

Safety Data Sheet
MAPEFLEX MS 45

Safety Data Sheet dated: 10/11/2023 - version 8



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

1.1. Product identifier

Mixture identification:

Trade name: MAPEFLEX MS 45

Trade code: 906PB9990

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

Recommended use: Sililated based polyether adhesive

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsable: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH208 Contains Trimethoxyvinylsilane
. May produce an allergic reaction.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH208 Contains 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards: No other hazards

Further hazards:

Methanol is released by hydrolysis during application.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEFLEX MS 45

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

Qty	Name	Ident. Numb.	Classification	Registration Number	Material Properties
≥1 - <2.5 %	trimethoxypropylsilane; silane, trimethoxypropyl-	CAS:1067-25-0 EC:213-926-7	Flam. Liq. 3, H226; Skin Irrit. 2, H315	01-2119972314-37-XXXX	
≥0.49 - <1 %	Trimethoxyvinylsilane	CAS:2768-02-7 EC:220-449-8 Index:014-049-00-0	Skin Sens. 1B, H317; Flam. Liq. 3, H226; Acute Tox. 4, H332	01-2119513215-52-XXXX	
≥0.1 - <0.25 %	Octocrilene	CAS:6197-30-4 EC:228-250-8	Aquatic Chronic 1, H410, M-Chronic:10	01-2119457637-27-XXXX	
≥0.016 - <0.025 %	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Chronic 2, H411		
			Specific Concentration Limits: C ≥ 0.05%: Skin Sens. 1 H317		
≥0.016 - <0.025 %	Octamethylcyclotetrasiloxane	CAS:556-67-2 EC:209-136-7 Index:014-018-00-1	Flam. Liq. 3, H226; Repr. 2, H361; Aquatic Chronic 1, H410, M-Chronic:10	01-2119529238-36-XXXX	SVHC
≥0.005 - <0.01 %	methanol	CAS:67-56-1 EC:200-659-6 Index:603-001-00-X	Flam. Liq. 2, H225 STOT SE 1, H370 Acute Tox. 3, H301 Acute Tox. 3, H331 Acute Tox. 3, H311	01-2119433307-44-XXXX	
			Specific Concentration Limits: 3% ≤ C < 10%: STOT SE 2 H371 10% ≤ C < 100%: STOT SE 1 H370		
<0.0015 %	2-octyl-2H-isothiazol-3-one	CAS:26530-20-1 EC:247-761-7 Index:613-112-00-5	Acute Tox. 2, H330 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, EUH071		
			Specific Concentration Limits: C ≥ 0.0015%: Skin Sens. 1A H317		
			Acute Toxicity Estimate: ATE - Oral: 125mg/kg bw ATE - Dermal: 311mg/kg bw		

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Not available

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

Treatment:

Not available

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
methanol CAS: 67-56-1	SUVA		Long Term: 260 mg/m ³ - 200 ppm; Short Term: 1040 mg/m ³ - 800 ppm

National SWEDEN	Long Term: 250 mg/m ³ - 200 ppm; Short Term: 350 mg/m ³ - 250 ppm SWEDEN, Short-term value, 15 minutes average value
National FINLAND	Long Term: 270 mg/m ³ - 200 ppm; Short Term: 330 mg/m ³ - 250 ppm FINLAND, hud
National NORWAY	Long Term: 130 mg/m ³ - 100 ppm NORWAY, H
NDS	Long Term: 100 mg/m ³
NDSCh	Long Term: 300 mg/m ³
National NORWAY	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 520 mg/m ³ - 400 ppm
EU	Long Term: 260 mg/m ³ - 200 ppm Skin
ACGIH	Long Term: 200 ppm; Short Term: 250 ppm Skin, BEI - Headache, eye dam, dizziness, nausea
DFG GERMANY	Short Term: Ceiling - 260 mg/m ³ - 200 ppm
ACGIH	Long Term: 200 ppm; Short Term: 250 ppm Skin - potential significant contribution to overall exposure by the cutaneous route;eye damage;headache;dizziness;nausea
National SWEDEN	Long Term: 250 mg/m ³ - 200 ppm
EU	Long Term: 260 mg/m ³ - 200 ppm Behaviour Indicative Possibility of significant uptake through the skin
National FRANCE	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 1300 mg/m ³ - 1000 ppm
National SPAIN	Long Term: 266 mg/m ³ - 200 ppm
National GREECE	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 325 mg/m ³ - 250 ppm
National DENMARK	Long Term: 260 mg/m ³ - 200 ppm
National FINLAND	Long Term: 270 mg/m ³ - 200 ppm; Short Term: 330 mg/m ³ - 250 ppm
National GERMANY	Long Term: 270 mg/m ³ - 200 ppm
National PORTUGAL	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 250 ppm
National NORWAY	Long Term: 130 mg/m ³ - 100 ppm; Short Term: 162.5 mg/m ³ - 125 ppm
National BELGIUM	Long Term: 266 mg/m ³ - 200 ppm; Short Term: 333 mg/m ³ - 250 ppm
NDS POLAND	Long Term: 100 mg/m ³
NDSCh POLAND	Short Term: 300 mg/m ³
CHE SWITZERLAND	Short Term: 1040 mg/m ³ - 800 ppm D
NDS NETHERLANDS	Long Term: 133 mg/m ³
National CZECH REPUBLIC	Long Term: 250 mg/m ³
National HUNGARY	Long Term: 260 mg/m ³
Malaysia OEL	Long Term: 262 mg/m ³ - 200 ppm Skin notation
National ESTONIA	Long Term: 250 mg/m ³ - 200 ppm; Short Term: 350 mg/m ³ - 250 ppm
National LATVIA	Long Term: 260 mg/m ³ - 200 ppm
National CZECH REPUBLIC	Short Term: Ceiling - 1000 mg/m ³
National SLOVAKIA	Long Term: 260 mg/m ³ - 200 ppm
National SLOVENIA	Long Term: 260 mg/m ³ - 200 ppm
National UNITED KINGDOM	Long Term: 266 mg/m ³ - 200 ppm; Short Term: 333 mg/m ³ - 250 ppm
National BULGARIA	Long Term: 260 mg/m ³ - 200 ppm
National ROMANIA	Long Term: 260 mg/m ³ - 200 ppm
TUR TURKEY	Long Term: 260 mg/m ³ - 200 ppm
National LITHUANIA	Long Term: 260 mg/m ³ - 200 ppm
National CROATIA	Long Term: 260 mg/m ³ - 200 ppm

2-octyl-2H-isothiazol-3-one
CAS: 26530-20-1

National SLOVENIA	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 1040 mg/m ³ - 800 ppm
DFG GERMANY	Short Term: Ceiling - 54 mg/m ³ - 10 ppm

National GERMANY	Long Term: 0.05 mg/m ³
CHE SWITZERLAND	Short Term: 0.1 mg/m ³

National SLOVENIA	Long Term: 0.05 mg/m ³ ; Short Term: 0.05 mg/m ³
DFG GERMANY	Short Term: Ceiling - 0.1 mg/m ³
National SLOVENIA	Long Term: 0.05 mg/m ³ ; Short Term: 0.1 mg/m ³

Biological limit values

methanol
CAS: 67-56-1

Biological Indicator: Methyl alcohol; Sampling Period: End of turn
Value: 15 mg/L; Medium: Urine
Remark: Background; Not Specific

Predicted No Effect Concentration (PNEC) values

Trimethoxyvinylsilane Exposure Route: Fresh Water; PNEC Limit: 0.34 mg/l

CAS: 2768-02-7

Exposure Route: Marine water; PNEC Limit: 0.034 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 1.24 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 0.12 mg/kg
Exposure Route: Intermittent release; PNEC Limit: 3.4 mg/l

methanol
CAS: 67-56-1

Exposure Route: Fresh Water; PNEC Limit: 154 mg/l
Exposure Route: Marine water; PNEC Limit: 15.4 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 570.4 mg/kg
Exposure Route: Soil; PNEC Limit: 23.5 mg/kg
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l
Exposure Route: Intermittent release; PNEC Limit: 1540 mg/l

Derived No Effect Level (DNEL) values

Trimethoxyvinylsilane Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 0.69 mg/kg; Consumer: 0.3 mg/kg

CAS: 2768-02-7

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 4.9 mg/m³; Consumer: 1.04 mg/m³

methanol
CAS: 67-56-1

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Industry: 40 mg/kg; Consumer: 8 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Industry: 260 mg/m³; Consumer: 50 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Industry: 260 mg/m³; Consumer: 50 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Industry: 40 mg/kg; Consumer: 8 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Industry: 260 mg/m³; Consumer: 50 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Industry: 260 mg/m³; Consumer: 50 mg/m³

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 8 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 8 mg/kg

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

In case of insufficient ventilation use mask with AX filters (EN 14387).

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: paste

Color: various

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.

Lower and upper explosion limit: Not available

Flash point: 100 °C (212 °F)

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: Not available

Viscosity: 1,000,000.00 cPs

Kinematic viscosity: Not available

Solubility in water: Insoluble

Solubility in oil: partly soluble

Partition coefficient (n-octanol/water): Not available

Vapour pressure: Not available

Relative density: Not available

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified
	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Trimethoxyvinylsilane	a) acute toxicity	LD50 Oral Rat = 6899 mg/kg LD50 Skin Rat = 3158 mg/kg LC50 Inhalation Vapour Rat = 16.8 mg/l 4h
Octocrilene	a) acute toxicity	LD50 Oral Rat > 5 g/kg LD50 Oral Rat > 5 g/kg
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	a) acute toxicity	LD50 Oral Rat = 670 mg/kg
Octamethylcyclotetrasiloxane	a) acute toxicity	LC50 Inhalation Rat = 36 mg/l 4h LD50 Skin Rabbit > 2000 mg/kg LD50 Oral Rat > 4000 mg/kg
methanol	a) acute toxicity	LD50 Skin Rabbit > 17100 mg/kg
2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 125 mg/kg bw ATE - Dermal : 311 mg/kg bw LD50 Oral Rat = 318 mg/kg LD50 Skin Rabbit = 311 mg/kg LC50 Inhalation Dust Rat = 0.58 mg/l 4h

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Octocrilene	CAS: 6197-30-4 - EINECS: 228-250-8	a) Aquatic acute toxicity : LC50 Fish > 10000 mg/L 96
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6	a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 2.15 mg/L b) Aquatic chronic toxicity : NOEC Algae = 0.0403 mg/L 72h b) Aquatic chronic toxicity : EC50 Algae = 0.11 mg/L 72h b) Aquatic chronic toxicity : EC10 Algae = 0.04 mg/L 72h b) Aquatic chronic toxicity : EC50 Daphnia = 3.27 mg/L 48h NOEC Daphnia = 1.2 mg/L 21d
Octamethylcyclotetrasiloxane	CAS: 556-67-2 - EINECS: 209-136-7 - INDEX: 014-018-00-1	a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio > 500 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus > 1000 mg/L 96h IUCLID b) Aquatic chronic toxicity : NOEC Fish >= 0.0044 mg/L - 93 d
methanol	CAS: 67-56-1 - EINECS: 200-659-6 - INDEX: 603-001-00-X	a) Aquatic acute toxicity : LC50 Fish 15400 mg/L 96h b) Aquatic chronic toxicity : NOEC Fish = 450 mg/L
2-octyl-2H-isothiazol-3-one	CAS: 26530-20-1 - EINECS: 247-761-7 - INDEX: 613-112-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 0.42 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 0.084 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 0.036 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 0.18 mg/L 96 b) Aquatic chronic toxicity : NOEC Daphnia = 0.002 mg/L - 21 d b) Aquatic chronic toxicity : NOEC Fish = 0.022 mg/L - 28 d b) Aquatic chronic toxicity : NOEC Algae = 0.004 mg/L 72

12.2. Persistence and degradability

Component	Persistence/Degradability:
methanol	Readily biodegradable

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID):

ADR-Hazard identification number: NA

Not Applicable

Air (IATA):

Not Applicable

Sea (IMDG):

Not Applicable

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

VOC (2004/42/EC) : N.A. g/l

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 (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

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. 2019/521 (ATP 12 CLP)
 Regulation (EU) n. 2018/1480 (ATP 13 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)
 Regulation (EU) n. 2021/849 (ATP 17 CLP)
 Regulation (EU) n. 2022/692 (ATP 18 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

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: 3

Restrictions related to the substances contained: 40, 69, 70, 75

SVHC Substances:

Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):

Component	Ident. Numb.	Quantity	Material Properties
Octamethylcyclotetrasiloxane	CAS: 556-67-2	>=0.016 - <0.025 %	SVHC
	EINECS: 209-136-7		
	Index: 014-018-00-1		

National regulations

MAL-kode: 1-1

Lagerklasse (TRGS-510): 12 - Non-combustible liquids, that cannot be assigned to any of the aforementioned LGK

German Water Hazard Class.

Class 2: hazardous for water.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H370	Causes damage to organs.
H371	May cause damage to organs.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3

3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
3.8/1	STOT SE 1	Specific target organ toxicity — single exposure, Category 1
3.8/2	STOT SE 2	Specific target organ toxicity — single exposure, Category 2
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic 3, H412	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: KAFH

KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
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.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 3: Composition/information on ingredients
- SECTION 8: Exposure controls/personal protection
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information
- SECTION 16: Other information