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

1.1 Product identifier

MD SIL Oxim rot, Tube
Article number: MSI.R.T80-BK
UFI: 3SUU-V975-T00X-K6YH

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

1.2.1 Relevant uses

Sealing material

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Marston Domsel GmbH
Bergheimer Str. 15
53909 Zülpich / GERMANY
Phone +49 (0) 22 52 94 15 0
Fax +49 (0) 22 52 17 44
Homepage www.marston-domsel.de
E-mail info@marston-domsel.de

Address enquiries to

Technical information info@marston-domsel.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Skin Sens. 1: H317 May cause an allergic skin reaction.

2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

Hazard pictograms

Signal word WARNING

Contains: Methyltris(methylethylketoxime)silane

3-Aminopropyltriethoxysilane

Dibutyltin dilaurate

Hazard statements H317 May cause an allergic skin reaction.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

Other hazards none

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
5 - 10	Quartz (≤10µm)
	CAS: 14808-60-7, EINECS/ELINCS: 238-878-4
	GHS/CLP: STOT RE 1: H372
5 - < 10	Methyltris(methylethylketoxime)silane
	CAS: 22984-54-9, EINECS/ELINCS: 245-366-4
	GHS/CLP: Eye Irrit. 2: H319 - Skin Sens. 1B: H317 - STOT RE 2: H373
0.1 - < 1	3-Aminopropyltriethoxysilane
	CAS: 919-30-2, EINECS/ELINCS: 213-048-4, EU-INDEX: 612-108-00-0, Reg-No.: 01-2119480479-24
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Skin Sens. 1: H317 - Eye Dam. 1: H318
0.1 - < 1	Dodecamethylcyclohexasiloxane (non-classified PBT/vPvB substance)
	CAS: 540-97-6, EINECS/ELINCS: 208-762-8
0.1 - < 0.4	Octamethylcyclotetrasiloxane
	CAS: 556-67-2, EINECS/ELINCS: 209-136-7, EU-INDEX: 014-018-00-1, Reg-No.: 01-2119529238-36-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Repr. 2: H361f - Aquatic Chronic 4: H413
0.1 - < 0.4	Decamethylcyclopentasiloxane (non-classified PBT/vPvB substance)
	CAS: 541-02-6, EINECS/ELINCS: 208-764-9, Reg-No.: 01-2119511367-43
< 0.2	Dibutyltin dilaurate
	CAS: 77-58-7, EINECS/ELINCS: 201-039-8, EU-INDEX: 050-030-00-3
	GHS/CLP: Skin Corr. 1C: H314 - Skin Sens. 1: H317 - Repr. 1B: H360FD - Muta. 2: H341 - STOT RE 1: H372 - STOT SE 1: H370 - Aquatic Chronic 1: H410 - Aquatic Acute 1: H400, M-Factor (acute): 1

Comment on component parts The quartz in this preparation is not available on foreseeable use.
Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Change soaked clothing.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

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.

Ingestion Consult a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.
Water spray jet.
Dry powder.
Foam.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Carbon monoxide (CO)
Nitrogen oxides (NOx).

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

Wash hands before breaks and after work.
Use barrier skin cream.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Store in a dry place.
Protect from heat/overheating.
Protect from atmospheric moisture and water.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Quartz (≤10µm)
CAS: 14808-60-7, EINECS/ELINCS: 238-878-4
Long-term exposure: 0,1 mg/m³, respirable, crystalline
Dibutyltin dilaurate
CAS: 77-58-7, EINECS/ELINCS: 201-039-8, EU-INDEX: 050-030-00-3
Long-term exposure: 0,1 mg/m³, as Sn, Sk
Short-term exposure (15-minute): 0,2 mg/m³

DNEL

Substance
Decamethylcyclopentasiloxane (non-classified PBT/vPvB substance), CAS: 541-02-6
Industrial, inhalative, Acute - local effects, 24.2 mg/m³
Industrial, inhalative, Long-term - local effects, 24.2 mg/m³
Industrial, inhalative, Long-term - systemic effects, 97.3 mg/m³
Industrial, inhalative, Acute - systemic effects, 97.3 mg/m³
general population, oral, Long-term - systemic effects, 5 mg/kg bw/d
general population, inhalative, Acute - systemic effects, 17.3 mg/m³
general population, inhalative, Acute - local effects, 4.3 mg/m³
general population, inhalative, Long-term - systemic effects, 17.3 mg/m³
general population, inhalative, Long-term - local effects, 4.3 mg/m³
general population, oral, Acute - systemic effects, 5 mg/kg bw/d
3-Aminopropyltriethoxysilane, CAS: 919-30-2
Industrial, dermal, Long-term - systemic effects, 2 mg/kg bw/d (AF=100)
Industrial, inhalative, Long-term - systemic effects, 14 mg/m³ (AF=25)
general population, oral, Long-term - systemic effects, 1 mg/kg bw/d (AF=200)
general population, inhalative, Long-term - systemic effects, 3.5 mg/m³ (AF=50)
general population, dermal, Long-term - systemic effects, 1 mg/kg bw/d (AF=200)
Octamethylcyclotetrasiloxane, CAS: 556-67-2
Industrial, inhalative, Long-term - systemic effects, 73 mg/m³
Industrial, inhalative, Long-term - local effects, 73 mg/m³
general population, inhalative, Long-term - systemic effects, 13 mg/m³
general population, inhalative, Acute - systemic effects, 13 mg/m³
general population, inhalative, Long-term - local effects, 13 mg/m³
general population, oral, Long-term - systemic effects, 3.7 mg/kg bw/day

PNEC

Substance
Decamethylcyclopentasiloxane (non-classified PBT/vPvB substance), CAS: 541-02-6
seawater, 0.00012 mg/l
sediment (freshwater), 2.39 mg/kg dw
sediment (seawater), 0.239 mg/kg dw
sewage treatment plants (STP), > 10 mg/l
soil, 3.34 mg/kg dw

freshwater, 0.0012 mg/l
3-Aminopropyltriethoxysilane, CAS: 919-30-2
sediment (seawater), 0.18 mg/kg dw
freshwater, 0.5 mg/L (AF=50)
seawater, 0.05 mg/L (AF=500)
sediment (freshwater), 1.8 mg/kg dw
soil, 0.069 mg/kg dw
sewage treatment plants (STP), 0.81 mg/L (AF=10)
Octamethylcyclotetrasiloxane, CAS: 556-67-2
oral (food), 41 mg/kg food
freshwater, 1.5 µg/L
seawater, 0.15 µg/L
sewage treatment plants (STP), 10 mg/l
sediment (freshwater), 3 mg/kg sediment dw
sediment (seawater), 0.3 mg/kg sediment dw
soil, 0.54 mg/kg soil dw

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Safety glasses. (EN 166:2001)

Hand protection
The details concerned are recommendations. Please contact the glove supplier for further information.
> 0.4 mm; Butyl rubber, >120 min (EN 374-1/-2/-3).

Skin protection
not applicable

Other
Avoid contact with eyes and skin.
Do not inhale vapours.

Respiratory protection
Respiratory protection mask in the event of high concentrations.
Short term: filter apparatus, filter A. (DIN EN 14387)

Thermal hazards
no

Delimitation and monitoring of the environmental exposition
Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	pasty
Color	red
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	No information available.
Boiling point [°C]	No information available.
Flash point [°C]	No information available.
Flammability (solid, gas) [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/cm³]	No information available.
Relative density	No information available.
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	not applicable
Relative vapour density	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Auto-ignition temperature	not applicable
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Water

10.6 Hazardous decomposition products

Formation of Formaldehyde during the thermal decomposition.
Contact with moisture liberates 2-Butanone oxime.

SECTION 11: Toxicological information

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

Acute oral toxicity

Substance
Decamethylcyclopentasiloxane (non-classified PBT/vPvB substance), CAS: 541-02-6
LD50, oral, Rat, > 24 134 mg/kg bw
3-Aminopropyltriethoxysilane, CAS: 919-30-2
LD50, oral, Rat (female), 1570 mg/kg bw
LD50, oral, Rat (male), 2830 mg/kg bw
Dibutyltin dilaurate, CAS: 77-58-7
LD50, oral, Rat, 175 mg/kg (RTECS)
Octamethylcyclotetrasiloxane, CAS: 556-67-2
LD50, oral, Rat, >4800 mg/kg bw (OECD 401)
Methyltris(methylethylketoxime)silane, CAS: 22984-54-9
LD50, oral, Rat, > 2000 mg/kg bw (Lit.)

Acute dermal toxicity

Substance
3-Aminopropyltriethoxysilane, CAS: 919-30-2
LD50, dermal, Rabbit, 4290 mg/kg bw
Octamethylcyclotetrasiloxane, CAS: 556-67-2
LD50, dermal, Rat, >2000 mg/kg bw (OECD 402)
Methyltris(methylethylketoxime)silane, CAS: 22984-54-9
LD50, dermal, Rat, > 2000 mg/kg bw (Lit.)

Acute inhalational toxicity

Substance
Decamethylcyclopentasiloxane (non-classified PBT/vPvB substance), CAS: 541-02-6
LD50, inhalativ (mist), Rat, 8.67 mg/l/4h
3-Aminopropyltriethoxysilane, CAS: 919-30-2
LC50, inhalative, Rat (female), 16 ppm/6h (OECD 403)
LC50, inhalative, Rat (male), 5 ppm/6h (OECD 403)
Octamethylcyclotetrasiloxane, CAS: 556-67-2
LC50, inhalative, Rat, 36 mg/l air (OECD 403)

Serious eye damage/irritation Based on the available information, the classification criteria are not fulfilled.

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

Respiratory or skin sensitisation Toxicological data of complete product are not available.
May produce an allergic reaction.
Calculation method

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance
Octamethylcyclotetrasiloxane, CAS: 556-67-2
NOAEL, dermal, Rabbit, 960 mg/kg bw/day
NOAEC, inhalative, Rat, 1820 mg/m³

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

Substance
Octamethylcyclotetrasiloxane, CAS: 556-67-2
NOAEC, inhalative, Rabbit, 6066 mg/m³ (Effect on developmental toxicity)
NOAEC, inhalative, Rat, 3640 mg/m³ (Effect on fertility)

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Substance
Octamethylcyclotetrasiloxane, CAS: 556-67-2
NOAEC, inhalative, Rat, 8492 mg/m³

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.

11.2 Information on other hazards

Endocrine disrupting properties Contains no ingredients with endocrine-disrupting properties.

Other information none

SECTION 12: Ecological information

12.1 Toxicity

Substance
3-Aminopropyltriethoxysilane, CAS: 919-30-2
LC50, (96h), Brachidanio rerio, > 934 mg/l
EC50, (72h), Desmodesmus subspicatus, > 1000 mg/l
EC50, (48h), Daphnia magna, 331 mg/l
Dibutyltin dilaurate, CAS: 77-58-7
LC50, (48h), Oryzias latipes, 1 mg/l
EC50, (24h), Daphnia magna, 0.66 mg/l
Octamethylcyclotetrasiloxane, CAS: 556-67-2
LC50, (96h), Oncorhynchus mykiss, > 0.022 mg/l
EC50, (48h), Daphnia magna, 0.015 mg/l
NOEC, (21d), Invertebrates, 0.015 mg/l
ErC50, (96h), Pseudokirchneriella subcapitata, > 22 µg/l

12.2 Persistence and degradability

Behaviour in environment compartments

Behaviour in sewage plant No information available.

Biological degradability

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not applicable

12.5 Results of PBT and vPvB assessment

not applicable

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 070216*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances
150104

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2022)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	0%

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H413 May cause long lasting harmful effects to aquatic life.
H361f Suspected of damaging fertility.
H226 Flammable liquid and vapour.
H372 Causes damage to lung through prolonged or repeated exposure if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.
H341 Suspected of causing genetic defects.
H360FD May damage fertility. May damage the unborn child.

H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)

Modified position none