Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	Primer Silicone

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

Intended use
Solventborne silicone resin based primer for silicone sealants.

1.3 Details of the supplier of the safety data sheet

Company name	TORGGLER S.R.L.
Full address	Via Prati Nuovi 9
Town	Marlengo
Postal code	39020
Province	BZ
Country	Italy
Phone number	+39 0473 282400
Fax	+39 0473 282501
e-mail address of the competent person responsible for the Safety Data Sheet	reach@torggler.com

1.4 Emergency telephone number

For urgent inquiries refer to	+39 348 662 70 93 (08.00 - 17.30)

Section 2 Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification		
Flammable liquid, category 3	H226	Flammable liquid and vapour.
Skin irritation, category 2	H315	Causes skin irritation.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms

Section 2

Signal word
Danger

Hazard statements	
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	
P261	Avoid breathing mist, spray, vapours.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	In case of fire: Use water, foam, chemical powder, sand to extinguish.
P310	Immediately call a poison center/doctor.

Contains
XYLENE (MIXTURE OF ISOMERS)
ETHYLBENZENE
BUTANOL

VOC (Directive 2004/42/EC)	
Binding primers.	
Volatile organic compounds - ready to use	367 g/l
VOC subcategory limit	750 g/l

2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

During use, it can form explosive/flammable mixtures with air.

Section 3 Composition/information on ingredients

Solventborne Methylsiliconic resin containing preparation.

3.2 Mixtures

XYLENE (MIXTURE OF ISOMERS)

Concentration	47 ≤ x < 57 %
CAS number	1330-20-7
EC number	215-535-7
INDEX number	601-022-00-9
Registration Number	01-2119488216-32-xxxx

Section 3

Hazard classification	▪ Flam. Liq. 3; H226 ▪ Asp. Tox. 1; H304 ▪ Acute Tox. 4; H312 ▪ Skin Irrit. 2; H315 ▪ Eye Irrit. 2; H319 ▪ Acute Tox. 4; H332 ▪ STOT SE 3; H335 ▪ STOT RE 2; H373
Classification note according to Annex VI to the CLP Regulation:	C
ATE (Dermal)	1,100 mg/kg
ATE (Inhalation - vapours)	11 mg/l
Substance with a community workplace exposure limit.	

ETHYLBENZENE

Concentration	17.9 ≤ x < 27.8 %
CAS number	100-41-4
EC number	202-849-4
INDEX number	601-023-00-4
Registration Number	01-2119489370-35-xxxx
Hazard classification	▪ Flam. Liq. 2; H225 ▪ Asp. Tox. 1; H304 ▪ Acute Tox. 4; H332 ▪ STOT RE 2; H373 ▪ Aquatic Chronic 3; H412
LC50 (Inhalation vapours):	17.2 mg/l (4h)
Substance with a community workplace exposure limit.	

BUTANOL

Concentration	8.9 ≤ x < 13.8 %
CAS number	71-36-3
EC number	200-751-6
INDEX number	603-004-00-6
Registration Number	01-2119484630-38-xxxx
Hazard classification	▪ Flam. Liq. 3; H226 ▪ Acute Tox. 4; H302 ▪ Skin Irrit. 2; H315 ▪ Eye Dam. 1; H318 ▪ STOT SE 3; H335 ▪ STOT SE 3; H336
LD50 (Oral):	790 mg/kg

octamethylcyclotetrasiloxane

Concentration	0.072 ≤ x < 0.1 %
CAS number	556-67-2
EC number	209-136-7
INDEX number	014-018-00-1
Registration Number	01-2119529238-36-xxxx
Hazard classification	▪ Flam. Liq. 3; H226 ▪ Repr. 2; H361f ▪ Aquatic Chronic 1; H410
M Factor (chronic)	10
Substance with a community workplace exposure limit.	

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Section 4 First aid measures

4.1 Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.
In case of more severe symptoms, ask for immediate medical aid.
EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.
INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.
INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuers protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

4.2 Most important symptoms and effects, both acute and delayed

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

Symptoms may be delayed. Narcotic effect. Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other severe central nervous system effects. Drowsiness, dizziness, disorientation, vertigo.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a poison center/doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

Section 5 Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.
Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

Section 7 Handling and storage

7.1 Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany)
3 – Flammable liquids

Applicable technical instruction according to Royal Decree 656/2017:

Classification	**Storage in fixed containers**	**Storage in mobile containers**
▪ H226 – Flam. Liq. 3	MIE APQ-1 – Storage of flammable and combustible liquids in fixed containers	MIE APQ-10 – Storage in mobile containers
Respect the joint storage conditions established in Royal Decree 656/2017.		

recommended storage temperature: <27 °C

7.3 Specific end use(s)

Primers, sealers and substrates.

Section 8 Exposure controls/personal protection

8.1 Control parameters

Regulatory references	
ACGIH	ACGIH 2026
European Union-OEL	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
Ireland-OELV	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
Malta-TLV	PROTECTION OF THE HEALTH AND SAFETY OF WORKERS FROM THE RISKS RELATED TO CHEMICAL AGENTS AT WORK REGULATIONS (S.L.424.24). PROTECTION OF WORKERS FROM THE RISKS RELATED TO EXPOSURE TO CARCINOGENS OR MUTAGENS AT WORK REGULATIONS (S.L.424.22)

octamethylcyclotetrasiloxane

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
European Union-OEL	123	10					Inhalation	

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	10 mg/l
Normal value in fresh water	0.0015 mg/l
Normal value for fresh water sediment	3 mg/kg/d
Normal value in marine water	0.00015 mg/l
Normal value for marine water sediment	0.3 mg/kg/d
Normal value for the terrestrial compartment	0.54 mg/kg/d
Normal value for the food chain (secondary poisoning)	41 mg/kg

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, inhalation	13 mg/m³	13 mg/m³
Workers, short-term, inhalation	73 mg/m³	73 mg/m³
Workers, long-term, inhalation	73 mg/m³	73 mg/m³

XYLENE (MIXTURE OF ISOMERS)

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH		20					--	
European Union-OEL	221	50	442	100			Skin	
Ireland-OELV	221	50	442	100			Skin	
Malta-TLV	221	50	442	100			Skin	

ETHYLBENZENE

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH	87	20					--	
European Union-OEL	442	100	884	200			Skin	
Ireland-OELV	442	100	884	200			Skin	
Malta-TLV	442	100	884	200			Skin	

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	9.6 mg/l
Normal value in fresh water	0.1 mg/l
Normal value for fresh water sediment	13.7 mg/kg/d

Section 8

Predicted no-effect concentration - PNEC	
Normal value in marine water	0.01 mg/l
Normal value for marine water sediment	1.37 mg/kg/d
Normal value for the terrestrial compartment	2.68 mg/kg
Normal value for the food chain (secondary poisoning)	20 mg/kg
Normal value for water, intermittent release	0.1 mg/l

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, inhalation	Not available	15 mg/m³
Workers, short-term, inhalation	293 mg/m³	Not available
Workers, long-term, dermal	Not available	180 mg/kg bw/d
Workers, long-term, inhalation	Not available	77 mg/m³
Workers, long-term, oral	Not available	1.6 mg/kg bw/d

BUTANOL

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH	61	20					--	
Ireland-OELV		20					--	
Ireland-OELV		20					Skin	

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	2,476 mg/l
Normal value in fresh water	0.082 mg/l
Normal value for fresh water sediment	0.178 mg/kg/d
Normal value in marine water	0.0082 mg/l
Normal value for marine water sediment	0.0178 mg/kg/d
Normal value for the terrestrial compartment	0.015 mg/kg/d
Normal value for water, intermittent release	2.25 mg/l

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, inhalation	55 mg/m³	Not available
Consumers, long-term, oral	Not available	3.125 mg/kg bw/d
Workers, long-term, inhalation	310 mg/m³	Not available

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
When choosing risk management measures and operating conditions, consult the exposure scenarios attached.
Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).
Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
Protect your hands with gloves of the following type:

Protect your hands with gloves of the following type

Material	Thickness	Breakthrough time
Nitrile rubber (NBR) In the event of a short term contact or as protection against occasional contacts	**0.4 mm** –	**30 min** –
Viton or fluoroelastomer (FKM) In case of continued exposure	**0.7 mm** –	**480 min** –

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344/EN ISO 13034).
Wash body with soap and water after removing protective clothing.
Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid	
Colour	transparent	
Odour	aromatic	
Odour threshold	Not applicable	
Melting point / freezing point	< -60 °C (< -76 °F)	
Initial boiling point	120 °C (248 °F)	
Flammability	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	28 °C (82.4 °F)	
Auto-ignition temperature	500 °C (932 °F)	
Decomposition temperature	Not available	
pH	7	
Kinematic viscosity	> 20.5 mm^2/s	Temperature: 40 °C (104 °F)
Dynamic viscosity	75.6 Pl	Temperature: 20 °C (68 °F)
Solubility	Not available	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	17 hPa	Temperature: 20 °C (68 °F) Remarks: 85 hPa (50 °C)(EU A4) 108 hPa (55 °C)
Density and/or relative density	1 g/ml	Temperature: 20 °C (68 °F) Method: DIN 51757
Relative vapour density	Not available	

Particle characteristics

Information not available.

9.2 Other information

9.2.1 Information with regard to physical hazards

Information not available.

9.2.2 Other safety characteristics

Total solids	20.21 %	Temperature: 250 °C (482 °F)
VOC (Directive 2004/42/EC)	36.68 % – 367 g/l	
Kinematic viscosity (40 °C)	74 mm2/s (20 °C)	

Section 10 Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

BUTANOL

Attacks various types of plastic materials

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

10.3 Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage
Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates
May form explosive mixtures with: air

ETHYLBENZENE

Reacts violently with: strong oxidants
Attacks various types of plastic materials
May form explosive mixtures with: air

BUTANOL

Reacts violently developing heat on contact with: aluminium, strong oxidising agents, strong reducing agents, hydrochloric acid
Forms explosive mixtures with: air

10.4 Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

BUTANOL

Avoid exposure to: sources of heat, naked flames

10.5 Incompatible materials

Information not available.

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane

Carbon oxides Silicon oxides. Measurements at temperatures above 150 °C in the presence of air (oxygen) have shown that a small amount of formaldehyde is formed by oxidative degradation.

Section 11 Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

11.1.1 Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

11.1.2 Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHYLBENZENE

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

11.1.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

11.1.4 Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

11.1.5 ACUTE TOXICITY

Experimental data:
ATEmix (dermal): 3333.33 mg/kg
ATEmix (inhalation/vapour): 25 mg/l

NOTE: The classification of the mixture is based on the experimental data and not on that calculated automatically by the system.

ATE (Inhalation - vapours) of the mixture	17.564 mg/l
ATE (Oral) of the mixture	> 2,000 mg/kg
ATE (Dermal) of the mixture	> 2,000 mg/kg

octamethylcyclotetrasiloxane

LD50 (Oral):	> 4,800 mg/kg	Species/guidelines: Rat

LD50 (Dermal):	> 2,375 mg/kg	Species/guidelines: Rat
LC50 (Inhalation vapours):	36 mg/l	Exposure duration: 4 hours Species/guidelines: Rat (air)
LC50 (Inhalation mists/powders):	36 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral):	> 2,500 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	4,350 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	26 mg/l	Exposure duration: 4 hours Species/guidelines: Rat
ATE (Dermal)	1,100 mg/kg	estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
ATE (Inhalation - vapours)	11 mg/l	estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

ETHYLBENZENE

LD50 (Oral):	3,500 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	15,354 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	17.2 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

BUTANOL

LD50 (Oral):	790 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	3,400 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	8,000	Exposure duration: 4 hours Species/guidelines: Rat

11.1.6 SKIN CORROSION/IRRITATION

Causes skin irritation.

11.1.7 SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage.

11.1.8 RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

11.1.9 GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

11.1.10 CARCINOGENICITY

Does not meet the classification criteria for this hazard class

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

11.1.11 REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

11.1.12 STOT - SINGLE EXPOSURE

May cause respiratory irritation.

11.1.13 STOT - REPEATED EXPOSURE

May cause damage to organs through prolonged or repeated exposure.

11.1.14 ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class
Viscosity:

11.2 Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

Section 12 Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity

octamethylcyclotetrasiloxane

EC50 - for Crustacea	> 0.015 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	> 0.022 mg/l	Exposure duration: 96 hours Species/guidelines: Oncorhynchus mykiss
Chronic NOEC for Fish	> 0.0044 mg/l	Species/guidelines: Oncorhynchus mykiss, 93d
Chronic NOEC for Crustacea	> 0.015 mg/l	Species/guidelines: Daphnia magna, 21d
Chronic NOEC for Algae / Aquatic Plants	0.022 mg/l	Species/guidelines: Selenastrum capricornutum

Aquatic Acute: no effects were seen within the accepted solubility limit of D4.

ETHYLBENZENE

EC50 - for Crustacea	44 mg/l	Exposure duration: 48 hours Species/guidelines: Leuciscus idus
LC50 - for Fish	4.2 mg/l	Exposure duration: 96 hours Species/guidelines: Salmo gairdneri

BUTANOL

EC50 - for Crustacea	1,983 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	1,730 mg/l	Exposure duration: 96 hours Species/guidelines: Pimephales promelas
EC50 - for Algae / Aquatic Plants	> 500 mg/l	Exposure duration: 72 hours Species/guidelines: Scenedesmus subspicatus

12.2 Persistence and degradability

octamethylcyclotetrasiloxane

Solubility in water	0.056 mg/l	
Degradability	NOT rapidly degradable	

XYLENE (MIXTURE OF ISOMERS)

Solubility in water	100 ≤ x ≤ 1,000 mg/l	
Degradability	Rapidly degradable	

ETHYLBENZENE

Solubility in water	1,000 ≤ x ≤ 10,000 mg/l	
Degradability	Rapidly degradable	

BUTANOL

Solubility in water	1,000 ≤ x ≤ 10,000 mg/l	
Degradability	Rapidly degradable	

12.3 Bioaccumulative potential

octamethylcyclotetrasiloxane

Bioconcentration factor	14,900
Partition coefficient n-octanol/water	6.98 LogKow

XYLENE (MIXTURE OF ISOMERS)

Bioconcentration factor	25.9
Partition coefficient n-octanol/water	3.12 LogKow

ETHYLBENZENE

Partition coefficient n-octanol/water	3.6 LogKow

BUTANOL

Bioconcentration factor	3.16
Partition coefficient n-octanol/water	1 LogKow

12.4 Mobility in soil

octamethylcyclotetrasiloxane

Partition coefficient soil/water	0.625 LogKoc

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient soil/water	2.73 LogKoc

BUTANOL

Partition coefficient soil/water	0.388 LogKoc

12.5 Results of PBT and vPvB assessment

octamethylcyclotetrasiloxane

However our understanding of the available science is that D4 does not behave similarly to known PBT/vPvB substances. The silicones industries interpretation of the available data is that the weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food
webs. D4 in air will degrade by naturally occurring reactions in the atmosphere. Any D4 in air that does not degrade by these reactions is not expected to deposit from the air to water, to land, or to living organisms

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6 Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7 Other adverse effects

Information not available.

Section 13 Disposal considerations

EWC: 080111*.

Section 13

13.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Hazardous waste classification - Reg. (UE) 1357/2014
HP 3 – Flammable
HP 4 – Irritant — skin irritation and eye damage
HP 5 – Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 6 – Acute Toxicity

Section 14 Transport information

14.1 UN number or ID number

ADR / RID	IMDG	IATA
UN 1263	UN 1263	UN 1263

14.2 UN proper shipping name

ADR / RID	PAINT or PAINT RELATED MATERIAL
IMDG	PAINT or PAINT RELATED MATERIAL
IATA	PAINT or PAINT RELATED MATERIAL

14.3 Transport hazard class(es)

	Class	Label	
ADR / RID	3	3	
IMDG	3	3	
IATA	3	3	

14.4 Packing group

ADR / RID	IMDG	IATA
III	III	III

14.5 Environmental hazards

ADR / RID	No
IMDG	Not marine pollutant
IATA	No

Section 14

14.6 Special precautions for user

ADR / RID			
Hazard identification No. - Kemler	30	Limited Quantities	5 L
Tunnel restriction code	(D/E)	Special provisions	163, 367, 650
IMDG			
EmS	F-E, S-E	Limited Quantities	
IATA			
Maximum quantity (Cargo)	220 L	Packaging instructions (Cargo)	366
Maximum quantity (Passengers)	60 L	Packaging instructions (Passengers)	355
Special provisions	A3, A72, A192		

Emanating a strong smell. Protect against humidity. Sensitive to heat starting from +25 ° C. Keep away from food and animal feed.

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

Seveso Category - Directive 2012/18/EU:

P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

	Restrictions	Registration Number EU
Product restrictions	3, 40	
Contained substance		
	75	
octamethylcyclotetrasiloxane	70	01-2119529238-36-xxxx

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)	Registration Number EU
octamethylcyclotetrasiloxane	01-2119529238-36-xxxx

Substances subject to authorisation (Annex XIV REACH)	Authorisation Number	Sunset date	Registration Number EU
None			

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Regulation (EU) 2019/1021 - on persistent organic pollutants

None

Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC)
Binding primers.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK3 – Severe hazard to waters

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

Section 16 Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:	
Acute Tox. 4	Acute toxicity, category 4
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Repr. 2	Reproductive toxicity, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Legend

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EC50: Effective concentration (required to induce a 50% effect)
- EC: Identifier in ESIS (European archive of existing substances)
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals

Section 16

Legend

- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

General Bibliography

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I ATP CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II ATP CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III ATP CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV ATP CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V ATP CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI ATP CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII ATP CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII ATP CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX ATP CLP)
13. Regulation (EU) 2017/776 (X ATP CLP)
14. Regulation (EU) 2018/669 (XI ATP CLP)
15. Regulation (EU) 2019/521 (XII ATP CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII ATP CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV ATP CLP)
19. Delegated Regulation (EU) 2020/1182 (XV ATP CLP)
20. Delegated Regulation (EU) 2021/643 (XVI ATP CLP)
21. Delegated Regulation (EU) 2021/849 (XVII ATP CLP)
22. Delegated Regulation (EU) 2022/692 (XVIII ATP CLP)
23. Delegated Regulation (EU) 2023/707
24. Delegated Regulation (EU) 2023/1434 (XIX ATP CLP)
25. Delegated Regulation (EU) 2023/1435 (XX ATP CLP)
26. Delegated Regulation (EU) 2024/197 (XXI ATP CLP)
27. Delegated Regulation (EU) 2024/2564 (XXII ATP CLP)
28. Regulation (EU) 2024/2865
29. Delegated Regulation (EU) 2025/1222 (XXIII ATP CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website

General Bibliography

- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

Calculation methods for classification

Chemical and physical hazards:
Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards:
Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards:
Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes from the previous revision

This SDS has been prepared with a different software from the one previous revision. The new calculation does not allow us to identify all the differences compared to the previous version. We therefore recommend carefully reviewing all 16 sections of the SDS. We remain available to provide any clarification regarding the content or the changes made compared to the previous version, which is available to professional or industrial users.