ALPA-GEL 97166 B

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

1.1 Product identifier

Trade name : ALPA-GEL 97166 B

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

Use of the Sub-stance/Mixture : Model and mould making

Recommended restrictions on use : No uses advised against have been identified at this time.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

CHT Germany GmbH
Bismarckstraße 102
72072 Tübingen
Germany
Tel.: +49 7071 154 0
info@cht.com

CHT Switzerland AG
Kriessernstrasse 20
9462 Montlingen
Switzerland
Tel.: +41 71 763 88 11
info.switzerland@cht.com

CHT UK Bridgwater Ltd.
Showground Road
Bridgwater TA6 6AJ
United Kingdom
Tel.: +44 1278 411 400
info.uk@cht.com

Importer : -
-
-
-
-
-

Responsible Department : CHT Germany GmbH
CHT Switzerland AG
Product Safety
sds.germany@cht.com
sds.switzerland@cht.com

1.4 Emergency telephone number

Emergency telephone number : +1 703 527 3887 CHEMTREC (International, 24 hours)
+44 20 3807 3798 CHEMTREC (United Kingdom, 24 hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Long-term (chronic) aquatic hazard, Category 3	H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P273 Avoid release to the environment.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Silicone polymer, crosslinking by addition contains hydrogen modified polysiloxane

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
octamethylcyclotetrasiloxane (REACH SVHC Candidate List)	556-67-2 209-136-7 014-018-00-1 01-2119529238-36	Flam. Liq. 3; H226 Repr. 2; H361f Aquatic Chronic 1; H410	>= 0.025 - < 0.1

		M-Factor (Chronic aquatic toxicity): 10	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : In case of skin contact remove mechanically with cloth or paper.
Wash off immediately with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult a physician.

If swallowed : Rinse mouth with water.
Do NOT induce vomiting.
Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks : None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)
Water spray
Dry powder
Foam

Unsuitable extinguishing media : High volume water jet
alkaline powder extinguishing agent

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.
Can be released in case of fire:
Carbon oxides
Silica

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers.
In case of fire do not inhale smoke, conflagration gases and steams.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Remove all sources of ignition.
Use personal protective equipment.
Contaminated surfaces will be extremely slippery.

6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.
If the product contaminates rivers and lakes or drains inform respective authorities.
Pay attention to local or official regulations.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Do not use any basic chemical binders.
Clean contaminated surface thoroughly.
Treat recovered material as described in the section "Disposal considerations".
Dispose of in accordance with local regulations.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Keep away from any kind of soiling (in particular heavy metal ions and alkalis) because of the risk of decomposition. Do not keep the container sealed.
Advice on protection against fire and explosion	:	Use only in well-ventilated areas. Take measures to prevent the build up of electrostatic charge. Keep away from sources of ignition - No smoking. The product can release hydrogen. Use water spray to cool unopened containers.
Hygiene measures	:	Avoid contact with skin, eyes and clothing. Do not breathe vapours, aerosols. Take off all contaminated clothing immediately. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Do always store in containers which correspond to the original ones. Keep in a dry, cool place. Protect from humidity and keep away from water. Do not keep the container sealed. Only store in vessels with degassing valve. Suitable material for containers and conduit: plastic coated steel Inappropriate material for containers and conduit: uncoated metals
Advice on common storage	:	Incompatible with oxidizing agents. Incompatible with acids and bases. Keep away from any kind of soiling (in particular heavy metal ions and alkalis) because of the risk of decomposition.

7.3 Specific end use(s)

Specific use(s)	:	Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL)

Substance name	End Use	Exposure routes	Potential health effects	Value
octamethylcyclotetrasiloxane (REACH SVHC Candidate List)	Workers	Inhalation	Long-term systemic effects	73 mg/m3
	Workers	Inhalation	Long-term local effects	73 mg/m3

	Consumers	Inhalation	Long-term systemic effects	13 mg/m3
	Consumers	Inhalation	Long-term local effects	13 mg/m3
	Consumers	Ingestion	Long-term systemic effects	3.7 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Substance name	Environmental Compartment	Value
octamethylcyclotetrasiloxane (REACH SVHC Candidate List)	Fresh water	1.5 µg/l
	Marine water	0.15 µg/l
	STP	10 mg/l
	Fresh water sediment	3 mg/kg dry weight (d.w.)
	Marine sediment	0.3 mg/kg dry weight (d.w.)
	Soil	0.54 mg/kg dry weight (d.w.)
	Secondary Poisoning	41 mg/kg food

8.2 Exposure controls

Engineering measures

Solids with occupational exposure limits in liquid preparations do not cause an exposure in the workplace, because they are not present in a respirable form. Exposure can occur in the form of aerosols or after drying of the liquid the solids remain, possibly in a finely dispersed form.
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Eye/face protection : Goggles (EN 166)

Hand protection

Material	:	Nitrile rubber
Break through time	:	> 480 min
Glove thickness	:	> 0.35 mm
Protective index	:	Class 6
Material	:	butyl-rubber
Break through time	:	> 480 min
Glove thickness	:	> 0.5 mm
Protective index	:	Class 6

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The obtained break through times according to EN 374 Part III are not measured under normal operating conditions. Therefore a maximum usage time of 50% of the break through time is recommended.

Skin and body protection	:	Wear suitable protective clothing (EN 14605).
Respiratory protection	:	In case of inadequate ventilation wear respiratory protection. Recommended Filter type: Combination filter A/P Equipment should conform to EN 14387

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	colourless
Odour	:	characteristic
pH	:	Not applicable substance/mixture is non-soluble (in water)
Melting point/ range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	> 100 °C
Evaporation rate	:	Not applicable
Flammability	:	Sustains combustion
Upper explosion limit / Upper flammability limit	:	74 %(V) Hydrogen
Lower explosion limit / Lower flammability limit	:	4 %(V) Hydrogen
Vapour pressure	:	< 100 hPa (20 °C)
Relative vapour density	:	Not applicable
Density	:	0.98 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable
Decomposition temperature	:	> 200 °C
Viscosity		
Viscosity, dynamic	:	ca. 800 mPa.s (20 °C)

Viscosity, kinematic	:	not determined
Oxidizing properties	:	Not applicable

9.2 Other information

Conductivity	:	Not determined
Particle Size Distribution	:	Not applicable
Self-ignition	:	560 °C Hydrogen

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions known if stored an handled properly.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	May generate flammable hydrogen gas. Avoid contact with water, alcohols, acidic, basic, or oxidizing materials. Potential for exothermic hazard

10.4 Conditions to avoid

Conditions to avoid	:	Keep away from heat and sources of ignition.

10.5 Incompatible materials

Materials to avoid	:	Oxidizing agents Alcohols Aldehydes Acids and bases Keep away from any kind of soiling (in particular heavy metal ions and alkalis) because of the risk of decomposition.

10.6 Hazardous decomposition products

Hydrogen

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg Remarks: Argument by analogy
Acute inhalation toxicity	:	Remarks: Based on available data, the classification criteria are not met.
Acute dermal toxicity	:	Remarks: Based on available data, the classification criteria are not met.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Acute oral toxicity	:	LD50 Oral (Rat, male): 4,800 mg/kg Method: OECD Test Guideline 401 Remarks: No mortality observed at this dose.
Acute inhalation toxicity	:	LC50 (Rat, male and female): 36 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403
Acute dermal toxicity	:	LD50 (Rat): > 2,375 mg/kg Method: OECD Test Guideline 402 Remarks: No mortality observed at this dose.

Skin corrosion/irritation

Product:

Remarks	:	Prolonged skin contact may cause skin irritation.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Species	:	Rat
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Product:

Remarks	:	Contact with eyes may cause irritation.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

Respiratory or skin sensitisation

Product:

Remarks : No known sensitising effect.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Test Type : Maximisation Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Reproductive toxicity - Assessment : Suspected of damaging fertility., toxic effect on reproduction, category 2

STOT - single exposure

Product:

Remarks : Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Remarks : Based on available data, the classification criteria are not met.

Aspiration toxicity

Product:

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

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	Remarks: No data is available on the product itself.
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data is available on the product itself.
Toxicity to algae/aquatic plants	:	Remarks: No data is available on the product itself.
Toxicity to microorganisms	:	Remarks: No data is available on the product itself.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.022 mg/l Exposure time: 96 h Remarks: Not classified due to data which are conclusive although insufficient for classification.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0.015 mg/l Exposure time: 48 h Test Type: flow-through test Remarks: Not classified due to data which are conclusive although insufficient for classification.
Toxicity to algae/aquatic plants	:	EC10 (Pseudokirchneriella subcapitata (algae)): >= 0.022 mg/l Exposure time: 96 h Remarks: Not classified due to data which are conclusive although insufficient for classification. EC50 (Pseudokirchneriella subcapitata (algae)): > 0.022 mg/l Exposure time: 96 h Remarks: Not classified due to data which are conclusive although insufficient for classification.
Toxicity to microorganisms	:	EC50 (activated sludge): > 10,000 mg/l Exposure time: 3 h Test Type: static test Method: ISO 8192

Toxicity to fish (Chronic toxicity)	:	NOEC: >= 0.0044 mg/l Exposure time: 93 d Species: Oncorhynchus mykiss (rainbow trout) Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: > 15 µg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: flow-through test
M-Factor (Chronic aquatic toxicity)	:	10

12.2 Persistence and degradability

Product:

Biodegradability	:	Remarks: No data is available on the product itself.
Physico-chemical removability	:	Remarks: The product is insoluble and floats on water. May be separated mechanically in waste water plants.

12.3 Bioaccumulative potential

Product:

Bioaccumulation	:	Remarks: Does not bioaccumulate.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Partition coefficient: n-octanol/water	:	log Pow: 6.98 (21.7 °C)

12.4 Mobility in soil

Product:

Mobility	:	Remarks: After release, adsorbs onto soil.

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

octamethylcyclotetrasiloxane (REACH SVHC Candidate List):

Assessment	:	Substance is persistent, bioaccumulative, and toxic (PBT).

: Substance is very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Product:

Endocrine disrupting potential : This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

Additional ecological information : The product is insoluble in water, therefore the ecological data such as, e.g. biodegradability, COD, BOD5 values cannot be determined analytically.
According to our knowledge, the product does not contain heavy metals and other compounds of EC directive 2000/60 EC.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Product that cannot be reused, reclaimed or recycled should be disposed of at an authorised facility in accordance with national, state and local regulations.

Contaminated packaging : Packaging must be completely emptied. Dispose of non-recyclable/recyclable packaging in accordance with local regulations.

Waste Code : For this product, no waste code number according to the European Waste Catalogue can be determined, as only the intended use by the consumer allows an assignment. The waste code number must be determined with the EU in consultation with the disposal company.

SECTION 14: Transport information

14.1 UN number

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not permitted for transport

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good

RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
IATA	:	Not permitted for transport

14.3 Transport hazard class(es)

ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
IATA	:	Not permitted for transport

14.4 Packing group

ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
Segregation group	:	-
IATA (Cargo)	:	Not permitted for transport
IATA (Passenger)	:	Not permitted for transport

14.5 Environmental hazards

ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : see chapter 6 - 8
By reason of the possible risk of formation of hydrogen under certain circumstances, CHT recommends transport over land or sea.
Packagings with venting are not permitted for air transport.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

15.2 Chemical safety assessment

A chemical safety assessment is not required or has not been carried out for this product.

SECTION 16: Other information

Full text of H-Statements

H226	:	Flammable liquid and vapour.
H361f	:	Suspected of damaging fertility.
H410	:	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Flam. Liq.	:	Flammable liquids
Repr.	:	Reproductive toxicity

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Training advice	:	Based on the information in the safety data sheet and the workplace conditions, employees must be regularly trained in the safe handling of the product. National rules for training employees in handling hazardous substances must be observed.
Other information	:	The classification for dangerous physico-chemical properties, health and environmental hazards has been derived from a combination of computational methods and, if available, test data. This data sheet contains changes from the previous version in section(s): 3 11 12
Sources of key data used to compile the Safety Data Sheet	:	Information from our suppliers, as well as data from the "Registered substances database" of the European Chemicals Agency (ECHA) has been used to compile this safety data sheet.

Classification of the mixture:		**Classification procedure:**
Aquatic Chronic 3	H412	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.