Wikofix® FK 1279

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

1.1 Product identifier

Trade Name	**Wikofix FK 1279**
Item number	FK 1279
BAG-Register number (CH)	CPID: 289751-62

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

Relevant identified uses	Adhesives and sealants
Uses advised against	All applications that are not explained in this technical data sheet.
Field for application [SU]	SU22 – Commercial use: Public domain (administration, education, entertainment, services, trade)

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).

omitted

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

Pictograms(e)	omitted
Signal word(s)	omitted
Hazard warning(s) [H-statements]	omitted
Special marking(s) [EUH-Phrases]	EUH208 Contains reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction. EUH210 Safety data sheet available on request.

2.3 Other hazards

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

Acrylate dispersions, fillers, and auxiliaries.
Relevant hazardous substances:

Content: 0.1 % - < 0.25 %

CAS No.: 111-42-2 EG No.: 203-868-0 Index No.: 603-071-00-1 Reg. No. (REACH): 01-2119488930-28-XXXX	**diethanolamine** [24/Q2/3]	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Repr. 2, H361fd; STOT RE 2, H373 (central nervous system, kidneys, Leber, blood) (oral)

Content: 0.0036 % - <0.036 %

CAS No.: 2634-33-5 EG No.: 220-120-9 Index No.: 613-088-00-6 Reg. No. (REACH): 01-2120761540-60-XXXX	**1,2-benzisothiazol-3(2H)-one** biocide abbreviation: BIT M Factor Acute = 1; M Factor Chronic = 1 SCL Skin Sens. 1A, H317: C>=0.036%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Acute 1, H400; Acute Tox. 2, H330; Aquatic Chronic 1, H410

Content: 0.00015 % - <0.0015 %

CAS No.: 55965-84-9 EG No.: 611-341-5 Index No.: 613-167-00-5 Reg. No. (REACH): 01-2120764691-48-XXXX	**reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** biocide abbreviation: C(M)IT/MIT M Factor Acute = 100 / M Factor Chronic = 100 SCL Eye Dam. 1: C>=0.6% SCL Eye Irrit. 2: 0.06%<=C<0.6% SCL Skin Corr. 1C: C>=0.6% SCL Skin Irrit. 2: 0.06%<=C<0.6% SCL Skin Sens. 1: C>=0.0015%	Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH071

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	Generally, the product does not irritate the skin. 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.
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. In case of persistent symptoms, consult doctor. Present this safety data sheet or product label. Drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting!

4.2 Most important symptoms and effects, both acute and delayed
See section 11.

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

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
Carbon oxide, Carbon monoxide, Carbon dioxide

Formation of toxic gases is possible during heating or in case of fire:
Carbon oxide. Toxic gases.

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.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Arrange for sufficient air supply.

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.

7. Handling and storage

7.1 Precautions for safe handling
Avoid eye and skin contact. Eating, drinking, smoking, as well as food-storage, is prohibited in workspace. Notes note on the packaging and current technical data sheet.
Wash contaminated clothing before reuse. General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. Take off contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities
To avoid the unauthorized and children and kept in a safe place.

7.3 Specific end uses
See section 1.2. - 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.: 111-42-2 EG No.: 203-868-0 Index No.: 603-071-00-1 Reg. No. (REACH): 01-2119488930-28-XXXX	**diethanolamine** CH: MAC: 3 mg/m³ DE: TWA: 11 ppm (0.5 mg/m³) AT: MAC: 0.46 ppm (2 mg/m³) [24/Q2/3]

CAS No.: 55965-84-9 EG No.: 611-341-5 Index No.: 613-167-00-5 Reg. No. (REACH): 01-2120764691-48-XXXX	**reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** biocide abbreviation: C(M)IT/MIT CH: MAC: 0.2 mg/m³ (e) CH: STEL: 0.4 mg/m³ (e) [25/Q2/4]

CAS No.: 102-71-6 EG No.: 203-049-8 Index No.: - Reg. No. (REACH): -	**2,2',2''-nitrilotriethanol** CH: MAC: 5 mg/m³ (e) CH: STEL: 5 mg/m³ (e) [25/QS/5]

CAS No.: 471-34-1 EG No.: 207-439-9 Index No.: - Reg. No. (REACH): -	**calcium carbonate** CH: MAC: 3 mg/m³ (a) BE: TWA: 10 mg/m³ (a)

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.: 111-42-2 EG No.: 203-868-0 Index No.: 603-071-00-1 Reg. No. (REACH): 01-2119488930-28-XXXX	**diethanolamine** consumer: DNEL: 0.125 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 0.07 mg/kg bw/d [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 0.06 mg/kg bw/d [oral, long-term, systemic effects]; consumer: DNEL: 0.125 mg/m³ [inhalative, long-term, systemic effects]; employee: DNEL: 1 mg/m³ [inhalative, long-term, local effects]; employee: DNEL: 0.13 mg/m³ bw/d [dermal exposure route, long-term, systemic effects]; employee: DNEL: 33 mg/m³ [inhalative, short-term, systemic effects]; employee: DNEL: 0.75 mg/m³ [inhalative, long-term, systemic effects]; employee: DNEL: 0.5 mg/m³ [inhalative, long-term, local effects]; environment: PNEC: 0.092 mg/kg dw [sediment, fresh water]; environment: PNEC: 0.0092 mg/kg dw [sediment, seawater]; environment: PNEC: 0.02 mg/l [fresh water]; environment: PNEC: 0.002 mg/kg dw [sea water]; environment: PNEC: 100 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 1.63 mg/kg dw [soil]; environment: PNEC: 0.095 mg/l [freshwater (intermittent release)]; environment: PNEC: 1.04 mg/kg feed [oral, feed] [24/Q2/3]

CAS No.: 102-71-6 EG No.: 203-049-8 Index No.: - Reg. No. (REACH): -	**2,2',2''-nitrilotriethanol** employee: DNEL: 6.3 mg/kg bw/day [dermal exposure route, long-term, systemic effects]; employee: DNEL: 5 mg/m³ [inhalative, long-term, systemic effects]; employee: DNEL: 1 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 2.66 mg/kg bw/day [dermal exposure route, long-term, systemic effects]; consumer: DNEL: 3 mg/kg bw/day [oral, long-term, systemic effects]; consumer: DNEL: 1.25 mg/m³ [inhalative, long-term, systemic effects];

	consumer: DNEL: 0.4 mg/m³ [inhalative, long-term, local effects]; environment: PNEC: 0.32 mg/l [fresh water]; environment: PNEC: 0.032 mg/l [sea water]; environment: PNEC: 5.12 mg/l [water, sporadic release]; environment: PNEC: 10 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 1.7 mg/kg [sediment, fresh water]; environment: PNEC: 0.17 mg/kg [sediment, seawater]; environment: PNEC: 0.151 mg/kg dw [soil] [24/Q2/4]

CAS No.: 2634-33-5 EG No.: 220-120-9 Index No.: 613-088-00-6 Reg. No. (REACH): 01-2120761540-60-XXXX	**1,2-benzisothiazol-3(2H)-one** employee: DNEL: 0.966 mg/kg [dermal exposure route, long-term, systemic effects]; employee: DNEL: 6.81 mg/m³ [inhalative, long-term, systemic effects]; consumer: DNEL: 0.18 mg/kg [oral, long-term, systemic effects]; consumer: DNEL: 0.345 mg/kg [dermal exposure route, long-term, systemic effects]; consumer: DNEL:1.2 mg/m³ [inhalative, long-term, systemic effects]; environment: PNEC: 4.03 mg/l [fresh water]; environment: PNEC: 0.403 mg/l [sea water]; environment: PNEC: 49.9 mg/kg [sediment, fresh water]; environment: PNEC: 4.99 mg/kg [sediment, seawater]; environment: PNEC: 3 mg/kg [soil]; environment: PNEC: 1.03 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 0.007 mg/kg [freshwater (intermittent release)]; environment: PNEC: 1.18 mg/kg [STP]; environment: PNEC: 1.18 mg/kg [soil] [24/Q1/4]

CAS No.: 55965-84-9 EG No.: 611-341-5 Index No.: 613-167-00-5 Reg. No. (REACH): 01-2120764691-48-XXXX	**reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** consumer: DNEL: 0.11 mg/kg bw/d [oral, short-term, systemic effects]; consumer: DNEL: 0.02 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 0.04 mg/m³ [inhalative, short-term, local effects]; consumer: DNEL: 0.09 mg/m³ [oral, long-term, systemic effects]; employee: DNEL: 0.02 mg/m³ [inhalative, long-term, local effects]; employee: DNEL: 0.04 mg/m³ [inhalative, short-term, local effects]; environment: PNEC: 0.00339 mg/l [fresh water]; environment: PNEC: 0.00339 mg/l [sea water]; environment: PNEC: 0.027 mg/kg dw [sediment, fresh water]; environment: PNEC: 0.027 mg/kg [sediment, seawater]; environment: PNEC: 0.01 mg/kg dw [soil]; environment: PNEC: 0.23 mg/l [microorganisms in wastewater treatment plants]; environment: PNEC: 0.0339 mg/kg [freshwater (intermittent release)] [24/Q2/4]

CAS No.: 471-34-1 EG No.: 207-439-9 Index No.: - Reg. No. (REACH): 01-2119486795-18-XXXX	**calcium carbonate** employee: DNEL: 10 mg/m³ [inhalative, long-term, systemic effects]; employee: DNEL: 4.26 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 10 mg/m³ [inhalative, long-term, systemic effects]; consumer: DNEL: 1.06 mg/m³ [inhalative, long-term, local effects]; consumer: DNEL: 6.1 mg/kg bw/d [oral, short-term, systemic effects]; consumer: DNEL: 6.1 mg/kg bw/d [oral, long-term, systemic effects]; environment: PNEC: 100 mg/l [microorganisms in wastewater treatment plants] [24/Q2/4]

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Ensure good ventilation, e.g. by local suction, general exhaust air.
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	Tight-fitting protective goggles with side protection shield (EN 166).

Hand-/Body protection	Avoid contact with your skin. If it's not avaible wear appropriate gloves.
Protective clothing	Wear suitable protective clothing.
Respiratory protection	Normally not needed.
Hygiene measures	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 manufacturer's information on permeability and breakthrough times of the protective gloves must be observed and followed.

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 - Liquid
Colour	various colours
Density	~1.4 g/cm^3 (20°C)
Viscosity	Not determined
Odour	Characteristic
pH-level	Not determined
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	Not determined
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.	Partially miscible in water
Solubility in / Miscibility in	Not determined
Partition coefficient n-Octanol/Water	Not determined
Conductivity	Not determined
VOC-content (EU)	< 0.16 %
VOC-content (CH)	1.8 – 2.3 g/l (0.13-0.16 %)

10. Stability and reactivity

10.1 Reactivity
The product is not reactive under normal conditions.

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
No effects are known if used as intended.

10.5 Incompatible materials
None known.

10.6 Hazardous decomposition products
No decomposition if used according to specifications.
In case of fire or extreme heat, see section 5.2.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	> 2000 mg/kg [oral]
Acute toxicity:	> 2000 mg/kg [dermal exposure route]
Acute toxicity:	> 20 mg/l/4h [inhalative, gas]

The product does not require labelling to the analysis of the general classification regulation for preparation of the EU in the last edition.
According to our experience and information, the product does not cause any harmful effects on health if handled and used according to specifications.

11.2. Toxicological information of hazardous ingredients

CAS No.: 111-42-2 EG No.: 203-868-0 Index No.: 603-071-00-1 Reg. No. (REACH): 01-2119488930-28-XXXX	**diethanolamine** acute toxicity: LD50: 6400 mg/kg [oral, rat, OECD 401]; acute toxicity: LD50: >2000 mg/kg [dermal exposure route, rabbit, OECD 402]; acute toxicity: LC0: ~1800 mg/m^3/8h [inhalative, rat, OECD 403, vapours]; corrosive/irritant effect on the skin: non-irritant [rabbit, OECD 404]; serious eye damage/irritation: non-irritant [rabbit, OECD 405]; respiratory/skin sensitization: no (skin contact) [Guinea pig, OECD 406]; germ cell mutagenicity: negative [OECD 474 (Mammalian Erythrocyte Micronucleus Test)]; germ cell mutagenicity: negative [Salmonella typhimurium, OECD 471 (Bacterial Reverse Mutation Test)]; germ cell mutagenicity: negative [mouse, OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)]; germ cell mutagenicity: negative [OECD 473 (In Vitro Mammalian Chromosome Aberration Test)]; carcinogenicity: NOAEL: 250 mg/kg bw/d [rat, OECD 453]; carcinogenicity: Nitrosamines can form with nitrosating agents. Nitrosamines have been shown to be carcinogenic in animal experiments. [OECD 451]; reproductive toxicity: NOAEL: 300 mg/kg bw/d [rat, OECD 421]; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 1000 mg/kg bw/d [oral, rat, OECD 408]; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 125 mg/kg bw/d [dermal exposure route, rat, OECD 411]; specific target organ toxicity - repeated exposure (STOT RE): NOAEC: 0.5 mg/kg bw/d [inhalative, rat, OECD 412, target organ(s): Leber-und Nierenschäden]; symptoms: unconsciousness, diarrhoea, cough, Kollaps, fatigue, dizziness, nausea and vomiting [24/Q2/3,4]

CAS No.: 2634-33-5 EG No.: 220-120-9 Index No.: 613-088-00-6 Reg. No. (REACH): 01-2120761540-60-XXXX	**1,2-benzisothiazol-3(2H)-one** acute toxicity: LD50: 1193 mg/kg [oral, rat]; acute toxicity: ATE: 450 mg/kg [oral]; acute toxicity: LD50: 4115 mg/kg [dermal exposure route, rat]; acute toxicity: LC50: 0.4 mg/l/4h [inhalative, rat, aerosol]; acute toxicity: ATE: 0.5 mg/l/4h [inhalative, vapours]; acute toxicity: ATE: 0.21 mg/l/4h [inhalative, OECD 403, dust, fog]; corrosive/irritant effect on the skin: irritant [Skin Irrit. 2]; serious eye damage/irritation: strong irritant [Eye Dam. 1]; respiratory/skin sensitization: Ja (skin contact) [Guinea pig, OECD 406]; respiratory/skin sensitization: Ja (skin contact) [mouse, OECD 429]; reproductive toxicity (developmental effects): NOAEL: 112 mg/kg, negative [rat, female]; reproductive toxicity (effects on fertility): NOAEL: 56.6 mg/kg bw/d, negative [rat, female]; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 150 mg/kg bw/d, negative [oral, rat, OECD 407]; symptoms: vomiting, headaches, gastrointestinal complaints, nausea, severe irritation or damage to the eyes, irritant effect on the skin [25/Q1,2,5/4]

CAS No.: 55965-84-9 EG No.: 611-341-5 Index No.: 613-167-00-5 Reg. No. (REACH): -	**reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** acute toxicity: LD50: 64 mg/kg [oral, rat]; acute toxicity: ATE: 53 mg/kg [oral]; acute toxicity: ATE: 50 mg/kg [dermal exposure route]; acute toxicity: LD50: 87 mg/kg [dermal exposure route, rat, OECD 402]; acute toxicity: LC50: 0.33 mg/l/4h [inhalative, rat, OECD 403, aerosol]; acute toxicity: ATE, 0.17 mg/l/4h [inhalative, aerosol]; acute toxicity: ATE, 0.5 mg/l/4h [inhalative, vapours]; corrosive/irritant effect on the skin: corrosiv [rabbit, OECD 404, Skin Corr. 1C]; serious eye damage/irritation: corrosiv [rabbit, OECD 404, Eye Dam. 1]; respiratory/skin sensitization: Ja (skin contact) [Guinea pig, Skin Sens. 1A, OECD 406]; germ cell mutagenicity: negative [mouse,OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test)]; germ cell mutagenicity: negative [rat, OECD 486 Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells In Vivo)]; aspiration hazard: no; symptoms: diarrhoea, mucous membrane irritation, tearing of the eyes, redness of the eyes [24/Q1,2/4]

CAS No.: 111-42-2 EG No.: 203-868-0 Index No.: 603-071-00-1 Reg. No. (REACH): 01-2119488930-28-XXXX	**2,2',2''-nitrilotriethanol** acute toxicity: LD50: 6400 mg/kg [oral, rat, OECD 401]; acute toxicity: LD50: >2000 mg/kg [dermal exposure route, rabbit, OECD 402]; acute toxicity: LC0: ~1800 mg/m^3/8h [inhalative, rat, OECD 403, vapours]; corrosive/irritant effect on the skin: non-irritant [rabbit, OECD 404]; serious eye damage/irritation: non-irritant [rabbit, OECD 405]; respiratory/skin sensitization: no (skin contact) [Guinea pig, OECD 406]; germ cell mutagenicity: negative [OECD 474 (Mammalian Erythrocyte Micronucleus Test)]; germ cell mutagenicity: negative [Salmonella typhimurium, OECD 471 (Bacterial Reverse Mutation Test)]; germ cell mutagenicity: negative [mouse, OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)]; germ cell mutagenicity: negative [OECD 473 (In Vitro Mammalian Chromosome Aberration Test)]; carcinogenicity: NOAEL: 250 mg/kg bw/d [rat, OECD 453]; carcinogenicity: Nitrosamines can form with nitrosating agents. Nitrosamines have been shown to be carcinogenic in animal experiments. [OECD 451]; reproductive toxicity: NOAEL: 300 mg/kg bw/d [rat, OECD 421]; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 1000 mg/kg bw/d [oral, rat, OECD 408]; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 125 mg/kg bw/d [dermal exposure route, rat, OECD 411];

	specific target organ toxicity - repeated exposure (STOT RE): NOAEC: 0.5 mg/kg bw/d [inhalative, rat, OECD 412, target organ(s): Leber-und Nierenschäden]; symptoms: unconsciousness, diarrhoea, cough, Kollaps, fatigue, dizziness, nausea and vomiting [24/Q2/3,4]

CAS No.: 471-34-1 EG No.: 207-439-9 Index No.: - Reg. No. (REACH): -	**calcium carbonate** acute toxicity: LD50: >2000 mg/kg [oral, rat, OECD 420]; acute toxicity: LD50: >2000 mg/kg [dermal exposure route, rat, OECD 402]; acute toxicity: LC50: >3 mg/l/4h [inhalative, rat, OECD 403]; corrosive/irritant effect on the skin: non-irritant [rabbit, OECD 404]; serious eye damage/irritation: non-irritant [rabbit, OECD 405]; respiratory/skin sensitization: no (skin contact) [mouse, OECD 429]; germ cell mutagenicity: negative [OECD 471, Bacterial Reverse Mutation Test]; germ cell mutagenicity: negative [OECD 473, In Vitro Mammalian Chromosome Aberration Test]; germ cell mutagenicity: negative [OECD 476, In Vitro Mammalian Cell Gene Mutation Test]; carcinogenicity: keine Hinweise auf eine derartige Wirkung; reproductive toxicity: NOEL: 1000 mg/kg bw/d [rat, OECD 422]; specific target organ toxicity - single exposure (STOT SE): keine Hinweise auf eine derartige Wirkung; specific target organ toxicity - repeated exposure (STOT RE): keine Hinweise auf eine derartige Wirkung; specific target organ toxicity - repeated exposure (STOT RE): NOAEL: 1000 mg/kg bw/d [oral, rat, OECD 422, Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test] ; specific target organ toxicity - repeated exposure (STOT RE): NOAEC: 0.212 mg/l [inhalative, rat, OECD 413, Subchronic Inhalation Toxicity - 90-Day Study]; aspiration hazard: no; symptoms: blood in urine (haematuria), nausea and vomiting; other information: harmless, is authorised as an additive in foodstuffs (E170) [25/Q2/4,5]

12. Ecological information

12.1 Toxicity

The product is not classified as dangerous for the environment.
Aquatic toxicity Germany (Self-classification): WGK 1 Slightly hazardous to water

12.2 Persistence and degradability
No information is available.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water	No information is available.

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.: 111-42-2 EG No.: 203-868-0 Index No.: 603-071-00-1 Reg. No. (REACH): 01-2119488930-28-XXXX	**diethanolamine** acute toxicity, fish: LC50: 1460 mg/l/96h [Pimephales promelas]; acute toxicity, daphnia: EC10: 1.05 mg/l/21d [Daphnia magna]; acute toxicity, daphnia: EC50: 55 mg/l/48h [Daphnia magna, U.S. EPA-660/3-75- 009]; acute toxicity, algae: EC50: 19 mg/l/96h [Pseudokirch neriella subcapitata, U.S. EPA ECOTOX Database];

	acute toxicity, algae: EC10: 1.1 mg/l/72h [Pseudokirch neriella subcapitata, U.S. EPA ECOTOX Database]; persistence and degradability: 93%/28d [activated sludge, OECD 301 F, easily biodegradable]; bioaccumulative potential: BCF: 2.7, is not to be expected; bioaccumulative potential: Log Pow: 2.46, is not to be expected [OECD107]; mobility in soil: Koc: 1, high, calculated value; results of PBT and vPvB assessment: no PBT substance, no vPvB substance; acute bacteriotoxicity: EC10: >1000 mg/l/30min [activated sludge, OECD 209]; other organisms: LC50: >1000 mg/kg/35d [Eisenia foetida]; other organisms: EC50: 776 mg/kg/>60d [Eisenia foetida] [24/Q2/4]

CAS No.: 2634-33-5 EG No.: 220-120-9 Index No.: 613-088-00-6 Reg. No. (REACH): 01-2120761540-60-XXXX	**1,2-benzisothiazol-3(2H)-one** acute toxicity, fish: LC50: 1.3 - 1.6 mg/l/96h [Salmogairdneri]; acute toxicity, fish: LC50: 2.18 mg/l/96h [OECD 203, Oncorhynchus mykiss]; acute toxicity, fish: LC50: 3.4 mg/l/96h [Lepomis macrochirus]; acute toxicity, fish: LC50: 2.15 mg/l/96h [Cyprinodon variegatus EPA 540/9-85-006]; acute toxicity, daphnia: EC50: 2.94 mg/l/48h [Daphnia Magna, OECD 202]; acute toxicity, algae: EC50: 0.15 mg/l/72h [Chlorella vulgaris]; acute toxicity, algae: EC50: 0.13 mg/l/3h [activated sludge, OECD 209]; acute toxicity, algae: ErC50: 0.11 mg/l/72h [OECD 201, Pseudokirchneriella subcapitata]; acute toxicity, algae: ErC50: 0.055 mg/l/96h [Pseudokirchneriella subcapitata]; acute toxicity, algae: ErC10: 0.027 mg/l/24h [Pseudokirchneriella subcapitata]; persistence and degradability: poorly biodegradable; bioaccumulative potential: BCF: 6.95 [OECD 305]; bioaccumulative potential: partition coefficient: Log Pow: 0.7; acute bacteriotoxicity: EC50: 12.8 mg/l/3h [activated sludge, OECD 209]; acute bacteriotoxicity: EC20: 3.3 mg/l/3h [activated sludge, OECD 209] [25/Q1,2/4]

CAS No.: 55965-84-9 EG No.: 611-341-5 Index No.: 613-167-00-5 Reg. No. (REACH): 01-2120764691-48-XXXX	**reaction mixture of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)** acute toxicity, fish: LC50: 0.22 mg/l/96h [Oncorhynchus mykiss, OECD 203]; acute toxicity, fish: NOEC/NOEL: 0.098 mg/l/28h [Oncorhynchus mykiss, OECD 210]; acute toxicity, fish: LC50: 0.28 mg/l/96h [Lepomis macrochirus]; acute toxicity, daphnia: NOEC/NOEL: 0.004 mg/l/21d [Daphnia magna, Krebstiere, OECD 211]; acute toxicity, daphnia: EC50: 0.1 - 0.16 mg/l/48h [Daphnia magna]; acute toxicity, algae: EC50: 0.048 mg/l/72h [Pseudokirchneriella subcapitata, OECD 201]; acute toxicity, algae: NOEC/NOEL: 0.0012 mg/l/72h [Pseudokirchneriella subcapitata, OECD 201]; acute toxicity, algae: NOEC/NOEL: 0.49 mg/l/48h [Sceletonema costatum, OECD 201]; acute bacteriotoxicity: EC50: 5.7 mg/l/16h [Pseudomonas putida]; acute bacteriotoxicity: EC50: 7.92 mg/l/3h [OECD 209, activated sludge]; acute bacteriotoxicity: EC20: 0.97 mg/l/3h [OECD 209, activated sludge]; persistence and degradability: >60 %/28d, easily biodegradable [activated sludge, OECD 301D]; bioaccumulative potential: BCF: 3.6 [calculated value]; bioaccumulative potential: Log Pow: 0.48, is not to be expected [OECD 107] [25/Q1,5,2/4]

CAS No.: 102-71-6 EG No.: 203-049-8 Index No.: - Reg. No. (REACH): -	**2,2',2''-nitrilotriethanol** acute toxicity, fish: LD50: >10000 mg/l/48h [Leuciscusidus, DIN 38412 T.15]; acute toxicity, daphnia: EC50: 609.9 mg/l/48h [Ceriodaphnia spec., OECD 202]; acute toxicity, daphnia: NOEC/NOEL 16 mg/l/21d [Daphnia magna, OECD 211]; acute toxicity, algae: EC50: 512 mg/l/72h [Desmodesmus subspicatus, DIN 38412 T.9]; acute toxicity, algae: EC50: 216 mg/l/72h [Desmodesmus subspicatus, DIN 38412 T.9]; persistence and degradability: 100%/5d, easily biodegradable [OECD 301];

	persistence and degradability: 97%/28d, biodegradable [OECD 301]; persistence and degradability: 96%/19d [OECD 301 E]; bioaccumulative potential: Log Pow: -2.3 [OECD 107, is not assumed due to the Log-Pows value]; bioaccumulative potential: BCF: <3.9 [Cyprinus caprio, OECD 305]; acute bacteriotoxicity: IC50: >1000 mg/l/3h [activated sludge, OECD 209]; acute bacteriotoxicity: EC50: >10000 mg/l/16h [Pseudomonas putida]; acute insect toxicity: EC50: >49.95 mg/kg/3d [Drosophila melanogaster] [24/Q2/4]

CAS No.: 471-34-1 EG No.: 207-439-9 Index No.: - Reg. No. (REACH): -	**calcium carbonate** acute toxicity, fish: LC50: >100 mg/l/96h [Oncorhynchus mykiss, OECD 203]; acute toxicity, fish: LC50: >1000 mg/l/48h [Oncorhynchus mykiss, OECD 203]; acute toxicity, daphnia: EC50: >1 mg/l/48h [Daphnia magna]; acute toxicity, algae: EC50: >200 mg/l/72h [Desmodesmus subspicatus]; acute toxicity, algae: EC50: >14 mg/l/72h [Desmodesmus subspicatus, OECD 201]; persistence and degradability: does not apply to inorganic substances; bioaccumulative potential: is not to be expected; acute bacteriotoxicity: EC50: >1000 mg/l/3h [activated sludge, OECD 209]; acute bacteriotoxicity: NOEC/NOEL: 1000 mg/l/3h [activated sludge, OECD 209]; other organisms: EC50: >1000 mg/kg dw /21d [Glycine max, OECD 208]; other organisms: EC50: >1000 mg/kg dw /21d [Lycopersicon esculentum, OECD 208]; other organisms: EC50: >1000 mg/kg dw /21d [Avena sativa, OECD 208]; other organisms: NOEC/NOEL: 1000 mg/kg dw /21d [Glycine max, OECD 208]; other organisms: NOEC/NOEL: 1000 mg/kg dw /21d [Lycopersicon esculentum, OECD 208]; other organisms: NOEC/NOEL: 1000 mg/kg dw /21d [Avena sativa, OECD 208]; other organisms: EC50: >1000 mg/kg dw/14d [Eisenia foetida, OECD 207]; other organisms: NOEC/NOEL: 1000 mg/kg dw/14d [Eisenia foetida, OECD 207]; other organisms: EC50: >1000 mg/kg dw/28d [OECD 216]; other organisms: NOEC/NOEL: 1000 mg/kg dw/28d [OECD 216]; water solubility: 0.0166 g/l [OECD 105, 20°C] persistence and degradability: does not apply to inorganic substances; mobility in soil: n.a.; results of PBT and vPvB assessment: does not apply to inorganic substances [25/Q2/5]

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. 08 04 10 – waste adhesives and sealants other than those mentioned in 08 04 09
Contaminated packages: Disposal must be made according to official regulations. If possible empty packaging completely. Packagings that cannot be cleaned are to be disposed off in the same manner as the product. Uncontaminated and cleaned packaging can be recycled.
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.

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:

Kemmler number:	Not applicable
EMS number:	Not applicable

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

14.8 Additional information:

ADR: LQ – Limited Quantities:	Not applicable
ADR: Transport category:	Not applicable
ADR: Tunnel restriction code:	Not applicable
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):

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H361 May damage fertility. Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
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.

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