethoxysilane ; tetramethyl orthosilicate ; 2-Propanol; Isopropylalkohol; Isopropanol;
48. Toluol	Toluol;
69. Methanol	Methanol; Methylalkohol

Does not contain a REACH candidate substance.
Does not contain a substance listed in REACH Annex XIV.

15 - Legal regulations

15.1 Regulations on safety, health and environmental protection/ Specific legislation for the substance or mixture

National regulations

Germany

Major Accidents Ordinance - 12th BImSchV
Not subject to 12th BImSchV (Federal Immission Control Ordinance) (Major Accidents Ordinance)

Water hazard class
Water hazard class WGK 3, highly hazardous to water (classification according to AwSV, Annex 1I

15.2 Chemical safety assessment

No further information available.

16 - Other information

16.1 Relevant phrases

Full text of hazard statements (H and EUH phrases) indicated by abbreviations.

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes severe eye irritation.
H332	Harmful by inhalation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
EUH208	Contains 3-aminopropyltriethoxysilane; 3-(triethoxysilane)-propan-1-amine, 3-(2-aminoethylamino)propyltrimethoxysilane, trimethoxyvinylsilan. May cause allergic reactions.
EUH210	Safety data sheet available on request.
EUH211	Caution! Spraying may produce hazardous respirable droplets. Do not breathe aerosol or mist.

Acute Tox. 4 (Inhalation:vapour)	: Acute toxicity (inhalation: vapour), Category 4
Acute Tox. 4 (Oral)	: Acute toxicity (oral), category 4
Acute Tox. Not classified (Inhalation:dust,mist)	: Acute toxicity (inhalation:dust,mist) Not classified
Aquatic Chronic Not classified	: Hazardous to the aquatic environment - Chronic Hazardous to the aquatic environment Not classified
Carc. 2	: Carcinogenicity, category 2
Eye Dam. 1	: Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	: Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	: Flammable Liquids, Category 3
Skin Corr. 1B	: Skin burn/irritation, Category 1, Subcategory 1B
Skin Sens. 1	: Skin sensitisation, Category 1
STOT SE 3	: Specific target organ toxicity (single exposure), Category 3, Respiratory irritation

16.2 Area issuing data sheet

See issuing area section 1 para 1.3

16 - Other information

16.3 AAbbreviations and acronyms

CAS-Nr.	: Chemical Abstract Service number
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
BOD	: Biochemical Oxygen Demand (BOD)
CLP	: Regulation on Classification, Labelling and Packaging; Regulation (EC) No 1272/2008
COD	: Chemical Oxygen Demand
DMEL	: Derived minimal adverse effect exposure level
DNEL	: Derived no adverse effect exposure level
EC50	: Average effective concentration
EC-Nr.	: European Community Number
EN	: European Standard
IATA	: International Air Transport Association
IMDG	: International Maritime Dangerous Goods Regulations
IOELV	: Occupational exposure limit values
LC50	: Lethal concentration for 50 % of a test population
LD50	: Lethal dose to 50 % of a test population (median lethal dose)
LOAEL	: Lowest dose with observable adverse effect
NOAEC	: Concentration with no observable adverse effect
NOAEL	: Dose with no observable adverse effect
NOEC	: Highest observed concentration with no observed adverse effect
OCDE	: Organisation for Economic Co-operation and Development
OEL	: Occupational exposure limit
PBT	: Persistent, bioaccumulative and toxic substance
PNEC	: Estimated No-Effect Concentration
REACH	: Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No 1907/2006
SDB	: Safety Data Sheet
vPvB	: Very persistent and very bioaccumulative
VOC	: Volatile organic compounds

Data sources

ECHA (European Chemicals Agency). Safety documents of the supplier. 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 and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006.

Training information

Normal use of this product is considered to be solely and exclusively the use indicated on the product packaging.

The information in the safety data sheet is based on our current knowledge, but does not constitute a guarantee of product properties and does not establish a contractual legal relationship. However, they do not constitute a guarantee of product properties and do not establish a contractual legal relationship.

Changes compared to the previous version
Change of contact information
Change of the product shelf life