Ramsauer GmbH & Co KG
4822 Bad Goisern / H. / Austria

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

1.1 Product identifier

Dach+Solar 460, transparent

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

1.2.1 Relevant uses

Silicon

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Ramsauer GmbH & Co KG
Sarstein 17
4822 Bad Goisern / H. / Austria
Phone +43(0)6135 8205-0
Fax +43(0)6135 8208-250
Homepage www.ramsauer.at
E-mail office@ramsauer.at

Address enquiries to

Technical information office@ramsauer.at

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +43(0) 1 406 43 43 (24h)

Company

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

No classification.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms none

Signal word none

Hazard statements none

Precautionary statements none

Special labelling EUH210 Safety data sheet available on request.

UFI: -

Special labelling Contains: 3-Aminopropyltriethoxysilane. EUH208 May produce an allergic reaction.

2.3 Other hazards

Human health dangers Frequent persistent contact with the skin can cause skin irritation.
Contact with moisture liberates Methanol and Ethanol.

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

3.2 The product is a mixture.

Range [%]	Substance
1 - <5	Trimethoxyvinylsilane
	CAS: 2768-02-7, EINECS/ELINCS: 220-449-8, Reg-No.: 01-2119513215-52-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H332
<1	Methanol
	CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X, Reg-No.: 01-2119433307-44-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Acute Tox. 3: H301 H311 H331 - STOT SE 1: H370
<1	Ethanol
	CAS: 64-17-5, EINECS/ELINCS: 200-578-6, EU-INDEX: 603-002-00-5, Reg-No.: 01-2119457610-43-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319
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-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Skin Sens. 1: H317 - Eye Dam. 1: H318
0,1 - <1	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 2: H411
0,1 - <1	Decamethylcyclopentasiloxane
	CAS: 541-02-6, EINECS/ELINCS: 208-764-9, Reg-No.: 01-2119511367-43-XXXX
0,1 - <1	Dodecamethylcyclohexasiloxane
	CAS: 540-97-6, EINECS/ELINCS: 208-762-8, Reg-No.: 01-2119517435-42-XXXX

Comment on component parts

SVHC (Candidate List of Substances of Very High Concern for authorisation) ≥ 0.1%
CAS 556-67-2 - Octamethylcyclotetrasiloxane
CAS 541-02-6 - Decamethylcyclopentasiloxane
CAS 540-97-6 - Dodecamethylcyclohexasiloxane
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Take off contaminated clothing and wash before reuse.

Inhalation

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

Skin contact

When in contact with the skin, clean 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

Seek medical advice immediately.
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Allergic reactions

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide.
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

High risk of slipping due to leakage/spillage of product.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).
Ensure adequate ventilation.

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.
No special measures necessary if used correctly.

Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.
Do not eat or drink when working.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep container tightly closed.
Store in a dry place.
Protect from heat/overheating.

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
Decamethylcyclopentasiloxane
CAS: 541-02-6, EINECS/ELINCS: 208-764-9, Reg-No.: 01-2119511367-43-XXXX
Long-term exposure: 10 ppm, CRMG (Chemical Manufacturer Recommended Exposure Guidelines) TWA
Ethanol
CAS: 64-17-5, EINECS/ELINCS: 200-578-6, EU-INDEX: 603-002-00-5, Reg-No.: 01-2119457610-43-XXXX
Long-term exposure: 1000 ppm, 1920 mg/m³
Methanol
CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X, Reg-No.: 01-2119433307-44-XXXX
Long-term exposure: 200 ppm, 266 mg/m³, Sk
Short-term exposure (15-minute): 250 ppm, 333 mg/m³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Methanol
CAS: 67-56-1, EINECS/ELINCS: 200-659-6, EU-INDEX: 603-001-00-X, Reg-No.: 01-2119433307-44-XXXX
Eight hours: 200 ppm, 260 mg/m³, H

DNEL

Substance
Decamethylcyclopentasiloxane, CAS: 541-02-6
Industrial, inhalative, Long-term - systemic effects: 97,3 mg/m³.
Industrial, inhalative, Acute - local effects: 24,2 mg/m³.
Industrial, inhalative, Long-term - local effects: 24,2 mg/m³.
Industrial, inhalative, Acute - systemic effects: 97,3 mg/m³.
general population, oral, Acute - systemic effects: 5 mg/kg bw/d.
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, Long-term - systemic effects: 17,3 mg/m³.
general population, inhalative, Long-term - local effects: 4,3 mg/m³.
general population, inhalative, Acute - local effects: 4,3 mg/m³.
3-Aminopropyltriethoxysilane, CAS: 919-30-2
Industrial, inhalative, Long-term - systemic effects: 59 mg/m³.
Industrial, inhalative, Acute - systemic effects: 59 mg/m³.
Industrial, dermal, Long-term - systemic effects: 8,3 mg/kg bw/day.
Industrial, dermal, Acute - systemic effects: 8,3 mg/kg bw/day.
general population, inhalative, Acute - systemic effects: 17,4 mg/m³.
general population, inhalative, Long-term - systemic effects: 17,4 mg/m³.
general population, dermal, Long-term - systemic effects: 5 mg/kg bw/day.
general population, dermal, Acute - systemic effects: 5 mg/kg bw/day.
Trimethoxyvinylsilane, CAS: 2768-02-7
Industrial, dermal, Long-term - systemic effects: 3.9 mg/kg bw/d (AF= 44).
Industrial, inhalative, Acute - systemic effects: 260 mg/m³.
Industrial, inhalative, Long-term - systemic effects: 27.6 mg/m³ (AF= 11).
general population, inhalative, Long-term - systemic effects: 18.9 mg/m³ (AF= 8).

general population, dermal, Long-term - systemic effects: 7.8 mg/kg bw/d (AF= 64).
general population, oral, Long-term - systemic effects: 0.3 mg/kg bw/d (AF= 192).
Dodecamethylcyclohexasiloxane, CAS: 540-97-6
Industrial, inhalative, Long-term - local effects: 1,22 mg/m³.
Industrial, inhalative, Acute - local effects: 6,1 mg/m³.
Industrial, inhalative, Long-term - systemic effects: 11 mg/m³.
general population, inhalative, Long-term - systemic effects: 2,7 mg/m³.
general population, inhalative, Long-term - local effects: 0,3 mg/m³.
general population, inhalative, Acute - local effects: 1,5 mg/m³.
general population, oral, Acute - local effects: 1,7 mg/kg bw/day.
Methanol, CAS: 67-56-1
Industrial, inhalative, Acute - local effects: 260 mg/m³.
Industrial, inhalative, Long-term - local effects: 260 mg/m³.
Industrial, dermal, Acute - systemic effects: 40 mg/kg bw/d.
Industrial, inhalative, Acute - systemic effects: 260 mg/m³.
Industrial, dermal, Long-term - systemic effects: 40 mg/kg bw/d.
Industrial, inhalative, Long-term - systemic effects: 260 mg/m³.
general population, inhalative, Acute - local effects: 50 mg/m³.
general population, dermal, Long-term - systemic effects: 8 mg/kg bw/d.
general population, inhalative, Long-term - systemic effects: 50 mg/m³.
general population, oral, Long-term - systemic effects: 8 mg/kg bw/day.
general population, oral, Acute - local effects: 8 mg/kg bw/day.
general population, dermal, Acute - local effects: 8 mg/kg bw/d.
Ethanol, CAS: 64-17-5
Industrial, dermal, Long-term - systemic effects: 343 mg/kg bw/d.
Industrial, inhalative, Long-term - systemic effects: 950 mg/m³.
general population, inhalative, Long-term - systemic effects: 114 mg/m³.
general population, oral, Long-term - systemic effects: 87 mg/kg bw/d.
general population, dermal, Long-term - systemic effects: 206 mg/kg bw/d.
Octamethylcyclotetrasiloxane, CAS: 556-67-2
Industrial, inhalative, Long-term - systemic effects: 73 mg/m³.
general population, inhalative, Long-term - systemic effects: 13 mg/m³.
general population, oral, Long-term - systemic effects: 3,7 mg/kg bw/day.

PNEC

Substance
Decamethylcyclopentasiloxane, CAS: 541-02-6
soil, 3,34 mg/kg dw.
sewage treatment plants (STP), > 10 mg/l.
sediment (freshwater), 2,39 mg/kg dw.
seawater, 0,00012 mg/l.
freshwater, 0,0012 mg/l.
sediment (seawater), 0,239 mg/kg dw.
3-Aminopropyltriethoxysilane, CAS: 919-30-2
sediment (seawater), 120 µg/kg sediment dw.
sediment (freshwater), 1,2 mg/kg sediment dw.
seawater, 33 µg/L.
freshwater, 330 µg/L.
sewage treatment plants (STP), 13 mg/L.
Trimethoxyvinylsilane, CAS: 2768-02-7
seawater, 0.04 mg/L (AF= 500).

freshwater, 0.4 mg/L (AF= 50).
sewage treatment plants (STP), 6.6mg/L (AF= 10).
soil, 0.06 mg/kg dw.
sediment (freshwater), 1.5 mg/kg dw.
sediment (seawater), 0.15 mg/kg dw.
Dodecamethylcyclohexasiloxane, CAS: 540-97-6
sewage treatment plants (STP), 1 mg/L.
sediment (freshwater), 13 mg/kg sediment dw.
sediment (seawater), 1,3 mg/kg sediment dw.
soil, 3,77 mg/kg soil dw.
oral (food), 66,7 mg/kg.
Methanol, CAS: 67-56-1
sediment (seawater), 100 mg/kg.
sediment (freshwater), 77 mg/kg.
sewage treatment plants (STP), 100 mg/l.
seawater, 2,08 mg/L.
freshwater, 20,8 mg/L.
sediment (seawater), 7,7 mg/kg.
Ethanol, CAS: 64-17-5
soil, 0,63 mg/kg soil dw.
freshwater, 0,96 mg/L.
seawater, 0,79 mg/L.
sewage treatment plants (STP), 580 mg/L.
sediment (seawater), 2,9 mg/kg sediment dw.
oral (food), 0,38 g/kg.
sediment (freshwater), 3,6 mg/kg sediment dw.
Octamethylcyclotetrasiloxane, CAS: 556-67-2
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.
oral (food), 41 mg/kg.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Not required under normal conditions.
Other	Avoid contact with eyes and skin. Do not inhale vapours. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Respiratory protection mask in the event of high concentrations. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	pasty
Color	transluzent
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	60,5 (c.c.; Afnor T 60103)
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	ca. 1,02 (20 °C / 68,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	virtually insoluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Vulcanises at room temperature on contact with moisture in the air.

10.2 Chemical stability

Stable at room temperature provided it is not on contact with air.

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Strong oxidizing agent.
Water

10.6 Hazardous decomposition products

Contact with moisture liberates Methanol and Ethanol.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, inhalative, > 20 mg/l (4 h).
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, > 2000 mg/kg.

Substance
Decamethylcyclopentasiloxane, CAS: 541-02-6
LD50, oral, Rat: > 5000 mg/kg.
LD50, dermal, Rabbit: > 2000 mg/kg.
LC50, inhalativ (mist), Rat: 8,67 mg/l/4h.
3-Aminopropyltriethoxysilane, CAS: 919-30-2
LD50, oral, Rat: 1,57 - 2,83 mL/kg bw.
LD50, dermal, Rabbit: 4,29 mL/kg bw.
LC50, inhalative, Rat: 5 - 16 ppm (6h).
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, inhalative, Rat: 16,8 mg/l (4 h) (OECD TG 403).
LD50, dermal, Rabbit: 3259 mg/kg bw.
LD50, oral, Rat: 7120 mg/kg (OECD TG 401).
NOAEL, oral, Rat: < 62,5 mg/kg (28 d) (OECD TG 422).
NOAEL, inhalative, Rat: 0,058 mg/l (98 d).
Methanol, CAS: 67-56-1
LD50, dermal, Rabbit: 17100 mg/kg bw (Lit.).
LD50, oral, Rat: 5628 mg/kg bw (IUCLID).
LC50, inhalative, Rat: 85,26 mg/l/4h (IUCLID).
LDLo, oral, Human: 143 mg/kg bw (RTECS).
Ethanol, CAS: 64-17-5
LD50, oral, Rat: 10470 mg/kg (OECD 401).
LD50, dermal, Rabbit: > 2000 mg/kg (OECD 402).
LC50, inhalative, Rat: 117-125 mg/l/4h (OECD 403).
NOAEL, Rat: > 3000 mg/kg/d (24 month OECD 451).
Octamethylcyclotetrasiloxane, CAS: 556-67-2
LD50, oral, Rat: 4800 mg/kg.
LD50, dermal, Rat: > 2400 mg/kg.
LC50, inhalative, Rat: 36 mg/L 4h.

Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met. May cause an allergic skin reaction.
Specific target organ toxicity — single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity — repeated exposure	Based on available data, the classification criteria are not met.
Mutagenicity	Does not contain a relevant substance that meets the classification criteria.
Reproduction toxicity	This product contains one or more substances of categorie Repr. 2 (CLP). (CAS: 556-67-2)
Carcinogenicity	Does not contain a relevant substance that meets the classification criteria.

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

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. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Decamethylcyclopentasiloxane, CAS: 541-02-6
LC50, (96h), Oncorhynchus mykiss: > 16 µg/L.
EC50, (96h), Pseudokirchneriella subcapitata: > 12 µg/L.
EC50, (48h), Daphnia magna: > 2,9 µg/L.
NOEC, Oncorhynchus mykiss: ≥ 14 µg/L/90d.
3-Aminopropyltriethoxysilane, CAS: 919-30-2
LC50, (96h), fish: 934 mg/L.
EC50, (48h), Daphnia magna: 331 mg/L.
NOEC, (96h), fish: 934 mg/L.
NOEC, (48h), Daphnia magna: 94 mg/L.
Trimethoxyvinylsilane, CAS: 2768-02-7
LC50, (96h), Oncorhynchus mykiss: 191 mg/l.
EC50, Pseudokirchneriella subcapitata: 210 mg/l (7 d) (US-EPA).
EC50, (48h), Daphnia magna: 168,7 mg/l (92/69/EWG C.2).
EC10, Pseudomonas putida: 1000 mg/l (5 h).
Methanol, CAS: 67-56-1
LC50, (96h), Lepomis macrochirus: 15400 mg/l (ECOTOX Database).
EC50, (48h), Daphnia magna: > 10000 mg/l (IUCLID).
Ethanol, CAS: 64-17-5
LC50, (96h), Oncorhynchus mykiss: 13000 mg/l (OECD 203).
LC50, (48h), Daphnia magna: 12340 mg/l.
EC50, (48h), Selenastrum capricornutum: 12900 mg/l (OECD 201).
EC50, (72h), Algae: 275 mg/l (OECD 201).

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

12.3 Bioaccumulative potential

not determined

12.4 Mobility in soil

not determined

12.5 Results of PBT and vPvB assessment

The mixture contains the following substances which fulfill the PBT and/or vPvB criteria according to REACH criteria, Annex XIII:CAS: 556-67-2, CAS: 541-02-6, CAS: 540-97-6

12.6 Other adverse effects

Ecological data of complete product are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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

Disposal in an incineration plant in accordance with the regulations of the local authorities.

Waste no. (recommended) 070217

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150102

SECTION 14: Transport information

14.1 UN 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 Transport in bulk according to Annex II of MARPOL and the IBC Code

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) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	no
- VOC (2010/75/CE)	<3 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H370 Causes damage to organs.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapour.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.
H361f Suspected of damaging fertility.
H332 Harmful if inhaled.
H226 Flammable liquid and vapour.

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
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

Modified position	SECTION 3 been added: Ethanol
	SECTION 3 been added: Octamethylcyclotetrasiloxane
	SECTION 3 been added: Decamethylcyclopentasiloxane
	SECTION 3 been added: Dodecamethylcyclohexasiloxane
	SECTION 2 been added: This substance/mixture contains components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB).
	SECTION 2 deleted: Does not contain any PBT or vPvB substances.
	SECTION 5 been added: Risk of formation of toxic pyrolysis products.
	SECTION 5 deleted: Water spray jet.
	SECTION 6 been added: Ensure adequate ventilation.
	SECTION 8 been added: Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
	SECTION 11 been added: This product contains one or more substances of categorie Repr. 2 (CLP).
	SECTION 11 deleted: Does not contain a relevant substance that meets the classification criteria.
	SECTION 12 been added: The mixture contains the following substances which fulfill the PBT and/or vPvB criteria according to REACH criteria, Annex XIII:[x]
	SECTION 12 deleted: Based on all available information not to be classified as PBT or vPvB respectively.