



according 1907/2006/EG, Article 31

Date of issue: 09.03.2016

Date of revision: - / Version: 1.0

Hinrisol

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

- 1.1 Product identifier
 Tradename: Hinrisol
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 Relevant identified uses: Debubbler for reducing the surface tension of gypsum and investments in addition-curing duplication silicones.
- 1.3 Details of the supplier of the safety data sheet
 Manufacturer/Supplier: ERNST HINRICHS Dental GmbH
 Street / mailbox: Borsigstr. 1
 Country code. / postal code / city: D - 38644 Goslar
 Phone: 0 53 21 / 5 06 24
 Fax: 0 53 21 / 5 08 81
 E-mail / Website: info@hinrichs-dental.de / www.hinrichs-dental.de
 Further information obtainable from: ERNST HINRICHS Dental GmbH
- 1.4 Emergency telephone number
 ERNST HINRICHS Dental GmbH: +49 (0) 53 21 / 5 06 24 - 25 (Mon-Fri. 8 a.m. – 4 p.m.)

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
 Classification according to Regulation (EC) No 1272/2008:
 Flam. Liq. 2 H225 Highly flammable liquid and vapour.
 Eye Irrit. 2 H319 Causes serious eye irritation
 STOT SE 3 H336 May cause drowsiness or dizziness.
 Aquatic Acute 1 H400 Very toxic to aquatic life.
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- 2.2 Label elements
 Labelling according to Regulation (EC) No 1272/2008:
 Hazard pictograms:



GHS02 GHS07 GHS09

Signal word: Danger
 Hazard-determining components of labelling: propan-2-ol

Hazard statements:

- H225: Highly flammable liquid and vapour.
 H319: Causes serious eye irritation
 H336: May cause drowsiness or dizziness.
 H411: Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
 No smoking.
 P233: Keep container tightly closed
 P280: Wear protective gloves, eye protection.
 P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P312: Call a POISON CENTER, doctor if you feel unwell
 P403+P235: Store in a well-ventilated place. Keep cool.

- 2.3 Other hazards

Results of PBT and vPvB assessment:

- PBT: Not applicable.
 vPvB: Not applicable.



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SECTION 3: Composition/information on ingredients

- 3.1 Substances Not applicable
 3.2 Mixtures

CAS: 107-46-0 EINEC: 203-492-7	Hexamethyldisiloxane F R11; R50	> 75%
	Flam. Liq. 2, H225; Aquatic Acute 1, H400; Aquatic Chronic 2, H411	
CAS: 67-63-0 EINECS: 200-661-7 Index: 603-117-00-0	propan-2-ol Xi R36; F R11; R67	10 - < 20%
	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 27306-78-1 EINEC: 608-078-3	3-(2-methoxyethoxy)propyl-methyl-bis(trimethylsilyloxy)silane Xn R20; 36; N 51/53	< 2%
	Acute Tox. 4, H332; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
 General information: Call a doctor if you feel unwell. If possible show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.
 After inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
 After skin contact: Take off contaminated clothing; Wash with plenty of soap and water. If skin irritation continues, consult a doctor.
 After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
 After swallowing: Do NOT induce vomiting. Rinse mouth. Drink plenty of water as a precaution.
- 4.2 Most important symptoms and effects, both acute and delayed:
 Symptoms/injuries after inhalation: May cause drowsiness or dizziness.
 Symptoms/injuries after eye contact: Causes serious eye irritation.
- 4.3 Indication of any immediate medical attention and special treatment needed: Treat symptomatically

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
 Suitable extinguishing agents: Water haze, Foam, Fire-extinguishing powder, Carbon dioxide. Sand.
 For safety reasons unsuitable extinguishing agents: Water with a full water jet.
- 5.2 Special hazards arising from the substance or mixture: Combustible liquid. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. In case of fire hazardous decomposition products may be produced such as: Carbon oxides (CO, CO2).
- 5.3 Advice for firefighters
 Protective equipment: Do not inhale explosion gases or combustion gases. Use a self-contained breathing apparatus and also a protective suit.
 Additional information: Dispose of fire debris and contaminated firefighting water in accordance with official regulations. Collect contaminated firefighting water separately. It must not enter drains.



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SECTION 6: Accidental release measures

6.1	Personal precautions, protective equipment and emergency procedures:	Wear protective equipment. Use breathing protection against the effects of fumes or aerosol. Keep unprotected persons away. Ensure adequate ventilation. Use special care to avoid static electric charges. Keep away from ignition sources. No open flames. No smoking. Avoid contact with skin and eyes. Do not breathe vapour.
6.2	Environmental precautions:	Do not allow to enter drainage system, surface or ground water. Inform respective authorities in case product reaches water or sewage system.
6.3	Methods and material for containment and cleaning up:	Do not flush with water. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable containers.
6.4	Reference to other sections:	See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1	Precautions for safe handling	Ensure good ventilation/exhaustion at the workplace. Ensure that suitable extractors are available on processing machines. Avoid breathing vapours. Avoid contact with skin and eyes. Use only non-sparking tools. Keep away from sources of ignition. No open flames. No smoking. Take precautionary measures against static discharge. The vapours are denser than air and may travel along the ground. Keep container closed when not in use.
	Hygiene measures:	Handle in accordance with good industrial hygiene and safety procedures. When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off contaminated clothing and wash it before reuse.
7.2	Conditions for safe storage, including any incompatibilities	
	Storage:	Store in cool, dry place in tightly closed containers. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
	Prohibitions on mixed storage	Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction. Keep away from food, drink and animal feedingstuffs
	Storage class:	3 (flammable liquid)
7.3	Specific end use(s)	No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1	Control parameters	
	Components with critical values that require monitoring at the workplace:	
	67-63-0 propan-2-ol	
	WEL	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm

DNEL: No further relevant information available



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PNEC: No further relevant information available

8.2 Exposure controls:

Appropriate engineering controls:: Provide adequate ventilation, if possible exhaust ventilation at machinery. If ventilation is not sufficient, use breathing apparatus protective equipment in order to comply with the occupational exposure limit.

Personal protective equipment:

Protection of hands: Wear suitable gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves: Nitrile rubber, FKM. ≥ 0.35 mm. Butyl rubber. ≥ 0.5 mm.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed safety glasses.

Breathing equipment: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection. Gas mask with filter type ABEK.

Body protection: Flame retardant antistatic protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Colourless liquid.

Physical state: Liquid.

Colour: Colourless.

Odour: none to slight.

Odour threshold: Not determined.

pH: 8.

Melting point/Freezing point: Not determined.

Boiling point/Boiling range: 100 °C

Flash point: 3 °C

Ignition temperature: 215 °C

Flammability (solid, gas): Not applicable.

Auto-ignition temperature: Not determined.

Decomposition temperature: Not determined.

Oxidising properties: Not determined

Explosive properties: Product is not explosive. However, formation of explosive vapour/air mixtures is possible.

Explosive Limits:

Lower: 2.0 Vol %

Upper: 12.0 Vol %

Vapour pressure at 20 °C: 44 hPa

Vapour pressure at 50 °C: 175 hPa

Density: 0,77 g/cm³

Relative density: Not determined.

Relative vapour density at 20 °C: Not determined.

Relative evaporation rate (butylacetate=1): Not determined

Solubility: Not miscible.

Partition coefficient (log Pow): Not determined

Viscosity

dynamic: Not determined

kinematic: 0.7 mm²/s (25 °C)

9.2 Other information

No further relevant information available.



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SECTION 10: Stability and reactivity

10.1	Reactivity	Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
10.2	Chemical stability	Stable under use and storage conditions as recommended in section 7. Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3	Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use.
10.4	Conditions to avoid	Open flame. Overheating. Direct sunlight. Heat. Sparks.
10.5	Incompatible materials	No further relevant information available.
10.6	Hazardous decomposition products	No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1	Information on toxicological effects	Acute toxicity: Not classified Based on available data, the classification criteria are not met
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LD/LC50 values that are relevant for classification:		
107-46-0 Hexamethyldisiloxane		
oral	LD50	> 16 ml/kg (> 12,16 g/kg) (rat)
dermal	LD50	> 2000 mg/kg (rabbit)
inhalation	LD50	106 mg/l/4h (rat)

Skin corrosion/irritation:	Based on available data, the classification criteria are not met.
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitisation:	Not classified Based on available data, the classification criteria are not met.
Germ cell mutagenicity:	Not classified Based on available data, the classification criteria are not met.
Carcinogenicity:	Not classified Based on available data, the classification criteria are not met.
Reproductive toxicity:	Not classified Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure):	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure):	Not classified Based on available data, the classification criteria are not met.
Aspiration hazard:	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1	Toxicity	Aquatic toxicity: Very toxic to aquatic life with long lasting effects.
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107-46-0 Hexamethyldisiloxan	
LC50 (fish)	0,46 mg/l (96 h, Onchorhynchus mykiss)
EC50 (daphnia)	> 0,37 mg/l (48 h, Daphnia magna)
EC50 (algae)	0,14 mg/l (95 h, Selenastrum capricornutum)
EC50 (algae)	> 0,55 mg/l (95 h, Selenastrum capricornutum)



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EC50 (microorganism)	≥ 100 mg/l (3 h, activated sludge)
NOEC (fish)	≥ 0,04 mg/l (56 d, Cyprinus carpio)
NOEC (daphnia)	0,08 mg/l (21 d, Daphnia magna)

12.2 Persistence and degradability:

107-46-0 Hexamethyldisiloxane	
Biodegradation	2 % (28 d), Not readily biodegradable.

12.3 Bioaccumulative potential:

107-46-0 Hexamethyldisiloxane	
Bioconcentration factor (BCF)	1290 - 2410 (70 d, Cyprinus carpio)
Bioconcentration factor (BCF)	776 - 1660 (70 d, Cyprinus carpio)

12.4 Mobility in soil:

107-46-0 Hexamethyldisiloxane	
log Koc	2,53

12.5 Results of PBT and vPvB assessment:

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Do not allow product to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:

Dispose in a safe manner in accordance with local/national regulations. Do not allow product to reach sewage system. Handle empty containers with care because residual vapours are flammable.

European Waste Catalogue Number:

The waste code number according to the Ordinance on the European Waste Catalogue (AVV) depends on the waste producer and can therefore vary for any given product. The waste code number is therefore to be gleaned separately from each waste producer.

SECTION 14: Transport information

14.1 UN number

ADR, IMDG, IATA:

UN1993

14.2 UN proper shipping name

ADR:

FLAMMABLE LIQUID, N.O.S

IMDG:

FLAMMABLE LIQUID, N.O.S

IATA:

Flammable liquid, n.o.s.

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Klasse:

3 Flammable liquids.

Danger labels:

3

14.4 Packing group

ADR, IMDG, IATA:

II

14.5 Environmental hazards

Marine pollutant:

Yes

Special marking:

Symbol (fish and tree)

14.6 Special precautions for user

Kemler Number:

Warning: Flammable liquids.

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EMS Number:	F-E,S-E
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Classification code	F1
Limited quantities (LQ):	1L
Excepted quantities (EQ):	E2
Transport category:	2
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ):	1L
Excepted quantities (EQ):	E2
UN "Model Regulation":	UN1993, FLAMMABLE LIQUID, N.O.S. (Hexamethyldisiloxane, Propan-2-ol), 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

National regulations:

Other regulations, limitations and prohibitive regulations:

15.2 Chemical safety assessment Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

Relevant phrases

H225:	Highly flammable liquid and vapour.
H319:	Causes serious eye irritation.
H332:	Harmful if inhaled
H336:	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H411:	Toxic to aquatic life with long lasting effects.
R11:	Highly flammable.
R20:	Harmful by inhalation
R36:	Irritating to eyes.
R50:	Very toxic to aquatic organisms.
R51/53:	Toxic for aquatic organisms - may cause long-term adverse effects in the aquatic environment.
R67:	Vapours may cause drowsiness and dizziness.

Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
CAS:	Chemical Abstracts Service (division of the American Chemical Society)



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LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Aquatic Acute 1:	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2:	Hazardous to the aquatic environment - Chronic Hazard, Category 2
Eye Irrit. 2:	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2:	Flammable liquids, Hazard Category 2
STOT SE 3:	Specific target organ toxicity - Single exposure, Hazard Category 3
F:	Highly flammable
N:	Dangerous for the environment
Xi:	Irritant
Xn:	Harmful