Wikosil®-NB 71XX

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

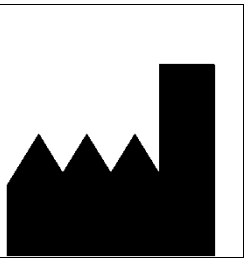
Trade Name	**Wikosil-NB**
Item number	NB 71XX (XX = colour) / Version with fungicide
BAG-Register number (CH)	CPID: 981711-79 UFI: QE20-C03W-D005-C0CF

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

Relevant identified uses	Sealant
Uses advised against	All applications that are not explained in this technical data sheet.

1.3 Details of the supplier of the safety data sheet

Supplier	**Wisabax AG** Kleb- und Dichtstoffe
Address	Grossmatte 21 / Postfach CH-6014 Luzern-Littau
Phone	+41 (0)41 250 18 18
Email	info@wisabax.ch
URL	www.wisabax.ch
Information contact	Technical Dept. - Mr B. Wicki Environment Dept. - Mrs E. Svets



1.4 Emergency telephone number

24h emergency number (just possible in switzerland)	**Tel. 145**	
Tox Info Suisse (ancient swiss toxicological infomations centre) **For emergencies from all the countries** 24h accessible in german, french, italian oder english. For not urgent cases see www.toxinfo.ch.	**Tel. +41 (0)44 251 51 51**	

2. Hazards identification

2.1 Classification of the substance or mixture according to (EC) Nr. 1272/2008 (CLP).

Hazard class	Hazard category	Hazard warnings
omitted	omitted	H412 Harmful to aquatic life with long lasting effects.

2.2 Labelling according to Regulation (EC) Nr. 1272/2008 (CLP)

Pictograms(e)	omitted
Signal word(s)	omitted
Hazard warning(s) [H-statements]	H412 Harmful to aquatic life with long lasting effects.
Safety instruction(s) [P-statements]	P273 Avoid release to the environment. P501 Dispose of contents/container in accordance with regional regulations.
Special marking(s) [EUH-Phrases]	EUH208 Contains 3-aminopropyltriethoxysilane, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction. EUH210 Safety data sheet available on request.

2.3 Other hazards

Persons suffering from allergic reactions to this product should avoid contact with de product.

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

3. Composition/information on ingredients

3.1 Substances
This product is a mixture, for more see section 3.2.

3.2 Description of the mixture

Mixture of the substances listed below with harmless additions.

Content: 1 % - <5 %

CAS No.: 37859-55-5 EG No.: 484-460-1 Index No.: - Reg. No. (REACH): 01-2120004323-76-XXXX	**O,O',O''-(methylsilylidyne)trioxime 2-pentanone** [25/Q4,60/5,3]	Acute Tox. 4 (oral), H302; Eye Irrit. 2, H319

Content: 0.1 % - <1 % ()

CAS No.: 13463-67-7 EG No.: 236-675-5 Index No.: 022-006-002 Reg. No. (REACH): 01-2119489379-17-XXXX	**titanium dioxide** (homogeneously mixed in pasty or liquid, NOT inhalable form)	Substance with certain legal requirements. [Carc. 2, H351] (inhalative)

Content: 0.1 % - <0.5 %

CAS No.: 919-30-2 EG No.: 213-048-4 Index No.: 612-108-00-0 Reg. No. (REACH): 01-2119480479-24-XXXX	**3-aminopropyltriethoxysilane** [25/QE/4]	Acute Tox. 4 (oral), H302; Skin Corr. 1B, H314

Content: 0.05 % - <0.1 %

CAS No.: 556-67-2 EG No.: 209-136-7 Index No.: 014-018-00-1 Reg. No. (REACH): 01-2119529238-36-XXXX	**octamethylcyclotetrasiloxane** [25/Q2/5]	Repr. 2, H361f; Aquatic Chronic 1, H410; Flam. Liq., H226

Content: 0.0025 % - <0.01 % *

CAS No.: 26530-20-1 EG No.: 247-761-7 Index No.: 613-112-00-5 Reg. No. (REACH): 01-2120768921-45-XXXX	**2-octyl-2H-isothiazol-3-one** biocide abbreviation: OIT Further name(s): octylisothiazolinone SCL Skin Sens. 1A; H317: C ≥ 0.0015% Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100	Acute Tox. 2, H330; Acute Tox. 3, H311; Acute Tox. 3, H301; Skin Corr. 1, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071

* Note on classification: **2-octyl-2H-isothiazol-3-one (OIT)** is present in encapsulated form, meaning that only a very small fraction is freely available in the mixture. A formulation with a very similar composition showed no evidence of sensitizing effects in OECD Test No. 406. Therefore, classification and labeling with GHS 07 / Warning / H317 is not required.

Note: H-phrases and abbreviations are detailed in section 16.

4. First aid measures

4.1 Description of first aid measures

General information	Observe the general rules of first aid measures. Refresh occasionally your knowledge. If medical advice is required, have this safety data sheet, the packaging or the label ready.
Following inhalation	Supply fresh air. Loosen restrictive clothing. Place in a resting position. Consult a doctor depending on the symptoms.
Following skin contact	Product residues remove mechanically, e.g. Remove contaminated clothing immediately. Wash skin with much water and soap. Consult a doctor depending ond the symptoms, if possible, show this container or label. Generally, the product does not irritate the skin.
Following eye contact	Rinse open eyes for several minutes under running water. Depending on the symptoms (e.g. redness), consult an ophthalmologist. Remove contact lenses, if possible.
Following ingestion	Rinse mouth thoroughly with water. Keep airways free. Telephone the emergency number or consult a doctor. If it is possible, present this safety data sheet or product label. Do not induce vomiting! Drink plenty of water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed
It may, in particular trough prolonged or repeated exposure the following symptoms may occur.
Desiccation of the skin. Allergic reactions possible.
In certain cases, symptoms of intoxication may only appear after a longer period of time/after several hours.

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

5. Firefighting measures

5.1 Extinguishing media
Always adapt firefighting measures to the surroundings and the size of the fire.

Suitable extinguishing media: Water spray jet, Dry powder fire extinguishers, Alcohol-resistant foam, Carbon dioxide
Unsuitable extinguishing media: Full water jet

5.2 Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire:
Carbon oxide (Carbon monoxide, ..), Nitrogen oxide (NOx).

5.3 Advice for fire-fighters
Do not inhale combustion gases.
Wear breathing apparatus with own air supply. Wear full protection depending on fire class.
Use water spray to cool endangered containers.
Dispose contaminated fire extinguishing water according to official directives.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Arrange for sufficient air supply. Avoid eye and skin contact as well as inhalation.

6.2 Environmental precautions
Do not empty into drains. Prevent surface and ground-water infiltration, as well as ground penetration.

6.3 Methods and material for containment and cleaning up
Mechanical remove and correct disposal of waste (cf. paragraph 13).

6.4 Reference to other sections
Personal protective equipment see section 8. Waste disposal see section 13.
Safe handling, see section 7.

7. Handling and storage

7.1 Precautions for safe handling
Ensure good ventilation. If necessary suction measures at the workplace or on the processing machines required. General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and after work. Attention of the general rules of the preventing operational fire protection.

7.2 Conditions for safe storage, including any incompatibilities
Protect them from direct sunlight and heat. Protect the product against moisture.
Recommended storage temperature: +5°C - +25°C.

7.3 Specific end uses
Adhesives and sealants - See technical data sheet and the product imprint.

8. Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

CAS No.: 112945-52-5 EG No.: 601-216-3 Index No.: - Reg. No. (REACH): -	**synthetic amorphous fumed silica, crystalline-free** DE: TRHS: 4 mg/m3 E,2, colloidal amorphous silica (CAS 7631-86-9), including fumed silica and silica produced by wet process (precipitated silica, silica gel) [25/Q1/5/V1]

CAS No.: 13463-67-7 EG No.: 236-675-5 Index No.: 022-006-002 Reg. No. (REACH): 01-2119489379-17-XXXX	**titanium dioxide** (in powder form with min. 1% particles with aerodynamic diameter <= 10 µm) CH: MAC: 3 mg/m^3 (a) DE: TRHS / TWA: 1.25 mg/m^3 Exp. Factor 2, AGW: 10 mg/m^3, Exp. Factor 2 [25/Q5,1,S,1/4,2,5]

CAS No.: 26530-20-1 EG No.: 247-761-7 Index No.: 613-112-00-5 Reg. No. (REACH): 01-2120768921-45-XXXX	**2-octyl-2H-isothiazol-3-one** biocide abbreviation: OIT CH: 0.05 mg/m^3 long-term, 0.1 mg/m^3 Kurzzeit DE: TRHS: 0.05 E mg/m^3 [25/Q61,S/3]

CAS No.: 64-17-5 EG No.: 200-578-6 Index No.: 603-002-00-5 Reg. No. (REACH): 01-2119457610-43-XXXX	**ethanol** CH: MAC: 500 ppm (960 mg/m^3) CH: STEL: 1000 ppm (1920 mg/m^3)

CAS No.: 67-56-1 EG No.: 200-659-6 Index No.: 603-001-00-X Reg. No. (REACH): 01-2119433307-44-XXXX	**methanol** CH: MAC: 200 ppm, MAC: 260 mg/m^3 CH: MAC: 100 ppm, MAC: 130 mg/m^3/8h CH: STEL: 400 ppm, STEL: 520 mg/m^3 EU: TWA: 200 ppm, TWA: 260 mg/m^3 DE: BLV: Urin 15 mg/l end of exposure or end of shift

MAK = Maximum Workplace Concentration (TLV = Threshold Limit Value)
CH It's a swiss limit, edited by SUVA. If there is no limit from SUVA it's a work place limit (AGW) from Germany or another European state.

CAS No.: 37859-55-5 EG No.: 484-460-1 Index No.: - Reg. No. (REACH): 01-2120004323-76-XXXX	**O,O',O''-(methylsilylidyne)trioxime 2-pentanone** employee: DNEL: 0.229 mg/m^3 [inhalative, long-term, systemic effects]; employee: DNEL: 0.065 mg/m^3 KG/d [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 0.033 mg/kg KG/d [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 0.057 mg/m^3 [inhalative, long-term, systemic effects];

	consumer: DNEL: 0.033 mg/kg KG/d [oral, long-term, systemic effects]; environment: PNEC: 0.1 mg/l [fresh water]; environment: PNEC: 0.01 mg/l [sea water]; environment: PNEC: 0.569 mg/kg [sediment, fresh water]; environment: PNEC: 0.057 mg/kg [sediment, seawater]; environment: PNEC: 2.15 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 0.044 mg/kg [soil]

CAS No.: 556-67-2 EG No.: 209-136-7 Index No.: 014-018-00-1 Reg. No. (REACH): 01-2119529238-36-XXXX	**octamethylcyclotetrasiloxane** employee: DNEL: 73 mg/m^3 [inhalative, long-term, systemic effects]; consumer: DNEL: 13 mg/m^3 [inhalative, long-term, systemic effects]; consumer: DNEL: 3.7 mg/kg [oral, long-term, systemic effects]; environment: PNEC: 0.0015 mg/l [fresh water]; environment: PNEC: 0.00015 mg/l [sea water]; environment: PNEC: 3 mg/kg [sediment, fresh water]; environment: PNEC: 0.3 mg/kg [sediment, seawater]; environment: PNEC: 0.54 mg/kg [soil]; environment: PNEC: 10 mg/l [microorganisms in wastewater treatment plants] [25/Q1/5]

CAS No.: 13463-67-7 EG No.: 236-675-5 Index No.: - Reg. No. (REACH): 01-2119489379-17-XXXX	**titanium dioxide** employee: DNEL: 10 mg/m^3 [inhalative, long-term, local effects]; consumer: DNEL: 700 mg/kg [oral, long-term, systemic effects]; environment: PNEC: 0.184 mg/l [fresh water]; environment: PNEC: 0.0184 mg/l [sea water]; environment: PNEC: 0.193 mg/l [fresh water, sporadic release]; environment: PNEC: 100 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 1000 mg/kg dw [sediment, fresh water]; environment: PNEC: 100 mg/kg dw [sediment, seawater]; environment: PNEC: 100 mg/kg dw [soil]; environment: PNEC: 1667 mg/kg feed [oral, feed] [24/Q1/4]

CAS No.: 919-30-2 EG No.: 213-048-4 Index No.: 612-108-00-0 Reg. No. (REACH): 01-2119480479-24-XXXX	**3-aminopropyltriethoxysilane** employee: DNEL: 59 mg/m^3 [inhalative, short-term, systemic effects]; employee: DNEL: 8.3 mg/kg kg/d [dermal exposure route, short-term, systemic effects]; employee: DNEL: 14 mg/m^3 kg/d [inhalative, long-term, systemic effects]; employee: DNEL: 2 mg/kg kg/d [dermal exposure route, long-term, systemic effects]; environment: PNEC: 0.33 mg/l [fresh water]; environment: PNEC: 0.033 mg/l [sea water]; environment: PNEC: 13 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 1.2 mg/kg [sediment, fresh water]; environment: PNEC: 0.12 mg/kg [sediment, seawater]; environment: PNEC: 0.05 mg/kg [soil] [25/Q902/4]

CAS No.: 556-67-2 EG No.: 209-136-7 Index No.: 014-018-00-1 Reg. No. (REACH): 01-2119529238-36-XXXX	**octamethylcyclotetrasiloxane** employee: DNEL: 73 mg/m^3 [inhalative, long-term, systemic effects]; consumer: DNEL: 13 mg/m^3 [inhalative, long-term, systemic effects]; consumer: DNEL: 3.7 mg/kg [oral, long-term, systemic effects]; environment: PNEC: 0.0015 mg/l [fresh water]; environment: PNEC: 0.00015 mg/l [sea water]; environment: PNEC: 3 mg/kg [sediment, fresh water]; environment: PNEC: 0.3 mg/kg [sediment, seawater]; environment: PNEC: 0.54 mg/kg [soil]; environment: PNEC: 10 mg/l [microorganisms in wastewater treatment plants] [25/Q1/5]

CAS No.: 64-17-5 EG No.: 200-578-6 Index No.: 603-002-00-5 Reg. No. (REACH): 01-2119457610-43-XXXX	**ethanol** employee: DNEL: 1900 mg/m^3 [inhalative, short-term, local effects]; employee: DNEL: 950 mg/m^3 [inhalative, long-term, systemic effects]; employee: DNEL: 343 mg/kg bw/d [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 950 mg/m^3 [inhalative, short-term, local effects];

	consumer: DNEL: 950 mg/m³ [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 114 mg/m³ [inhalative, long-term, systemic effects]; consumer: DNEL: 87 mg/kg [oral, long-term, systemic effects]; consumer: DNEL: 206 mg/kg bw/d [dermal exposure route, long-term, systemic effects]; environment: PNEC: 0.96 mg/l [fresh water]; environment: PNEC: 0.79 mg/l [sea water]; environment: PNEC: 2.75 mg/l [water, sporadic release]; environment: PNEC: 580 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 3.6 mg/kg dw [sediment, fresh water]; environment: PNEC: 0.63 mg/kg dw [soil]; environment: PNEC: 0.72 mg/kg feed [oral, feed]; environment: PNEC: 2.9 mg/kg dw [sediment, seawater]

CAS No.: 67-56-1 EG No.: 200-659-6 Index No.: 603-001-00-X Reg. No. (REACH): 01-2119433307-44-XXXX	**methanol** employee: DNEL: 20 mg/kg bw/d [dermal exposure route, short-term, systemic effects]; employee: DNEL: 130 mg/m³ [inhalative, short-term, systemic effects]; employee: DNEL: 130 mg/m³ [inhalative, short-term, local effects]; employee: DNEL: 20 mg/kg bw/d [dermal exposure route, long-term, systemic effects]; employee: DNEL: 130 mg/m³ [inhalative, long-term, systemic effects]; employee: DNEL: 130 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 4 mg/kg bw/d [dermal exposure route, short-term, systemic effects]; consumer: DNEL: 26 mg/m³ [inhalative, short-term, systemic effects]; consumer: DNEL: 4 mg/kg bw/d [oral, short-term, systemic effects]; consumer: DNEL: 4 mg/kg [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 26 mg/m³ [inhalative, short-term, local effects]; consumer: DNEL: 26 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 26 mg/m³ [inhalative, long-term, systemic effects]; consumer: DNEL: 4 mg/kg bw/d [oral, long-term, systemic effects]; environment: PNEC: 154 mg/l [fresh water]; environment: PNEC: 15.4 mg/l [sea water]; environment: PNEC: 570.4 mg/kg [sediment, fresh water]; environment: PNEC: 57.04 mg/kg [sediment, seawater]; environment: PNEC: 23.5 mg/kg [soil]; environment: PNEC: 1540 mg/l [water, sporadic release]; environment: PNEC: 100 mg/l [microorganisms in wastewater treatment plants] [25/Q2/5]

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Ensure good ventilation, e.g. by local suction, general exhaust air.
Minimize the risk of inhalations of vapours.
Comply with the workplace exposure limits.
If limits can't be adhered to, use appropriate respiratory protection.

8.2.2 Personal protective equipment

General data	Select personal protective equipment according to the CEN standards; discuss protective equipment with the supplier.
Eye/face protection	During refilling or if possible contact with the eyes, goggles recommended.
Hand-/Body protection	Avoid contact with your skin. If it's not avaible wear appropriate gloves.
Protective clothing	Wear suitable protective clothing, e.g long-sleeved clothes and safety shoes according to EN ISO 20345.
Respiratory protection	Comply with the workplace exposure limits. In case of insufficient ventilation or if limit values cannot be complied, use air respirator. Filters type AXBEK in accordance with EN 14387. Follow the wear time limits for breathing apparatus.

Hygiene measures	General hygiene measures for the handling of chemicals are applicable. Do not eat, drink or smoke while at work. Wash hands before breaks and after work.
Thermal hazards	Not applicable.

On the basis of the contents and our experience the following non-binding recommendations for the selection of the material of the protective gloves (minimum layer thickness: 0.4 mm):

Recommended glove material:	Nitrile rubber/Nitrile latex (NBR), Butyl rubber (Butyl), Polyvinyl chloride (PVC), Flourinated rubber (FKM)
Inappropriate glove material:	Textile Materials

The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the materials used for gloves cannot be predetermined; it is therefore necessary to check this before using the product.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

8.2.3 Environmental exposure controls
More information that is detailed is not available yet.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Pasty
Colour	various colours
Density	Transparent: ca. 1.02 g/ml Farben: ca. 1.26 g/ml
Viscosity (dynamic)	>21 mm^2/s
Odour	Characteristic
Odour threshold	Not determined
pH-level	Ca. 7
Melting point/freezing point	Not determined
Initial boiling point/boiling range	Not determined
Decomposition temperature	Not determined
Rate of evaporation	Not determined
Flashpoint	Not determined
Auto-ignition temperature	> 400 °C
Lower explosive limits	Not determined
Upper explosive limits	Not determined
Vapour pressure	Not determined
Vapour density (Air = 1)	Not determined
Explosive properties	The product is not explosive.
Oxidising properties	No

9.2 Other information

Solubility in / Miscibility with water.	Immiscible with water
Solubility in / Miscibility in	Not determined
Partition coefficient n-Octanol/Water	Not determined
Conductivity	Insulating
VOC-content (EU)	< 1 %
VOC-content (CH)	< 1 %

10. Stability and reactivity

10.1 Reactivity
This product reacts with water (air humidity).

10.2 Chemical stability
The product is stable when properly stored and handled.

10.3 Possibility of hazardous reactions
No effects are known if used as intended.

10.4 Conditions to avoid
Protect from humidity. Avoid excessive heat.

10.5 Incompatible materials
Water, Acids, Bases.

10.6 Hazardous decomposition products
In case of fire or very high heat can i.a. the following hazardous decomposition products are formed:
Carbon oxide (Carbon monoxide, ..), Nitrogen oxide (NOx).

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	ATEmix: > 30'000 mg/kg
Acute toxicity (dermal)	ATEmix: > 60'000 mg/kg
Acute toxicity (inhalativ)	ATEmix: > 20'000 ppm [gas]
Acute toxicity (inhalativ)	ATEmix: > 5 mg/l [dust, fog]
Acute toxicity (inhalativ)	ATEmix: > 20 mg/l [vapours]
Nanomaterial	Contains primary particles with external dimensions between 1 and 100 nanometers (Art. 2 para. 2 let. q ChemO)

11.2. Toxicological information of hazardous ingredients

CAS No.: 37859-55-5 EG No.: 484-460-1 Index No.: - Reg. No. (REACH): 01-2120004323-76-XXXX	**O,O',O''-(methylsilylidyne)trioxime 2-pentanone** acute toxicity: LD50: >1780 mg/kg [dermal exposure route, rat]; acute toxicity: LD50: 1234 mg/kg [oral, rat]; acute toxicity: ATE: 500 mg/kg [oral] [25/Q61/3]

CAS No.: 13463-67-7 EG No.: 236-675-5 Index No.: - Reg. No. (REACH): 01-2119489379-17-XXXX	**titanium dioxide** acute toxicity: LD50: >10000 mg/kg [oral, rat, OECD 425]; acute toxicity: LD50: >5000 mg/kg [dermal exposure route, rabbit]; acute toxicity: LC50: >5.09 mg/l/4h [inhalative, rat]; corrosive/irritant effect on the skin: non-irritant [dermal exposure route, rabbit, OECD 404]; serious eye damage/irritation: non-irritant, mechanical irritation possible [rabbit, OECD 405]; respiratory/skin sensitization: not sensitising [Guinea pig, OECD 406]; germ cell mutagenicity: negative [mouse, OECD 474 (Mammalian Erythrocyte Micronucleus Test)]; germ cell mutagenicity: negative [mammals, OECD 473 (In Vitro Mammalian Erythrocyte Chromosome Aberration Test)]; germ cell mutagenicity: negative [salmonella typhimurium, (Ames test)]; germ cell mutagenicity: negative [OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)]; germ cell mutagenicity: negative] [OECD 471 (Bacterial Reverse Mutation Test)]; carcinogenicity: EU: Carc. 2 (inhalation), H351, only applies in powder form with min. 1% particles with aerodynamic diameter <= 10 µm; not valid in case of homogeneously mixed in pasty or liquid, NOT inhalable form); persistence and degradability: poorly biodegradable; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 3500 mg/kg/90d [rat];

	specific target organ toxicity - repeated exposure (STOT RE): NOAEC: 10 mg/m³/90d [rat]; symptoms: mucous membrane irritation, cough, shortness of breath, drying of the skin [24/Q1,2/4]

CAS No.: 919-30-2 EG No.: 213-048-4 Index No.: 612-108-00-0 Reg. No. (REACH): 01-2119480479-24-XXXX	**3-aminopropyltriethoxysilane** acute toxicity: LD50: 1780 ml/kg [oral, rat, female, OECD 401]; acute toxicity: LD50: 2700 ml/kg [oral, rat, males, OECD 401]; acute toxicity: LD50: 3800 ml/kg [dermal exposure route, rabbit, TOXNET]; acute toxicity: LC50: >5 ppm [inhalative, rat, males]; acute toxicity: NOAEL: >43.8 mg/kg/2y/bd [oral, rat, males]; acute toxicity: Kat. 1B, SCL; cat. 21, 5%; cat. 2, 1%; respiratory/skin sensitization: Kat. 1, SCL; cat. 1, 1%; specific target organ toxicity - repeated exposure (STOT RE): LOAEL: 600 mg/kg/bw/d/90d [oral, rat] [25/Q106, 902/3,4]

CAS No.: 556-67-2 EG No.: 209-136-7 Index No.: 014-018-00-1 Reg. No. (REACH): 01-2119529238-36-XXXX	**octamethylcyclotetrasiloxane** acute toxicity: LD50: >4800 mg/kg [oral, rat, OECD 401]; acute toxicity: LD50: >2400 mg/kg [dermal exposure route, rat, OECD 402]; acute toxicity: LC50: 36 g/m3/4h [dermal exposure route, rat, OECD 402] [25/Q1/5]

CAS No.: 26530-20-1 EG No.: 247-761-7 Index No.: 613-112-00-5 Reg. No. (REACH): 01-2120768921-45-XXXX	**2-octyl-2H-isothiazol-3-one** acute toxicity: ATE: LD50: 125 mg/kg [oral]; acute toxicity: ATE: LD50: 311 mg/kg [dermal exposure route]; acute toxicity: LD50: 318 mg/kg [oral, rat]; acute toxicity: LD50: 311 mg/kg [dermal exposure route, rabbit]; acute toxicity: ATE: LC50: 0.27 mg/l/4h [inhalative, dust/fog] [25/Q901/5]

Classification of the respective hazardous components see section 3.

12. Ecological information

12.1 Toxicity

Aquatic toxicity Germany (Self-classification)	WGK 2 Clearly hazardous to water
H412 Harmful to aquatic life with long lasting effects.	

12.2 Persistence and degradability
The product is not biodegradable.

12.3 Bioaccumulative potential
Any bioaccumulation potential.

12.4 Mobility in soil
No information is available.

12.5 Results of PBT and vPvB assessment
See section 2.3.

12.6 Other adverse effects
Do not allow product to reach ground water, water course or sewag system.

12.7 Additional ecotoxicological information

CAS No.: 37859-55-5 EG No.: 484-460-1 Index No.: - Reg. No. (REACH): 01-2120004323-76-XXXX	**O,O',O''-(methylsilylidyne)trioxime 2-pentanone** acute toxicity, fish: LC50: >113 mg/l/96h [rainbow trout, Oncorhynchus mykiss, OECD 203]; acute toxicity, algae: ErC50: 100 mg/l/72h [Pseudokirchneriella subcapitata, OECD 201]; acute toxicity, crustaceans: EC50: >113 mg/l/48h [Daphnia magna, OECD 202]; bioaccumulative potential: Log Pow 1.25, BCF: 3.103 [25/Q61/3]

CAS No.: 13463-67-7 EG No.: 236-675-5 Index No.: - Reg. No. (REACH): 01-2119489379-17-XXXX	**titanium dioxide** acute toxicity, fish: LC50: >100 mg/l/96h [Oncorhnchus mykiss, OECD 203]; acute toxicity, daphnia: LC50: >100 mg/l/48h [Daphnia magna, OECD 202]; acute toxicity, crustaceans: LC50: 19.3 mg/l/48h [Daphnia magna]; acute toxicity, algae: EC50: 16 mg/l/72h [Pseudokirchneriella subcapitata, U.S. EPA600/9-78-018]; acute toxicity, algae: NOEC: ≥2.92 mg/l/21d [chronic]; acute toxicity, algae: NOEC: 5600 mg/l/72h [chronic]; persistence and degradability: poorly biodegradable; bioaccumulative potential: BCF: 9.6/42d, is not to be expected; bioaccumulative potential: BCF: 19-352/14d [Oncorhynchus mykiss]; mobility in soil: negative; results of PBT and vPvB assessment: no PBT substance, no vPvB substance; acute bacteriotoxicity: >5000 mg/l [Escherichia coli]; acute bacteriotoxicity: LC0: >10000 mg/l/24h [Pseudomonas fluorescens]; acute bacteriotoxicity: >5000 mg/l [Pseudomonas flueroscens] annelid worm toxicity: NOEC/NOEL: >1000 mg/kg [Eisenia foetida]; water solubility: insoluble 20°C [24/Q1,2,106/4,3]

CAS No.: 919-30-2 EG No.: 213-048-4 Index No.: 612-108-00-0 Reg. No. (REACH): 01-2119480479-24-XXXX	**3-aminopropyltriethoxysilane** acute toxicity, fish: LC50: >934 mg/l/96h [Brachydanio rerio, ECHA]; acute toxicity, algae: ErC50: >1000 mg/l/72h [Desmodesmus subspicatus, ECHA]; acute toxicity, algae: NOEC: 1.3 mg/l/72h [Desmodesmus subspicatus]; acute toxicity, algae: EC50: >100 mg/l/72h [Pseudokirchneriella subcapitata]; acute toxicity, crustaceans: EC50: 331 mg/l/48h [Dapnia magna]; bioaccumulative potential: Log Pow: 0.31, BCF: 3.4, Log KOW: 1.7; persistence and degradability: 67%/28d, poorly biodegradable [OECD 301A] [25/Q61,106,902/3,4]

CAS No.: 556-67-2 EG No.: 209-136-7 Index No.: 014-018-00-1 Reg. No. (REACH): 01-2119529238-36-XXXX	**octamethylcyclotetrasiloxane** acute toxicity, fish: LC50: >1000 mg/l/96h [Lepomis macrochirus]; acute toxicity, fish: LC50: >500 mg/l/96h [Brachydanio rerio]; acute toxicity, crustaceans: EC50: 0.25 mg/l/24h [Daphnia magna]; bioaccumulative potential: partition coefficient: 6.49 [25/Q1/5]

CAS No.: 26530-20-1 EG No.: 247-761-7 Index No.: 613-112-00-5 Reg. No. (REACH): 01-2120768921-45-XXXX	**2-octyl-2H-isothiazol-3-one** acute toxicity, fish: LC50: 122 µg/l/96h; acute toxicity, daphnia: EC50: 0.18 mg/l/48h [Daphnia magna]; acute toxicity, algae: EC50: 150 µg/l/96h [25/Q901/5]

13. Disposal considerations

13.1 Waste treatment methods

Waste disposal according to official state regulations.

Waste treatment options: 08 04 09 – Waste adhesives and sealants containing organic solvents or other dangerous substances.
Contaminated packages: Disposal must be made according to official regulations. If possible empty packaging completely. CH: After complete hardening, product can be disposed of with domestic waste. Packagings that cannot be cleaned are to be disposed off in the same manner as the product. Alternatively, it can be used if necessary following waste code: 15 01 10 – Packing that contains the residues of hazardous materials or is contaminated through hazardous materials.
• The waste code numbers mentioned are recommendations based on the probable use of the product. The particular application and local disposal situation obtaining for the user may lead to other waste codes being assigned as well. • Switzerland: Following regulation in the latest valid constitution must be observed: Technical regulation on waste (TVA, SR 814.600), regulation for waste processing (VeVa, SR 814.610) and in the regulation of UVEK concerning lists for handling waste (LVA, SR 814.610.1).

14. Transport information

14.1 UN-Number:
ADR, RID, ADN, IMDG, IATA: Not applicable

14.2 UN proper shipping name
ADR, RID, ADN, IMDG, IATA: Not applicable

14.3 Transport hazard class(es):
ADR, RID, ADN, IMDG, IATA: Not applicable

14.4 Packing group:
ADR, RID, ADN, IMDG, IATA: Not applicable

14.5 Enviromental hazards:
Dangerous to the environment: No / Marine pollutant: No

14.6 Special precautions for user:
Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Inapplicable

14.8 Additional information:

UN “Model Regulation”:	Inapplicable

15. Regulatory information

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

Classification and labelling see section 2. Classification of the preparation has been done by calculation or based on studies/test on the product itself or experience with similar mixtures.

Further national and further regulations, limitations and legal requirements

VOC content according to swiss VOC regulation (VOCV) see section 9.2.
Water hazard class (WGK) see section 12.1.
Chemicals regulation (ChemV), ordinance on chemicals risk reduction (ChemRRV), Luftreinhalte-Verordnung (LRV), Ordinance on protection against major accidents (StFV), professional association principles/industrial medicine regulations

15.2 Chemical Safety Assessment
A chemical safety assessment is not provided for mixtures.

16. Other information

Hazards used in the document (H-phrases):

H226 Flammable liquid and vapour
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H351 May probably cause cancer.
H361f May damage fertility.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Other recommended sources for more information:
- Federal Office of Public Health (Switzerland): www.bag.admin.ch (German/French/Italian/English)

List of relevant abbreviations that may be used in the document:

Abbreviation	Full text / Meaning
ADR	Accord européen realtif au transport international des marchandises Dangereuses par Route (= European agreement concerning the international carriage of dangerouse goods by road)
AGW, Spb.-Üf.	AGW = Arbeitsplatzgrenzwert (occupational limit value), Spb.-Üf. = Spitzenbegrenzung (peak limit) – Überschreitungsfaktor (exceedance factor) (1 bis 8) and category (I, II) for short-term values (TRGS 900, germany)
AOEL	Acceptable Operator Exposure Level
Aquatic Acute	Hazardous to the aquatic environment - Acute
Aquatic Chronic	Hazardous to the aquatic environment – Chronic
Asp. Tox.	Aspiration hazard (Danger when inhaling)
ATE	Acute Toxicity Estimates
BAG	Office for health (Bundesamt für Gesundheit, Schweiz)
BAT	Biological tolerance values at the workplace (Biologische Arbeitsstofftoleranzwerte, Schweiz)
BG	Trade association (Berufsgenossenschaft)
BGR	Trade association regulations (Berufsgenossenschaftliche Regeln)
BGV	Trade association regulations (Berufsgenossenschaftliche Vorschrift)
Carz.	Carcinogenic substance
CAS-Nr.	Chemical Abstracts Service
CH	Swiss confederation (from the latin Confoederatio Helvetica)
CH: MAK:	Swiss limit of maximum allowable concentration, issued by the swiss accident insurance fund. (Schweizerischen Unfallversicherungsanstalt (SUVA)
CLP	Classification, Labelling and Packaing (REGULATION (EG) Nr. 1272/2008)
CPID	Chemical Product IDentification.
DMEL	Derived Minimum Effect Level
DNEL	Derived No Effect Level
EG-Nr.	Substances of the EC material inventory, consisting of 7 digits (Syntax: XXX-XXX-X). Comprises waste materials (EINECS), new substances (ELINCS) as well as the No-Longer-Polymers-Liste (NLP-Liste).
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Irrit.	Eye irritant, depending on the category Eye irritation possible to serious eye damage.
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Flam. Sol.	Flammable solid
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
IMDG-Code	International Maritime Code for Dangerous Goods
Index-Nr.	Indexation of dangerous substances of appendix 5 in the VO(EG)1272/2008 (or annex I of directive 67/548/EWG) with the following syntax: XXX-XXX-XX-X
LC	Lethal concentration
LD	Lethal (fatal) dose
LD50	Lethal dose, 50%
Met. Corr.	On metal corrosive acting substance or mixture
Muta.	Substance with germ cell mutagenicity
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
Ozone	Hazardous for the ozone layer
PBT	Persistent, bioaccumulative, and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Verordnung (EG) Nr. 1907/2006 zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe)
Repr.	Reproductive toxicity
Resp. Sens.	Sensitising for respiratory tract
SCL	Specific concentration limits
Skin Irrit.	Skin irritant – corrosive/irritant to skin
Skin Sens.	Sensitising for the skin
STOT RE	Specific target organ toxicity – repeated exposure
STOT SE	Specific target organ toxicity – single exposure
TRGS	Technical rules on hazardous substances
VOC	Volatile organic compounds
VOCV	VOC-regulation (Swiss)
vPvB	Very persistent and very bioaccumulative

Department issuing data specification sheet: See section 1.3.
This safety data sheet replaces all previous versions.

Disclaimer: The specifications rest on the today's stand of our knowledge. It does not constitute a legally binding assurance of specific product properties.