Material Safety Data Sheet

according to Regulation (EU) 2015/830

Revision:03

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President Dental

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

1.1. Product identifier

Product Name: PASTE HARDENER- Condensation Silicone Catalyst

Code: PRD.01.10005

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

Intendent use : for Professional use only. Catalyst for condensation silicone.

Avoid use: in article for supply to, or use by, the general public.

1.3. Details of the supplier of the safety data sheet

Company Name: President Dental GmbH

Street: Kesselbodenstrasse 5

Zip-Code / Town: 85391, Allershausen

Web: www.presidentdental.com

Contact for technical information: +49 8166 389 9 820

Phone / Fax / E-Mail: +49 8166 389 9 820 / +49 8166 389 9 821 / info@presidentdental.com

1.4. Emergency Telephone Number

+49 8166 389 9 820 (8.00 am – 4.30 pm Mon-Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)	The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).
Adverse physicochemical, human health and environmental effects:	No other hazards

2.2. Label Elements

The Regulation EC 1272/2008, on classification, labelling and packaging of substances and mixtures (CLP), shall not apply to a medical device in the finished state used in direct physical contact with the human body according to art. 1.5, letter d). Therefore the product is exempted from the CLP labeling requirements. **The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).**	
Hazard pictograms:	None
Hazard statements	None
Precautionary statements:	None
Special Provisions:	EUH210 Safety data sheet available on request. EUH208 Contains carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one. May produce an allergic reaction.
Special provisions according	None

to Annex XVII of REACH and subsequent amendments:	

2.3. Other Hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

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

Qty	Chemical Name	CAS No.	Classification
≥ 5% - < 10%	Trimethoxypropylsilane	CAS: 1067-25-0 EC: 213-926-7 REACH No. :01-2119972314-37-XXXX	2.6/3 Flam. Liq. 3 H226 3.2/2 Skin Irrit. 2 H315
≥ 5% - < 10%	Dioctyltin oxide	CAS :870-08-6 EC :212-791-1 REACH No . :01-2119971268-27-XXXX	3.8/2 STOT SE 2 H371
≥ 3% - < 5%	Tetraethyl silicate; ethyl silicate	Index number : 014-005-00-0 CAS : 78-10-4 EC : 201-083-8 REACH No. : 01-2119496195-28-XXXX	3.8/3 STOT SE 3 H335 2.6/3 Flam. Liq. 3 H226 3.1/4/Inhal Acute Tox. 4 H332 3.3/2 Eye Irrit. 2 H319
≥ 0,3% - < 0,5%	Carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one	Index number : 606-148-00-8 CAS : 99-49-0 EC : 202-759-5	3.4.2/1 Skin Sens. 1 H317 3.1/4/Oral Acute Tox. 4 H302

SECTION 4: First aid measures

4.1. Description of first aid measures

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

Eye Contact: Skin Contact: Ingestion	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wash with plenty of water and soap. Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

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

	None

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

	None

SECTION 5: Fire Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguishing media which must not be used for safety reasons:	Water. Carbon dioxide (CO2). 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

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. Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

	Wash with plenty of water.

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. See also section 8 for recommended protective equipment. Advice on general occupational hygiene: Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompabilities.

	Keep away from food, drink and feed. Incompatible materials: See section 10.5. Instructions as regards storage premises: Adequately ventilated premises.

7.3. Specific and use(s)

	See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

PASTE HARDNER								
Trimethoxypropylsilane - CAS: 1067-25-0								
OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
No data available								
Dioctyltin oxide - CAS: 870-08-6								
OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
AGW	0.01 mg/m^3	0.002 ppm	8h	0.02 mg/m^3	0.004 ppm	15min		GERMANY
Tetraethyl silicate; ethyl silicate - CAS: 78-10-4								
OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
VME/VLE	85 mg/m^3	10 ppm	8h	85 mg/m^3	10 ppm	15min		SWITZERLAND
AK	44 mg/m3		8h					HUNGARY
GVI/KGVI	44 mg/m3	5 ppm	8h					CROATIA
HTP	43 mg/m^3	5 ppm	8h	86 mg/m^3	10 ppm	15min		FINLAND
MAK	44 mg/m^3	5 ppm	8h	88 mg/m^3	10 ppm	15min		AUSTRIA
NDS/NDSCh	44 mg/m^3		8h					POLAND
NPEL	44 mg/m^3	5 ppm	8h					SLOVAKIA (Slovak Republic)
EU	44 mg/m^3	5 ppm	8h					
OELV	44 mg/m^3	5 ppm	8h					IRELAND
RD	44 mg/m^3	5 ppm	8h					LITHUANIA
RV	44 mg/m^3	5 ppm	8h					LATVIA
TGG	44 mg/m^3	5 ppm	8h					NETHERLANDS
TLV	44 mg/m^3	5 ppm	8h					MALTA
TLV	44 mg/m^3	5 ppm	8h					NORWAY
TLV	44 mg/m^3	5 ppm	8h					ROMANIA

TLV	50 mg/m^3	5.85 ppm	8h	200 mg/m^3	23.4 ppm	15min		CZECH REPUBLIC
TLV	85 mg/m^3	10 ppm	8h					DENMARK
TLV	44 mg/m^3	5 ppm	8h					CYPRUS
TLV	44 mg/m^3	5 ppm	8h					BULGARIA
TLV	44 mg/m^3	5 ppm	8h					GREECE
TLV-ACGIH	85 mg/m^3	10 ppm	8h					
VL	44 mg/m^3	5 ppm	8h					LUXEMBOURG
VLE	44 mg/m^3	5 ppm	8h					PORTUGAL
VLEP	85 mg/m^3	10 ppm	8h					FRANCE
VLEP	44 mg/m^3	5 ppm	8h	0 mg/m3	0 ppm			ITALY
VLEP	44 mg/m^3	5 ppm	8h					BELGIUM
WEL	44 mg/m^3	5 ppm	8h					UNITED KINGDOM
MAK	86 mg/m^3	10 ppm	8h	86 mg/m^3	10 ppm	15min		GERMANY
AGW	12 mg/m^3	1.4 ppm	8h	12 mg/m^3	1.4 ppm	15min		GERMANY
MV	170 mg/m^3	20 ppm	8h	170 mg/m^3	20 ppm	15min		SLOVENIA
MAK	85 mg/m^3	10 ppm	8h	85 mg/m^3	10 ppm	15min		SWITZERLAND
ACGIH		10 ppm	8h				URT and eye irr, kidney dam	
TLV-ACGIH		10 ppm	8h				URT & eye irr, kidney dam	
carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one - CAS: 99-49-0								
OEL Type	**TWA**		**Duration**	**STEL**		**Duration**	**Notes**	**Country**
No data available								

DNEL Exposure Limit Values	
Trimethoxypropylsilane - CAS: 1067-25-0	Consumer: 154.17 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects Consumer: 8.77 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 30.25 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 1.26 mg/kg/d - Exposure: Human Oral - Frequency: Long Term, systemic effects Worker Professional: 17.86 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Professional: 123.82 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Dioctyltin oxide - CAS: 870-08-6	Worker Professional: 0.03 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects Consumer: 0.001 mg/kg bw/d - Exposure: Human Oral - Frequency: Long Term, systemic effects Worker Professional: 0.03 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
tetraethyl silicate; ethyl silicate - CAS: 78-10-4	Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Worker Professional: 85 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Consumer: 3 mg/kg/d - Exposure: Human Dermal - Frequency: Short Term, systemic effects Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects Consumer: 3 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 14 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Worker Professional: 56 mg/kg/d - Exposure: Human Dermal - Frequency: Short Term, systemic effects Worker Professional: 56 mg/kg/d - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Professional: 85 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
PNEC Exposure Limit Values	
Trimethoxypropylsilane - CAS: 1067-25-0	Target: Soil (agricultural) - Value: 0.25 mg/kg Target: Fresh Water - Value: 1.49 mg/l Target: intermittent release - Value: 14.9 mg/l

tetraethyl silicate; ethyl silicate - CAS: 78-10-4	Target: Marine water - Value: 0.149 mg/l Target: Freshwater sediments - Value: 5.6 mg/kg Target: Marine water sediments - Value: 0.56 mg/kg Target: Microorganisms in sewage treatments - Value: 10 mg/l
	Target: Soil (agricultural) - Value: 0.05 mg/kg Target: Fresh Water - Value: 0.19 mg/l Target: intermittent release - Value: 10 mg/l Target: Marine water - Value: 0.019 mg/l Target: Freshwater sediments - Value: 0.83 mg/kg Target: Marine water sediments - Value: 0.083 mg/kg Target: Microorganisms in sewage treatments - Value: 4000 mg/l

8.2. Exposure controls

Precautionary measures:	Give adequate ventilation to the premises where the product is stored and/or handled.
Eye protection:	Wear airtight protective goggles.
Protection for skin:	Wear professional overalls and safety footwear
Protection for hands:	Permeation resistant gloves A H J in PVA or fluorinated rubber. 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.
Respiratory protection:	Mask with a type AX filter 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 (e.g. TLV-TWA).
Thermal Hazards:	None
Environmental exposure controls:	None
Appropriate engineering controls:	None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value
Appereance	Gel
Colour	Red
Odour	Mint
Odour treshold	Not available
pH	Not available
Melting point/freezing point	Not available

Initial boiling point	Not available
Boiling range	Not available
Flash point	63,9 °C.
Evaporation rate	Not available
Flmmability of solids and gases	Not applicable
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit-	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	0.94 g/cm^3
Solubility	İnsoluble in water
Partion coefficient: n- octano/water	Not available
Auto-ignition tempreature	Not available
Decomption tempreature	Not available
Viscosity	25 kPa*s (@23°C)
Explosive properties	Not available
Oxiding properties	Not availabe

9.2. Other Information

Properties	Value
Miscibility:	Not available
Fat Solubility:	Not available
Conductivity:	Not available
Substance Groups relevant properties	Not available

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

	The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

	Avoid moisture and high temperature. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5 Incompatibles materials

	Water Avoid contact with strong oxidizing materials. Acids Alkalis

10.6. Hazardous decomposition products

	None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product: PASTE HARDENER	
Acute Toxicity	Not classified
Skin Corrosion / Irritation	Not classified
Serious Eye Damage / Irritation	Not classified
Respiratory or Skin Sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified
Aspiration hazard	Not classified

Toxicological information of the main substances found in the product:	
Trimethoxypropylsilane - CAS: 1067-25-0	
Acute Toxicity	Test: LC50 - Route: Inhalation - Species: Rat 22.2 mg/l - Duration: 4h - Source: (OECD 403, ECHA dossier). Test: LD50 - Route: Oral - Species: Rat > 5170 mg/kg - Source: (OECD 401, ECHA dossier).
Skin Corrosion / Irritation	Species: Rabbit - Skin Irritant - Source: (OECD 404, ECHA dossier).
Serious Eye Damage / Irritation	Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 405, ECHA dossier).

Respiratory or Skin Sensitisation	Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (OECD 406, ECHA dossier).
Germ cell mutagenicity	Test: In vitro - Species: Salmonella Typhimurium - Negative - Source: (OECD 471, ECHA dossier). Test: In vivo - Species: Mouse - Negative - Source: (OECD 474, ECHA dossier).
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified
Aspiration hazard	Not classified
Dioctyltin oxide - CAS: 870-08-6	
Acute Toxicity	Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg - Source: (MSDS supplier) Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (OECD 402, ECHA dossier).
Respiratory or Skin Sensitisation	Test: Skin Sensitization - Based on available data, the classification criteria are not met - Source: (LLNA, ECHA dossier).
Germ cell mutagenicity	Test: In vitro - Species: Salmonella Typhimurium - Negative - Source: (ECHA dossier). Test: In vivo - Species: Mouse - Negative - Source: (OECD 474, ECHA dossier).
STOT - repeated exposure	Route: Oral - Species: Rat - Notes: Target organ: Immune system - Positive - Source: (ECHA dossier).
tetraethyl silicate; ethyl silicate - CAS: 78-10-4	
Acute Toxicity	Test: LC50 - Route: Inhalation - Species: Rat 16 mg/l - Duration: 4h - Source: (OECD 403, MSDS supplier). Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg - Source: (OECD 423, MSDS supplier).
Skin Corrosion / Irritation	Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 404, MSDS supplier).
Serious Eye Damage / Irritation	Species: Rabbit - Based on available data, the classification criteria are not met - Source: (OECD 405, MSDS supplier).
Respiratory or Skin Sensitisation	Test: Skin Sensitization - Species: Guinea pig - Based on available data, the classification criteria are not met - Source: (OECD 406, MSDS supplier).
STOT - repeated exposure	Test: NOAEL - Route: Oral - Species: Rat 10 mg/kg - Based on available data, the classification criteria are

	not met - Source: (OECD 422, MSDS supplier). Test: LOAEL - Route: Inhalation - Species: Mouse 0.43 mg/l - Based on available data, the classification criteria are not met - Source: (OECD 412, MSDS supplier).
carvone (ISO); 2-methyl-5-(prop-1-en-2-yl)cyclohex-2-en-1-one - CAS: 99-49-0	
Acute Toxicity	Test: LD50 - Route: Oral - Species: Rat 1640 mg/l - Source: (MSDS supplier

SECTION 12: Ecological information

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment.	
PASTE HARDENER	
Not classified for environmental hazards Based on available data, the classification criteria are not met	
Trimethoxypropylsilane - CAS: 1067-25-0	
Not classified for environmental hazards Based on available data, the classification criteria are not met	
a) Aquatic acute toxicity:	Endpoint: EC50 - Species: Daphnia > 816 mg/l - Duration h: 48h (EU Method C.2, Daphnia magna, ECHA dossier). Endpoint: EC50 - Species: Algae > 913 mg/l - Duration h: 72h (EU Method C.3, Scenedesmus subspicatus, ECHA dossier). Endpoint: LC50 - Species: Fish > 746 mg/l - Duration h: 96h (read across, Brachydanio rerio, ECHA dossier).
Trimethoxypropylsilane - CAS: 1067-25-0	
a) Aquatic acute toxicity:	Endpoint: EC50 - Species: Daphnia > 75 mg/l - Duration h: 48h (OECD 202, Daphnia magna, MSDS supplier). Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72h (OECD 201, Pseudokirchnerella subcapitata, MSDS supplier). Endpoint: LC50 - Species: Fish > 245 mg/l - Duration h: 96h (OECD 203, Brachydanio rerio, MSDS supplier). Endpoint: NOEC - Species: Algae > 100 mg/l (OECD 201, Pseudokirchnerella subcapitata, MSDS supplier). Endpoint: NOEC - Species: Daphnia > 75 mg/l (OECD 202, Daphnia magna, MSDS supplier). Endpoint: NOEC - Species: Fish > 245 mg/l (OECD 203, Brachydanio rerio, MSDS supplier).

12.2. Persistance and degradability

Trimethoxypropylsilane - CAS: 1067-25-0

Biodegradability:	Non-readily biodegradable
Dioctyltin oxide - CAS: 870-08-6	
Biodegradability:	Non-readily biodegradable
tetraethyl silicate; ethyl silicate - CAS: 78-10-4	
Biodegradability:	Readily biodegradable

12.3. Bioaccumulative potential

tetraethyl silicate; ethyl silicate - CAS: 78-10-4	
Test:	BCF - Bioconcentrantion factor 3.16
Test:	Kow - Partition coefficient 3.18

12.4. Mobility in Soil

	Information not available

12.5. Results of PBT and vPvB assessment

vPvB Substances:	None
PBT Substances:	None

12.6. Other adverse effects

	Information not available

SECTION 13: Disposal Considerations

13.1. Waste Treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1 UN number

	Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

	Not available

14.3. Transport hazard class(es)

	Not available

14.4. Packing Group

	Not available

14.5. Environmental hazards

	ADR-Enviromental Pollutant:	No
	IMDG-Marine pollutant:	No

14.6. Special precautions for user

	Not available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

	Not Applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific fort he substance or mixture

	Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) 2015/830 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP)
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	Restriction 3

product:	
Restrictions related to the substances contained:	Restriction 20
	Restriction 69
Provisions related to directive EU 2012/18 (Seveso III):	Seveso III category according to Annex 1, part 1 - None
Lagerklasse according to TRGS 510:	LGK 10: Combustible liquids
WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)	WGK2 - Hazardous for water
Lagerklasse according to TRGS 510:	LGK 10: Combustible liquids
Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:	Dioctyltin oxide.
California Proposition 65	Substance(s) listed under California Proposition 65: None.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.	
Substances for which a Chemical Safety Assessment has been carried out:	Trimethoxypropylsilane Dioctyltin oxide tetraethyl silicate; ethyl silicate

SECTION 16: Other information

Other Information

Full text of phrases referred to in Section 3:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H371 May cause damage to organs (immune system) if swallowed.

H335 May cause respiratory irritation.

H332 Harmful if inhaled. Acute toxicity, category 4.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2

Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT SE 2	3.8/2	Specific target organ toxicity - single exposure, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Further Information

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

A safety data sheet is not required for this product under article 31 of Regulation 1907/2006/EC.
This safety data sheet has been created on a voluntary basis.

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 MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

	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.
	KSt:	Explosion coefficient.
	LC50:	Lethal concentration, for 50 percent of test population.
	LD50:	Lethal dose, for 50 percent of test population.
	PNEC:	Predicted No Effect Concentration.
	RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
	STEL:	Short Term Exposure limit.
	STOT:	Specific Target Organ Toxicity.
	TLV:	Threshold Limiting Value.
	TWA:	Time-weighted average
	WGK:	German Water Hazard Class.