Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) (This safety data sheet is for information only and does not comply with the official language requirements of article 31 (5) of REACH.)



SILCADUR 130 Coating

Version number: 1.0

First version: 27.03.2025

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

1.1 **Product identifier**

	Trade name	SILCADUR 130 Coating
1.2	Relevant identified uses of the substance of	or mixture and uses advised against
	Relevant identified uses	Coating for particular industrial and professional uses
1 2	Datails of the supplier of the sefety data sh	soat

1.3 Details of the supplier of the safety data sheet

Telephone: +49 (0) 2104 9727-0
Telefax: +49 (0) 2104 9727-25
e-mail: reach@silca-online.de
Website: www.silca-online.de

e-mail (competent person)

sdb@csb-compliance.com

Please do not use this e-mail address to ask for the latest safety data sheet. For this purpose contact SILCA Service- und Vertriebsgesellschaft für Dämmstoffe mbH.

1.4 Emergency telephone number

Poison centre						
Country	Name	Telephone				
Germany	Giftinformationszentrum - Nord Göttingen	+49 551 19240				

As above or nearest toxicological information centre.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Classifica	Classification						
Section	Hazard class	Category	Hazard class and category	Hazard state- ment			
3.4S	skin sensitisation	1	Skin Sens. 1	H317			

For full text of abbreviations: see SECTION 16

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word	warning
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Pictograms

GHS07



H317 May cause an allergic skin rea	action.
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Precautionary statements

P261	Avoid breathing mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Hazardous ingredients for labelling

2-methyl-2H-isothiazol-3-one

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\ge 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\ge 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

Description of the mixture

lazardous ingredients							
Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes		
aluminium oxide	CAS No 1344-28-1	≥25-<50	-	-	-		

Version number: 1.0

Hazardous ingredients					
Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
	EC No 215-691-6				
	REACH Reg. No 01-2119529248- 35-xxxx				
silicon dioxide, amorphous	CAS No 7631-86-9	≥10-<20	-	-	-
	EC No 231-545-4				
	REACH Reg. No 01-2119379499- 16				
ethylene glycol	CAS No 107-21-1	≥2,5-<5	Acute Tox. 4 / H302 STOT RE 2 / H373	(!)	GHS-HC IOELV
	EC No 203-473-3				
	Index No 603-027-00-1				
	REACH Reg. No 01-2119456816- 28-xxxx				
2-methyl-2H-iso- thiazol-3-one	CAS No 2682-20-4	< 0,1	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 2 / H330		GHS-HC
	EC No 220-239-6		Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1A / H317		
	Index No 613-326-00-9		Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 EUH071		

Notes

GHS- Harmonised classification (the classification of the substance corresponds to the entry in the list according toHC: 1272/2008/EC, Annex VI)

IOELV: Substance with a community indicative occupational exposure limit value

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
ethylene glycol	-	-	500 ^{mg} / _{kg}	oral
2-methyl-2H-isothiazol- 3-one	Skin Sens. 1A; H317: C ≥ 0,0015 %	M-factor (acute) = 10 M-factor	232 ^{mg} / _{kg} 242 ^{mg} / _{kg} 0,5 ^{mg} / _l /4h	oral dermal inhalation: vapour

Name of substance	Specific Conc. Limits	M-Factors	ΑΤΕ	Exposure route
		(chronic) = 1	0,11 ^{mg} / _l /4h	inhalation: dust/mist

Remarks

For full text of H-phrases: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Self-protection of the first aider. Remove affected person from the danger area and lay down. Do not leave affected person unattended. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.

Notes for the doctor

None.

4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO₂), co-ordinate firefighting measures to the fire surroundings

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

Non-combustible.

Keep containers cool with water spray. In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Bunding. Covering of drains.

Advice on how to clean up a spill

Collect spillage. Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe vapour/spray.

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Handling of incompatible substances or mixtures

Do not mix with acids.

Measures to protect the environment

Avoid release to the environment. Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas. Wash hands after use. Preventive skin protection (barrier creams/ointments) is recommended. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Flammability hazards

None.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

frost

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

Ventilation requirements

Provision of sufficient ventilation.

Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place. Store in corrosive resistant container with a resistant inner liner. Г

Packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occup	Occupational exposure limit values (Workplace Exposure Limits)										
Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Nota- tion	Source		
DE	ethanediol	107-21-1	AGW	10	26	20	52	va, H, Y	TRGS 900		
DE	ethylene glycol	107-21-1	MAK	10	26	20	52	va, H	DFG		
DE	aluminium, insol- uble compounds	1344-28- 1	МАК	-	0,5	-	4	i	DFG		
DE	aluminium, insol- uble compounds	1344-28- 1	МАК	-	0,05	-	0,4	r	DFG		
DE	silica, amorphous	7631-86- 9	AGW	-	1	-	8	i, DE- AGW-2, Y	TRGS 900		
DE	silica, amorphous	7631-86- 9	МАК	-	0,02	-	0,16	r	DFG		
EU	ethylene glycol	107-21-1	IOELV	20	52	40	104	Н	2000/39/EC		

Notation

- DE-AGW-2 Colloidal amorphous silica (7631-86-9) including fumed silica and produced in wet process silica (precipitated silica, silica gel).
- Н absorbed through the skin i inhalable fraction respirable fraction r STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified) TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) as vapours and aerosols va Y a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the biological limit value (BGW) are adhered to

Human health values

Relevant DNELs	Relevant DNELs of components										
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time					
aluminium oxide	1344-28-1	DNEL	3 mg/m³	human, inhalat- ory	worker (industry)	chronic - systemic effects					
aluminium oxide	1344-28-1	DNEL	3 mg/m ³	human, inhalat- ory	worker (industry)	chronic - local ef- fects					
silicon dioxide, amorphous	7631-86-9	DNEL	0,963 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects					
ethylene glycol	107-21-1	DNEL	35 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects					
ethylene glycol	107-21-1	DNEL	106 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects					
2-methyl-2H-iso- thiazol-3-one	2682-20-4	DNEL	0,021 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects					

Environmental values

Relevant PNECs of components										
Name of substance	CAS No	Endpoint	Threshold level	Environmental com- partment						
aluminium oxide	1344-28-1	PNEC	20 ^{mg} /l	sewage treatment plant (STP)						
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	3,39 ^{µg} / _l	freshwater						
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	3,39 ^{µg} / _l	marine water						
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	0,23 ^{mg} / _l	sewage treatment plant (STP)						
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	0,047 ^{mg} / _{kg}	soil						

8.2 Exposure controls

Appropriate engineering controls

Use local and general ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Use protective eyewear to guard against splash of liquids (EN 166)

Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
PVC: polyvinyl chloride	no information available	no information available

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection

Protective clothing against liquid chemicals. (EN 13832, EN 340, EN 13034, EN 14605).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Particle filter device (DIN EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (paste)
Colour	not determined
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	9 – 10
Kinematic viscosity	not determined

Dynamic viscosity	not determined
Solubility(ies)	
Water solubility	not miscible in any proportion
Partition coefficient n-octanol/water (log value)	not determined
Vapour pressure	not determined
Density and/or relative density	
Density	not determined
Relative vapour density	information on this property is not available
Particle characteristics	not relevant (liquid)
Other information	
Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

9.2

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Do not mix with acids.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

acids, oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Classification procedure

If not otherwise specified the classification is based on: Ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Test data are not available for the complete mixture.

Acute toxicity of components										
Name of substance	CAS No	Expos- ure route	End- point	Value	Species	Method	Source			
aluminium oxide	1344-28-1	oral	LD0	>10.000 ^{mg} / _{kg}	rat	OECD Guideline 401	ECHA			
silicon dioxide, amorph- ous	7631-86-9	oral	LD50	>5.110 ^{mg} / _{kg}	rat	OECD Guideline 401	ECHA			
silicon dioxide, amorph- ous	7631-86-9	inhala- tion: dust/mis t	LC0	5,01 ^{mg} / _l /4h	rat	OECD Guideline 436	ECHA			
silicon dioxide, amorph- ous	7631-86-9	dermal	LD0	>5.000 ^{mg} / _{kg}	rabbit	-	ECHA			
ethylene glycol	107-21-1	dermal	LD50	>3.500 ^{mg} / _{kg}	mouse	-	ECHA			
2-methyl-2H-isothiazol-3- one	2682-20-4	oral	LD50	232 – 24 9 ^{mg} / _{kg}	rat, male	EPA OPPTS 870.1100	ECHA			
2-methyl-2H-isothiazol-3- one	2682-20-4	oral	LD50	120 ^{mg} / kg	rat, fe- male	EPA OPPTS 870.1100	ECHA			
2-methyl-2H-isothiazol-3- one	2682-20-4	dermal	LD50	242 ^{mg} / kg	rat	OECD Guideline 402	ECHA			
2-methyl-2H-isothiazol-3- one	2682-20-4	inhala- tion: dust/mis t	LC50	0,11 ^{mg} / _l /4h	rat	OECD Guideline 403	ECHA			

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Reproductive toxicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - single exposure

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\ge 0,1\%$.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

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

Aquatic toxicity (acute) of components

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
silicon dioxide,	7631-86-9	EL50	72 h	>1.000 ^{mg} / _l	green algae	OECD	ECHA Chem

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
amorphous						Guideline 201	
silicon dioxide, amorphous	7631-86-9	LC50	96 h	>5.000 ^{mg} / _l	fathead min- now (Pimephales promelas)	OECD Guideline 203	ECHA Chem
silicon dioxide, amorphous	7631-86-9	EC50	72 h	>173,1 ^{mg} / _l	green algae (Desmodesmus subspicatus)	OECD Guideline 201	ECHA Chem
silicon dioxide, amorphous	7631-86-9	EC50	48 h	>5.000 ^{mg} / _l	daphnia magna	OECD Guideline 202	ECHA Chem
ethylene glycol	107-21-1	LC50	96 h	>72.860 ^{mg} / I	fathead min- now (Pimephales promelas)	EPA 600/4- 90/027	ECHA
ethylene glycol	107-21-1	EC50	48 h	>100 ^{mg} / _l	daphnia magna	OECD Guideline 202	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	EC50	96 h	0,069 ^{mg} / _l	algae (Skelet- onema cost- atum)	OECD Guideline 201	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	EC50	48 h	1,6 ^{mg} / _l	daphnia magna	EPA OPP 72-2	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	LC50	48 h	0,934 ^{mg} / _l	daphnia magna	OECD Guideline 202	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	LC50	96 h	4,77 ^{mg} / _l	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 203	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	ErC50	96 h	>0,072 ^{mg} / _l	algae (Skelet- onema cost- atum)	OECD Guideline 201	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	EbC50	96 h	0,063 ^{mg} / _l	algae (pseudokirch- neriella sub- capitata)	OECD Guideline 201	ECHA

Aquatic toxicity (chronic)

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

Aquatic toxicity (chronic) of components

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
aluminium ox- ide	1344-28-1	EC50	8 d	45 ^{mg} / _l	Ceriodaphnia dubia (water flea)	EPA Meth- od 1002	ECHA
aluminium ox- ide	1344-28-1	growth (Eb- Cx) 10%	3 h	1.000 ^{mg} / _l	A mixed popu- lation of active sewage sludge microorgan- isms	OECD Guideline 209	ECHA
silicon dioxide, amorphous	7631-86-9	EC50	3 h	>1.000 ^{mg} / _l	microorgan- isms	OECD Guideline 209	ECHA
silicon dioxide, amorphous	7631-86-9	NOEC	21 d	68 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA Chem
silicon dioxide, amorphous	7631-86-9	LOEC	21 d	149,2 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA Chem
silicon dioxide, amorphous	7631-86-9	growth (Eb- Cx) 10%	3 h	>1.000 ^{mg} / _l	microorgan- isms	OECD Guideline 209	ECHA Chem
ethylene glycol	107-21-1	LC50	28 d	>1.500 ^{mg} / _l	tidewater sil- verside (Men- idia peninsu- lae)	ASTM E- 47.01	ECHA
ethylene glycol	107-21-1	NOEC	28 d	>40 ^{mg} / _l	tidewater sil- verside (Men- idia peninsu- lae)	ASTM E- 47.01	ECHA
ethylene glycol	107-21-1	NOEC	72 h	>100 ^{mg} / _l	algae (pseudokirch- neriella sub- capitata)	OECD Guideline 201	ECHA
ethylene glycol	107-21-1	NOEC	7 d	8.590 ^{mg} / _l	Ceriodaphnia dubia (water flea)	EPA 600/4- 89/001	ECHA
ethylene glycol	107-21-1	growth (Eb- Cx) 20%	30 min	>1.995 ^{mg} / _l	activated sludge, do- mestic	DIN EN ISO 8192	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	EC50	21 d	1,4 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	EC50	3 h	41 ^{mg} / _l	activated sludge of a pre- dominantly do-	OECD Guideline 209	ECHA

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
					mestic sewage		
2-methyl-2H- isothiazol-3- one	2682-20-4	EC50	16 h	2,3 ^{mg} / _l	activated sludge (Pseudomonas putida)	DIN EN ISO 10712	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	NOEC	21 d	0,044 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	NOEC	33 d	2,1 ^{mg} / _l	fathead min- now (Pimephales promelas)	OECD Guideline 210	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	LOEC	21 d	0,089 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	LOEC	33 d	4,2 ^{mg} / _l	fathead min- now (Pimephales promelas)	OECD Guideline 210	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	growth (Eb- Cx) 10%	16 h	1 ^{mg} / _l	activated sludge (Pseudomonas putida)	DIN EN ISO 10712	ECHA

12.2 Persistence and degradability

Biodegradation

Test data are not available for the complete mixture.

Degradability of components

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
ethylene glycol	107-21-1	DOC removal	90 – 100 %	10 d	OECD Guideline 301 A	ECHA
ethylene glycol	107-21-1	oxygen deple- tion	≥83 %	14 d	OECD Guideline 301 C	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	carbon diox- ide generation	47,6 %	29 d	OECD Guideline 301 B	ECHA
2-methyl-2H- isothiazol-3- one	2682-20-4	oxygen deple- tion	0 %	28 d	OECD Guideline 301 D	ECHA

Persistence

No data available.

12.3 Bioaccumulative potential

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW
ethylene glycol	107-21-1	-	-1,36
2-methyl-2H-isothiazol-3- one	2682-20-4	5,75	-0,486

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\ge 0,1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\ge 0,1\%$.

12.7 Other adverse effects

Data are not available.

Remarks

Wassergefährdungsklasse, WGK (water hazard class): 2. Keep away from drains, surface and ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN number or ID number	not subject to transport regulations
112	UN proper shipping pame	

- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)

14.4 Packing group

- 14.5 Environmental hazards
- 14.6 Special precautions for user
- 14.7 Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	CAS No	Restriction
SILCADUR 130 Coating	this product meets the criteria for clas- sification in accordance with Regulation No 1272/2008/EC	-	R3
2-methyl-2H-isothiazol-3-one	substances in tattoo inks and perman- ent make-up	-	R75

Legend

R3 1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

- games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market.

3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:

- can be used as fuel in decorative oil lamps for supply to the general public, and

- present an aspiration hazard and are labelled with H304.

4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).

5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage";
(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Ust a sip of arrill lighter fluid may lead to life threatening lung damage";

marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage'; (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';

R75 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:

(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;

(b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive tox-

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icant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;

(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;

(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:

(i) 0,1 % by weight, if the substance is used solely as a pH regulator;

(ii) 0,01 % by weight, in all other cases;

(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;

(f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:

(i) "Rinse-off products";

(ii) "Not to be used in products applied on mucous membranes";

(iii) "Not to be used in eye products";

(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;

(h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.

3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.

4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:

(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);

(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).

5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification of that new or revised classification.

6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made. 7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:

(a) the statement "Mixture for use in tattoos or permanent make-up";

(b) a reference number to uniquely identify the batch;

(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for

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tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;

(d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;

(e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;

(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;

(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible.

The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device or an accessory to a medical device or an accessory to a medical device. The same meaning device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

Not assigned.

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

None of the ingredients are listed.

Regulation on the marketing and use of explosives precursors

None of the ingredients are listed.

Regulation on drug precursors

None of the ingredients are listed.

Regulation on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

Regulation concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (Germany)

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK2(water hazard class)- classification acc. to annex 1 (AwSV)

Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass con- centration	Nota- tion
5.2.5	organic substances	-	1 – < 5 wt%	0,5 ^{kg} / _h	50 ^{mg} / _{m³}	3)

Notation

3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK)	
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(non-combustible liquids)

Chemikalien-Verbotsverordnung (Chemicals Prohibition Ordinance) - ChemVerbotsV

none of the ingredients are listed

Other information

Observe employment restrictions for young people according to § 22 JArbSchG. Observe occupational restrictions for mothers acc. to §§ 11 and 12 MuSchG!

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15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in im- plementation of Council Directive 98/24/EC
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de nav- igation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement con- cerning the International Carriage of Dangerous Goods by Road)
AGW	Workplace exposure limit
Aquatic Acute	Hazardous to the aquatic environment - acute hazard

Abbr.	Descriptions of used abbreviations	
Aquatic Chron- ic	Hazardous to the aquatic environment - chronic hazard	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical sub- stances)	
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures	
DFG	Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung ge- sundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance caus- ing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)	
ED	Endocrine disruptor	
EINECS	European Inventory of Existing Commercial Chemical Substances	
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms	
ELINCS	European List of Notified Chemical Substances	
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
Eye Dam.	Seriously damaging to the eye	
Eye Irrit.	Irritant to the eye	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
IMDG	International Maritime Dangerous Goods Code	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regula- tion (EC) No 1272/2008	
IOELV	Indicative occupational exposure limit value	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality dur- ing a specified time interval	
LGK	Lagerklasse (storage class according to TRGS 510, Germany)	

Abbr.	Descriptions of used abbreviations
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the sum- mation method the classification of a mixture in which the substance is present
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
SVHC	Substance of Very High Concern
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU. Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
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.
H330	Fatal if inhaled.
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.

Responsible for the safety data sheet

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Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.