SILISIL RTV MF-Ultra 50 Orange

Safety Data Sheet

SILITECH AG encourages you to read and understand the entire Safety Data Sheet (SDS), as this document contains important information. We ask that you follow the precautions indicated in this document, unless your conditions of use require other appropriate methods or actions.

1. IDENTIFICATION

Product Name
SILISIL RTV MF-Ultra 50 Orange

Relevant uses identified for the substance or mixture
Industrial uses
Reserved for professional users
Addition silicone for mold making

Uses not recommended
None known

Company identification
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Emergency phone number
Tox Info Suisse (24/7): +41 44 251 51 51 or 145 (Switzerland and Liechtenstein).

2. HAZARD IDENTIFICATION

Classification of the substance or mixture
Not classified according to Regulation (EC) No 1272/2008 (CLP).

Labeling elements

Labelling according to Regulation (EC) No 1272/2008	None
Danger pictograms	None
Warning notice	None
Hazard statements	None

Other dangers

PBT	Not applicable
vPvB	Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
Not applicable

Mixtures
Hazardous components within the meaning of the CLP regulation and related classification

Quantity	Name	Ident. Number	Classification
>= 13% - < 20%	Quartz	CAS: 14808-60-7 EC: 238-878-4	STOT RE 1 H372 causes damage to organs (lungs) through prolonged or repeated exposure if inhaled.
<0,09%	Zirconium bis (hydrogen phosphate)	CAS: 13772-29-7 EC: 237-401-7 REACH No.: 01-21201143 57-62-XXXX	Skin Sens. 1 H317 May cause an allergic skin reaction
<0,09%	octamethylcyclotetrasiloxane; [D4]	Index number: 014-018-00-1 CAS: 556-67-2 EC: 209-136-7	Flam. Liq. 3 H226 Flammable liquid and vapour. Repr. 2 H361f Suspected of damaging fertility. Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. M=10.

4. FIRST AID MEASURES

Description of first aid measures

General Information
Remove any clothing contaminated by the product immediately.

Inhalation
Provide fresh air and keep warm and at rest.

Skin contact
Wash immediately with soap and water and rinse thoroughly. If skin irritation persists, consult a doctor.

Visual contact
Rinse your eyes under running water for several minutes and seek medical advice.

Ingestion
Do not induce vomiting. Obtain medical examination immediately.

Burns
Not applicable.

Most important symptoms and effects, both acute and delayed
None known.

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

Information for doctors
Bring this safety data sheet or the label from this product.

5. FIRE FIGHTING MEASURES

Fire extinguishing agent
Suitable extinguishing media: CO2, foam, water spray, extinguishing powder.

Specific risks associated with the substance or mixture
Do not inhale combustion gases. Burning produces thick smoke

Advice for firefighters
Special safety equipment
Wear a self-contained breathing apparatus independent of ambient air.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely

6. MEASURES IN CASE OF ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures
Wear safety equipment. Keep unprotected individuals away.

Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter surface water or drains. Retain contaminated water and dispose of it. In case of gas emissions or of entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: absorbing material, sand.

Containment and cleaning methods and materials
Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists. Keep containers tightly closed. Ensure good ventilation/extraction in the work area. Keep away from sources of ignition – no smoking. Keep away from heat.

Safe storage conditions, including any potential incompatibilities
Open containers must be carefully resealed and kept in an upright position to prevent leaks.

Requirements for storage facilities and containers
Store only in the original receptacle.

Instructions regarding shared storage
Do not store with flammable materials. Store away from food.

Other information on storage conditions
Keep containers tightly closed. Store in a cool, dry place in tightly sealed drums. Protect from intense heat and direct sunlight. Store containers in a well-ventilated area.

Specific end use(s)
No further information available.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters

Quartz - CAS: 14808-60-7

OEL Type	TWA	Duration	STEL	Duration	Notes	Country
TLV	0.3 mg/m³	8h	0.6 mg/m³	15 min	Inhalable (aerosol)	Denmark
TLV	0.1 mg/m³	8h	0.2 mg/m³	15 min	Respirable (aerosol)	Denmark
OELV	0.1 mg/m³	8h			Respirable	Ireland
VLA	0.05 mg/m³	8h			Respirable	Spain
MAK	0.15 mg/m³	8h			Respirable (aerosol)	Switzerland
VLEP	0.1 mg/m³	8h				Belgium
VLEP	0.1 mg/m³	8h			Respirable (aerosol)	France
TGG	0.075 mg/m³	8h			Respirable (dust)	Netherlands
NGV/KGV	0.1 mg/m³	8h			Respirable	Sweden
AK	0.15 mg/m³	8h			Respirable (aerosol)	Hungary
HTP	0.05 mg/m³	8h			Respirable	Finland
MAK	0.15 mg/m³	8h			Respirable (aerosol)	Austria
NIOSH	0.05 mg/m³	8h				USA
NDS/NDSCh	0.1 mg/m³	8h			Respirable	Poland
ACGIH	0.025 mg/m³	8h			(R), A2 -Pulm fibrosis, lung cancer	

Zirconium bis(hydrogen phosphate) - CAS: 13772-29-7

OEL Type	TWA	Duration	STEL	Duration	Notes	Country
No data available						

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

OEL Type	TWA	Duration	STEL	Duration	Notes	Country
No data available						

DNEL Exposure Limit Values
Not available

PNEC Exposure Limit Values
Not available

Additional notes
This document is based on the lists in force at the time of its preparation.

Exposure controls
Apply general control measures to avoid unnecessary exposure.

Appropriate technical controls
No further information provided.

General protection and hygiene measures
Observe standard safety precautions when handling chemicals. Do not eat, drink, smoke, or sniffle at work. Wash your hands before breaks and at the end of your shift. Separate restrooms, showers, and changing rooms are required.

Respiratory protection
Use respiratory protection if ventilation is insufficient. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection

Protective gloves

The glove material must be impermeable and resistant to the product, substance or preparation. Due to a lack of testing, no recommendation for a specific glove material for the product/preparation/chemical mixture can be given. The glove material should be selected based on penetration time, permeability rate, and degradation.

Glove material
EN374
Choosing the right gloves depends not only on the material, but also on other quality criteria that can vary from one manufacturer to another. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application

Glove material penetration time
The exact penetration time is to be determined by the manufacturer of the protective gloves and must be respected.

Eye/Face Protection
EN 166

Airtight protective goggles

Body protection
Protective workwear

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Orange
Smell	Odorless
Melting/freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability (°C)	Not determined
Lower/upper explosive limit (% v/v)	Not determined
Flash point (°C)	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
pH	Not determined
Kinematic viscosity	Not determined
Water solubility	Insoluble
Solubility in oil	Not determined
n-octanol/water coefficient (LogKow)	Not determined
Vapor pressure (20 °C)	Not determined
Density (20 °C)	1.01 g/cm³
Relative density	Not determined
Vapor density	Not determined
Particle size	Not determined

Other information
No other relevant information.

10. STABILITY AND REACTIVITY

Reactivity
Stable under normal conditions.

Chemical stability
Stable under normal conditions.

Potential for dangerous reactions
None

Conditions to avoid
No other significant information is available.

Incompatible materials
None in particular.

Hazardous decomposition products
None.

Additional information
None.

11. TOXICOLOGICAL INFORMATION

Information on hazard classes as defined in Regulation (EC) No 1272/2008: acute toxicity
Based on the available data for the mixture, the classification criteria are not met.

Skin corrosion/irritation
Based on the available data for the mixture, the classification criteria are not met.

Serious eye injuries/irritations
Based on the available data for the mixture, the classification criteria are not met.

Respiratory awareness
Based on the available data for the mixture, the classification criteria are not met.

Skin sensitization
Based on the available data for the mixture, the classification criteria are not met.

Germ cell mutagenicity
Based on the available data for the mixture, the classification criteria are not met.

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

Reproductive toxicity
Based on the available data for the mixture, the classification criteria are not met.

Unique exposure to STOTs
Based on the available data for the mixture, the classification criteria are not met.

Repeated exposure to STOTs
Based on the available data for the mixture, the classification criteria are not met.

Danger by aspiration
Based on the available data for the mixture, the classification criteria are not met.

Toxicological information of the main substances found in the product

Quartz - CAS: 14808-60-7

STOT-repeated exposure

Route	Target organ
Inhalation	Lungs

Zirconium bis(hydrogen phosphate) - CAS: 13772-29-7

Acute toxicity

Test	Route	Species
LD50	Oral	>2000 mg/kg (rat)

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

Test	Route	Species
LC50	-	36 mg/l (rat)
LD50	Skin	>2000 mg/kg (rat)
LD50	Oral	4800 mg/kg (rat)

Information on other hazards

Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12. ECOLOGICAL INFORMATION

The product is not classified as chronic aquatic hazard. A test based on the bioavailability and release of D4 by polymer silicone was performed with the OECD 29 method. It was found that the quantity of D4 released by 100mg of polymer is at least below the quantification limit of the method (i.e. 4.4 ppb), a value significantly lower than the limit that would result in the classification for chronic aquatic toxicity (NOEC of 0.0044 mg/L for fish and 0.0079 mg/L for aquatic invertebrates). Therefore, the product is not classified for this hazard class.

Toxicity
octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2
Aquatic acute toxicity

Test	Duration	Species
IC50	72h	>0.0022 mg/l (algae)
LC50	-	>0.0022 mg/l (fish)
NOEC	-	>0.0044 mg/l (fish)

Long-term toxicity to aquatic invertebrates

Test	Duration	Species
NOEC	21 days	7.9 µg/l (daphnia)

Persistence and degradability
Quartz - CAS: 14808-60-7
Biodegradability: Non-readily biodegradable

Bioaccumulation potential
Quartz - CAS: 14808-60-7
Not bioaccumulative

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

Test	Partition coefficient
Kow	6.49

Mobility in the ground
Not available.

vPvB assessment
PBT
<0,1% octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

vPvB
<0,1% octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

Endocrine system disruptive properties
For information regarding endocrine-disrupting properties, refer to section 11.

Other side effects
None

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation
Recover if possible. Comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

	UN/ID	UN Appropriate Shipping Name	Hazard classes	PG*	Environment**	Other information
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packaging group
** Environmental risks

Additional Information
Non-hazardous goods according to ADR, IATA and IMDG regulations.

Special precautions for the user
Not applicable.

Bulk maritime transport according to IMO instruments
No data available.

15. REGULATORY INFORMATION

Specific regulations/legislation relating to the substance or mixture concerning safety, health and the environment
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2020/878
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Directive 2012/18/EU

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications
Restrictions related to the product:
Restriction 3
Restriction 40

Restrictions related to the substances contained:
Restriction 70
Restriction 75

SVHC Substances
Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):
octamethylcyclotetrasiloxane; [D4]
PBT, vPvB

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
None

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe

Lagerklasse according to TRGS 510
LGK 10: Combustible liquids

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012
None

Substance(s) listed under California Proposition 65
Quartz - Listed as carcinogen

Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:
None

16. OTHER INFORMATION

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT RE 1	3.9/1	Specific target organ toxicity – repeated exposure, Category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, Category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, Category 3

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic	According to Article 12 of the CLP Regulation, "Where, as a result of the evaluation carried out pursuant to Article 9, the following properties or effects are identified, manufacturers, importers and downstream users shall take them into account for the purposes of classification: [...] conclusive scientific experimental data show that the substance or mixture is not biologically available and those data have been ascertained to be adequate and reliable." Following a release study of D4 through the OECD 29 test on polymeric products representative for quantity of D4, the limit that would result in the classification for chronic aquatic toxicity (NOEC of 0.0044 mg /L for fish and 0.0079 mg / L for invertebratesaquatic) is not reached.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:
ECHA – European Chemical Agency
GESTIS - Information system on hazardous substances of the German Social Accident Insurance
IARC – International Agency for Research on Cancer
IPCS INCHEM – International Program on Chemical Safety
ISS – Istituto Superiore di Sanità
PubChem - Open chemistry database at the National Institutes of Health (NIH)

Acronyms and abbreviations
ADR = Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
ATEmix = Acute toxicity Estimate (Mixtures)
CAS = Chemical Abstracts Service (division of the American Chemical Society)
CLP = Classification, Labeling, Packaging
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial Chemical Substances
GefStoffVO = Ordinance on Hazardous Substances, Germany
GHS = Globally Harmonized System of Classification and Labeling of Chemicals
IATA = International Air Transport Association
IATA-DGR = Dangerous Goods Regulation by the "International Air Transport Association"
ICAO = International Civil Aviation Organization
ICAO-TI = Technical Instructions by the "International Civil Aviation Organization"
IMDG = International Maritime Code for Dangerous Goods
INCI = International Nomenclature of Cosmetic Ingredients
KSt = Explosion coefficient
LC50 = Lethal concentration, for 50 percent of test population
LD50 = Lethal dose, for 50 percent of test population
PNEC = Predicted No Effect Concentration
RID = Regulation Concerning the International Transport of Dangerous Goods by Rail
STEL = Short Term Exposure limit
STOT = Specific Target Organ Toxicity
TLV = Threshold Limiting Value
TWA = Time-weighted average
WGK = German Water Hazard Class

Other
A change (proportional to the last essential change (first encryption in the SDS version, see section 1)) is marked with a triangle.

The information contained in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended that this safety data sheet be given to the end user of the product.

The information contained in this safety data sheet cannot be used as a product specification.

Country-Language: CH-en