

SAFETY DATA SHEET

According to regulation (EC) n° 1907/2006 Annex II

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

1.1 Product identifier:

Product name: BLUESIL TAP GRS

Product No.: PRCO90000164

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

Identified uses: Lubricant.

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet:

Manufacturer:

Elkem Siliconi Italia Srl
via Archimede, 602
I-21042 Caronno Pertusella

Telephone: +39 (02) 964 141

Fax: +39 (02) 96450209

E-mail: fds.sil@elkem.com

Supplier:

Elkem Silicones Germany GmbH
Hans-Sachs-Strasse 4a
D-23566 Lübeck

Telephone: +49 (0) 451 6 09 81-27

Fax: +49 (0) 451 6 09 81-11

1.4 Emergency telephone number: CHEMTREC Switzerland (24h) : +(41)-435082011 / National Poison Centre : 145

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

2.2 Label Elements

Supplemental label information

EUH210: Safety data sheet available on request.

Hazard summary

Physical Hazards: No specific recommendations.

Health Hazards

Inhalation: No specific symptoms noted.

Eye contact: No specific symptoms noted.

Skin Contact: No specific symptoms noted.

Ingestion: No specific symptoms noted.

Other Health Effects: No other information noted.

Environmental Hazards: Not regarded as dangerous for the environment.

2.3 Other hazards Fulfilling PBT (persistent/bioaccumulative/toxic) criteria Fulfilling vPvB criteria

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: Mixture of Polyorganosiloxanes, fillers.

| Chemical name | Concentration | CAS-No. | EC No. | REACH Registration No. | M-Factor: | Notes |
|-------------------------------|---------------|------------|-----------|------------------------|--------------------|------------|
| Boric acid | 0,1 - <1% | 10043-35-3 | 233-139-2 | 01-2119486683-25-XXXX | No data available. | # |
| Octamethylcyclotetra siloxane | 0,1 - <1% | 556-67-2 | 209-136-7 | 01-2119529238-36-0002 | No data available. | # PBT vPvB |
| Decamethylcyclopent asiloxane | 0,1 - <1% | 541-02-6 | 208-764-9 | 01-2119511367-43-0003 | No data available. | vPvB |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

Classification

| Chemical name | Classification | Notes |
|------------------------------|---|--------------------|
| Boric acid | Repr. 1B H360FD; | No data available. |
| Octamethylcyclotetrasiloxane | Flam. Liq. 3 H226; Repr. 2 H361f; Aquatic Chronic 4 H413; | No data available. |
| Decamethylcyclopentasiloxane | None known. | No data available. |

CLP: Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General: Get medical attention if symptoms occur. Contaminated clothing to be placed in closed container until disposal or decontamination.

4.1 Description of first aid measures

Inhalation: Not relevant.

Skin Contact: Remove contaminated clothing and shoes. Wash contact areas with soap and water.

Eye contact: In the event of contact with the eyes, rinse thoroughly with clean water. Continue to rinse for at least 15 minutes.

Ingestion: Do not induce vomiting. Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: None known.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No specific recommendations.

Treatment: No specific recommendations.

SECTION 5: Firefighting measures

General Fire Hazards: No specific recommendations.

5.1 Extinguishing media
Suitable extinguishing media: Extinguish with foam, carbon dioxide or dry powder. Water spray.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture: None known. For further information, refer to section 10: "Stability and Reactivity".

5.3 Advice for firefighters
Special fire fighting procedures: Water spray should be used to cool containers.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

6.1.2 For emergency responders: No data available.

6.2 Environmental Precautions: Collect spillage. Do not discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up: Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent.(cf. : § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.

6.4 Reference to other sections: Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

SECTION 7: Handling and storage

- | | |
|--|--|
| 7.1 Precautions for safe handling: | No specific precautions. |
| 7.2 Conditions for safe storage, including any incompatibilities: | No special storage precautions noted. Material is stable under normal conditions. Avoid contact with oxidizing agents. Use container made of: Plastic lined steel drum. Suitable plastic material. |
| 7.3 Specific end use(s): | No specific recommendations. |

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters Occupational Exposure Limits

None of the components have assigned exposure limits.

8.2 Exposure controls Appropriate Engineering Controls:

No specific recommendations.

Individual protection measures, such as personal protective equipment

General information: No specific precautions.

Eye/face protection: Safety Glasses.

Skin protection

Hand Protection: Material: Nitrile.
Material: Polyvinyl chloride (PVC).
Material: Rubber or plastic.

Other: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Respiratory Protection: No specific precautions.

Hygiene measures: Provide eyewash station and safety shower.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

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|--|--------------------------|
| Physical state: | Solid |
| Form: | Viscous paste |
| Color: | Translucent., Light grey |
| Odor: | Odorless |
| Odor Threshold: | No data available. |
| pH: | Not applicable |
| Melting Point: | No data available. |
| Boiling Point: | No data available. |
| Flash Point: | 225 °C (Closed Cup) |
| Evaporation Rate: | No data available. |
| Flammability (solid, gas): | No data available. |
| Flammability Limit - Upper (%): | No data available. |

| | |
|---|---|
| Flammability Limit - Lower (%): | No data available. |
| Vapor pressure: | No data available. |
| Vapor density (air=1): | No data available. |
| Density: | Approximate 1,01 kg/dm ³ (20 °C) |
| Solubility(ies) | |
| Solubility in Water: | Practically Insoluble |
| Solubility (other): | Acetone: Practically Insoluble Alcohol: Practically Insoluble Diethylether: Dispersible Aliphatic hydrocarbons: Dispersible Aromatic hydrocarbons: Dispersible Chlorinated solvents: Dispersible |
| Partition coefficient (n-octanol/water): | No data available. |
| Autoignition Temperature: | > 400 °C |
| Decomposition Temperature: | No data available. |
| Viscosity: | No data available. |
| Explosive properties: | No data available. |
| Oxidizing properties: | According to the data on the components Not considered as oxidizing. (evaluation by structure-activity relationship) |

9.2 Other information: No data available.

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.1 Reactivity: | No other information noted. |
| 10.2 Chemical Stability: | Stable |
| 10.3 Possibility of hazardous reactions: | No data available. |
| 10.4 Conditions to avoid: | No other information noted. |
| 10.5 Incompatible Materials: | Strong oxidizing agents. |
| 10.6 Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Boron oxide. |

SECTION 11: Toxicological information

Information on likely routes of exposure

| | |
|----------------------|--------------------|
| Inhalation: | No data available. |
| Ingestion: | No data available. |
| Skin Contact: | No data available. |
| Eye contact: | No data available. |

11.1 Information on toxicological effects:

Acute toxicity:

Oral:

Product: Composition/information on ingredients

Specified substance(s):

octamethylcyclotetrasiloxane LD 50 (Rat): > 4 800 mg/kg

Decamethylcyclopentasiloxane LD 50 (Rat): > 2 000 mg/kg

Dermal:

Product: Composition/information on ingredients

Specified substance(s):

Boric acid LD 50 (Rabbit): > 2 000 mg/kg (According to a standardised method.) Semi-occluded (Dermal)

octamethylcyclotetrasiloxane LD 50 (Rat): > 2 375 mg/kg

Decamethylcyclopentasiloxane LD 50 (Rabbit): > 2 000 mg/kg

Inhalation:

Product: Composition/information on ingredients

Specified substance(s):

Boric acid LC 50 (Rat, Female, Male, 4 h): > 2,03 mg/l Aerosol
LC 50 (Rat, Female, Male, 4 h): > 2,12 mg/l Dust

octamethylcyclotetrasiloxane LC 50 (Rat, 4 h): > 36 mg/l

Decamethylcyclopentasiloxane LC 50 (Rat): 8,67 mg/l

Repeated dose toxicity:

Product: Composition/information on ingredients

Specified substance(s):

Boric acid NOAEL (Rat(Female, Male), Oral): 17,5 mg/kg LOAEL
(Rat(Female, Male), Oral): 58,5 mg/kg
NOAEL (Rat(Female, Male), Inhalation): 0,47 mg/l Aerosol
NOAEL (Dog(Female), Inhalation): >= 0,057 mg/l Aerosol

octamethylcyclotetrasiloxane NOAEL (Rat, Inhalation): 1,820 mg/l Method: OECD 453
NOAEL (Rabbit, Dermal): 960 mg/kg Method: OECD 411

Decamethylcyclopentasiloxane NOAEL (Rat, Oral): >= 1 000 mg/kg
NOAEL (Rat, Inhalation - vapor): >= 2,42 mg/l
NOAEL (Rat, Dermal): >= 1 600 mg/kg

Skin Corrosion/Irritation:

Product: Composition/information on ingredients

Specified substance(s):

| | |
|------------------------------|--|
| Boric acid | According to a standardised method. (Rabbit) : Occluded (Dermal) |
| octamethylcyclotetrasiloxane | Rabbit, 24 h : Not irritating |
| Decamethylcyclopentasiloxane | Rabbit : Not irritating |

Serious Eye Damage/Eye

Irritation:

| | |
|--------------------------------|--|
| Product: | Composition/information on ingredients |
| Specified substance(s): | |
| Boric acid | OECD 405 (Rabbit) : Slightly irritating. |

octamethylcyclotetrasiloxane Rabbit, 24 h : Not irritating

Decamethylcyclopentasiloxane Rabbit : Not irritating

Respiratory or Skin

Sensitization:

| | |
|--------------------------------|--|
| Product: | Composition/information on ingredients |
| Specified substance(s): | |
| Boric acid | OECD 406 (Guinea Pig) : Not a skin sensitizer. |

octamethylcyclotetrasiloxane Guinea Pig : Not a skin sensitizer.

Decamethylcyclopentasiloxane Not a skin sensitizer.

Germ Cell Mutagenicity:

In vitro:

| | |
|--------------------------------|--|
| Product: | Composition/information on ingredients |
| Specified substance(s): | |
| Boric acid | Bacteria (OECD 471): No mutagenic effects. |
| octamethylcyclotetrasiloxane | Bacteria : No mutagenic components identified. Chromosomal aberration : No mutagenic components identified. In vitro gene mutations test on mammalian cells: : No mutagenic components identified. |
| Decamethylcyclopentasiloxane | Chromosomal aberration : No mutagenic components identified. Bacteria : No mutagenic components identified. |

In vivo:

| | |
|--------------------------------|--|
| Product: | Composition/information on ingredients |
| Specified substance(s): | |
| Boric acid | (OECD 474)No mutagenic effects. |
| octamethylcyclotetrasiloxane | No effects expected. |
| Decamethylcyclopentasiloxane | No effects expected. |

Carcinogenicity:

Product: Composition/information on ingredients
Specified substance(s):
octamethylcyclotetrasiloxane Rat (, Female, Male, Inhalation): (OECD 453) No effects expected.

Reproductive toxicity:

Product: Composition/information on ingredients
Specified substance(s):
Boric acid May damage fertility. May damage the unborn child.

octamethylcyclotetrasiloxane Suspected of damaging fertility.

Reproductive toxicity**(Fertility):**

Product: Composition/information on ingredients
Specified substance(s):
Boric acid Rat (Ingestion): NOAEL (parent): 17,5 mg/kg NOAEL (F1):17,5 mg/kg
NOAEL (F2): 17,5 mg/kg

octamethylcyclotetrasiloxane Fertility study 2 generations. Rat (Inhalation): NOAEL (parent): 3,64
mg/l NOAEL (F1):None. NOAEL (F2): None. Method: OECD 416

Decamethylcyclopentasiloxane Fertility study 2 generations. Rat (Inhalation): NOAEL (parent): 3,64
mg/l NOAEL (F1):None. NOAEL (F2): None. Method: OECD 416

Developmental toxicity**(Teratogenicity):**

Product: Composition/information on ingredients
Specified substance(s):
Boric acid Rat (Ingestion): NOAEL (terato): 9,6 mg/kg NOAEL (mater): 13,3
mg/kg Method: OECD 414

octamethylcyclotetrasiloxane Rat (Inhalation): NOAEL (terato): > 6,066 mg/l NOAEL (mater): 3,640
mg/l Method: OECD 414

Specific Target Organ Toxicity - Single Exposure:

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure:

Product: No data available.

Aspiration Hazard:

Product: No data available.
Specified substance(s):
octamethylcyclotetrasiloxane No effects expected.

SECTION 12: Ecological information**12.1 Toxicity:****Acute toxicity:****Fish:****Product:** No effects expected (assessment based on ingredients).**Aquatic Invertebrates:****Product:** No effects expected (assessment based on ingredients).**Chronic Toxicity:****Fish:****Product:** No effects expected (assessment based on ingredients).**Aquatic Invertebrates:****Product:** No effects expected (assessment based on ingredients).**Toxicity to Aquatic Plants:****Product:** No effects expected (assessment based on ingredients).**12.2 Persistence and Degradability:****Biodegradation:****Product:** Not applicable**BOD/COD Ratio:****Product:** No data available.**12.3 Bioaccumulative potential:****Product:**

Composition/information on ingredients

Specified substance(s):

Boric acid

Chinook salmon (*Oncorhynchus tshawytscha*), Bioconcentration Factor (BCF): < 0,1 (Measured)

octamethylcyclotetrasiloxane

Fathead Minnow, Bioconcentration Factor (BCF): 12 400

Decamethylcyclopentasiloxane

Fathead Minnow, Bioconcentration Factor (BCF): 7 060

12.4 Mobility in soil:

No data available.

12.5 Results of PBT and vPvB assessment:

Composition/information on ingredients

Boric acid

None Reported

| | | |
|------------------------------|--|------------------------------|
| octamethylcyclotetrasiloxane | Fulfilling PBT (persistent/bioaccumulative/toxic) criteria, Fulfilling vPvB criteria | REACH (1907/2006) Ax XIII |
|------------------------------|--|------------------------------|

| | | |
|------------------------------|--------------------------|------------------------------|
| Decamethylcyclopentasiloxane | Fulfilling vPvB criteria | REACH (1907/2006) Ax XIII |
|------------------------------|--------------------------|------------------------------|

12.6 Other adverse effects: None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

General information: The user's attention is drawn to the possible existence of local regulations regarding disposal.

Disposal methods

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate.

Contaminated Packaging: Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

SECTION 14: Transport information

This material is not subject to transport regulations.

Other information: No special precautions.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

SECTION 15: Regulatory information

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

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

Inventory Status:

| | |
|--|---|
| Australia AICS: | On or in compliance with the inventory. |
| Canada DSL Inventory List: | On or in compliance with the inventory. |
| EINECS, ELINCS or NLP: | On or in compliance with the inventory. |
| Japan (ENCS) List: | On or in compliance with the inventory. |
| China Inv. Existing Chemical Substances: | On or in compliance with the inventory. |
| Korea Existing Chemicals Inv. (KECI): | On or in compliance with the inventory. |
| Philippines PICCS: | On or in compliance with the inventory. |
| US TSCA Inventory: | On or in compliance with the inventory. |
| New Zealand Inventory of Chemicals: | On or in compliance with the inventory. |

SECTION 16: Other information

Revision Information: Not relevant.

References

PBT PBT: persistent, bioaccumulative and toxic substance.
vPvB vPvB: very persistent and very bioaccumulative substance.

Key abbreviations or acronyms used:

No data available.

Key literature references and sources for data: No data available.

Wording of the H-statements in section 2 and 3

H226 Flammable liquid and vapor.
H360FD May damage fertility. May damage the unborn child.
H361f Suspected of damaging fertility.
H413 May cause long lasting harmful effects to aquatic life.

Training information: No data available.

Issue Date: 27.09.2018

SDS No.:

Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.