

SAFETY DATA SHEET

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR 1910.1200

1. Identification of the substance or mixture and of the supplier

1.1 Product identifier:

Product name: BLUESIL HI PRO GREEN

Product No.: PRCO90000365

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

Identified uses: Catalyst

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet:

Manufacturer:

Elkem Silicones USA Corp.
7979 Park Place Road
29745 York, SC
USA

Telephone: +1 (803) 792-3000

Fax: +1 (803) 684-7202

E-mail: product.stewardship@elkem.com

Supplier:

Elkem Silicones USA Corp.
Two Tower Blvd, Suite 1802
08816-1100 East Brunswick, NJ
USA

Telephone: +1 (732) 227-2060

Fax: +1 (732) 249-7000

1.4 Emergency telephone number: +1 (800) 424-9300 CHEMTREC

2. Hazards identification

2.1 Classification of the substance or mixture:

The product has been classified according to the legislation in force.

Hazard Classification:

Health Hazards:

Acute toxicity (Oral)	Category 4	H302: Harmful if swallowed.
Skin sensitizer	Category 1	H317: May cause an allergic skin reaction.
Toxic to reproduction	Category 2	H361f: Suspected of damaging fertility.
Specific Target Organ Toxicity - Repeated Exposure	Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

2.2 Label Elements:

Hazard pictograms:



Signal Word:

Warning

Hazard statements: H302: Harmful if swallowed.
 H317: May cause an allergic skin reaction.
 H361: Suspected of damaging fertility or the unborn child.
 H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements:

Prevention: P280: Wear protective gloves/protective clothing.

Response: P302+P350+P332+P313: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
 P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.
 P308+P313: IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards which do not result in GHS classification:

No other information noted.

Substance(s) formed under the conditions of use:

Chemical name	CAS-No.	Concentration*
Methanol	67-56-1	<13%

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

3. Composition/information on ingredients

Mixtures:

General information:

Mixture of Polyorganosiloxanes, fillers, additives.

Hazardous Component(s):

Chemical name	Concentration*	Type	CAS number
Trimethoxyphenylsilane	25 - <35%	Component	2996-92-1
Dimethylbis[(1-oxoneodecyl)oxy]stannane	1 - <5%	Component	68928-76-7

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

4. First-aid measures

General information:

Move into fresh air and keep at rest. Take off contaminated clothing and wash it before reuse. Get medical attention immediately.

4.1 Description of first aid measures:

Inhalation:

Under normal conditions of intended use, this material is not expected to be an inhalation hazard. In case of inhalation: Move person into fresh air and keep at rest. Get medical attention if symptoms occur.

Skin contact:

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin with soap and water. Get medical attention immediately. Contaminated clothing to be placed in closed container until disposal or decontamination. Wash contaminated clothing before reuse.

Eye contact:

In the event of contact with the eyes, rinse thoroughly with clean water for at least 15 minutes. Get medical attention if symptoms occur.

Ingestion:

Do not induce vomiting. Rinse mouth thoroughly with water. Do not give victim anything to drink if he is unconscious. Get medical attention immediately. Immediately call a POISON CENTER/doctor.

Personal Protection for First-aid Responders:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). Refer to sections 5 and 8 for information on emergency procedures and protective equipment.

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

Any important symptoms and effects are described in Section 11 (Toxicological information) of this SDS.

4.3 Indication of any immediate medical attention and special treatment needed:**Notes to the physician:**

No specific recommendations. Show this Safety Data Sheet to the attending physician.

5. Fire-fighting measures**5.1 Extinguishing media:****Suitable extinguishing media:**

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray.

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture:

Product will burn under fire conditions. Thermal decomposition or combustion may liberate carbon oxides, silicon oxides and other toxic gases or vapors.

5.3 Advice for firefighters:**Special fire fighting procedures:**

Use standard firefighting procedures and consider the hazards of other involved materials. Remove undamaged containers from fire area if it is safe to do so. Evacuate to a safe location and contact the emergency services. Water spray should be used to cool containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for fire-fighters:

Firefighters should wear standard protective equipment and a positive pressure self-contained breathing apparatus (SCBA).

6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

6.2 Environmental Precautions:

Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up:

Absorb with sand or other inert absorbent and place into containers.

6.4 Reference to other sections:

Caution: Contaminated surfaces may be slippery. For waste disposal, see Section 13 of the SDS.

7. Handling and storage

7.1 Precautions for safe handling:

Precautions:

Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment. For further information, refer to section 10: "Stability and Reactivity". Take care to prevent spills, waste and minimize release to the environment. In case of spills, beware of slippery floors and surfaces.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local/regional/national regulations. Store in a dry place. Keep in properly labelled containers. Store away from incompatible materials.

Packaging frequently used at our sites:

Steel drums coated with epoxy-resin.

7.3 Specific end use(s):

See the technical data sheet on this product for further information.

8. Exposure controls/personal protection

8.1 Control Parameters:

Occupational Exposure Limits:

Dimethylbis[(1-oxoneodecyl)oxy]stannane

Type	Exposure Limit Values	Source	Date	Remarks
AN ESL	- 0.1 µg/m ³	TX ESL	06 2018	Health Particulate.
ST ESL	- 1 µg/m ³	TX ESL	06 2018	Health Particulate.
PEL	- 0.1 mg/m ³	OSHA Z1	02 2006	as Sn
STEL	- 0.2 mg/m ³	ACGIH	2008	as Sn
TWA	- 0.1 mg/m ³	OSHA Z1A	1989	as Sn
SKIN_DES	- -	US CA OEL	09 2006	Can be absorbed through the skin. as Sn
SKIN_DES	- -	NIOSH	2005	Can be absorbed through the skin. as Sn
SKIN_FINAL	- -	OSHA Z1A	1989	Can be absorbed through the skin. as Sn
SKIN_DES	- -	ACGIH	03 2019	Danger of cutaneous absorption as Sn
TWA	- 0.1 mg/m ³	ACGIH	2008	as Sn
TWA PEL	- 0.1 mg/m ³	US CA OEL	09 2006	as Sn
STEL	- 0.2 mg/m ³	US CA OEL	09 2006	as Sn
REL	- 0.1 mg/m ³	NIOSH	2005	as Sn
TWA	- 0.1 mg/m ³	TN OEL	06 2008	as Sn
SKIN_DES	- -	TN OEL	06 2008	Can be absorbed through the skin. as Sn

Additional exposure limits under the conditions of use:

Methanol

Type	Exposure Limit Values	Source	Date	Remarks
STEL	250 ppm 325 mg/m3	NIOSH	2005	
REL	200 ppm 260 mg/m3	NIOSH	2005	
TWA	200 ppm -	ACGIH	2008	
TWA	200 ppm 260 mg/m3	OSHA Z1A	1989	
STEL	250 ppm 325 mg/m3	OSHA Z1A	1989	
SKIN_DES	- -	NIOSH	2005	Can be absorbed through the skin.
PEL	200 ppm 260 mg/m3	OSHA Z1	02 2006	
STEL	250 ppm -	ACGIH	2008	
SKIN_FINAL	- -	OSHA Z1A	1989	Can be absorbed through the skin.
IDLH	6,000 ppm -	NIOSH IDLH	10 2017	IDLH values based on the 1994 Revised Criteria
SKIN_DES	- -	ACGIH	03 2019	Danger of cutaneous absorption

8.2 Exposure controls:

Appropriate Engineering Controls:

No specific recommendations.

Individual protection measures, such as personal protective equipment:

Provide sufficient ventilation during operations which cause vapor formation. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Eye/face protection:

Safety glasses with side shields.

Hand Protection:

Protective gloves are recommended.

Skin and Body Protection:

Wear suitable protective clothing.

Respiratory Protection:

If ventilation is insufficient, suitable respiratory protection must be provided.

Environmental Controls:

No data available.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state:

Liquid

Form:

Slightly viscous

Color:

Green

Odor:

Characteristic

pH:

By definition, pH measurement consists in the determination of hydrogen ions concentration in solution, generally aqueous. Silicones products are hydrophobic and therefore, not soluble in water. By consequence, it is not possible to measure the pH value.

Melting point/freezing point:

No data available.

Boiling Point:

> 211 °C

Flash Point:

> 96 °C / 205 °F (Closed cup according to method ASTM D56.)

Flammability:

No data available.

Flammability Limit - Upper (%):

No data available.

Flammability Limit - Lower (%):

No data available.

Vapor pressure:

No data available.

Relative vapor density:

No data available.

Evaporation Rate:	No data available.
Density:	Approximate 1.00 kg/dm ³ (20 °C)
Solubility(ies):	
Solubility in Water:	Practically Insoluble
Solubility (other):	Acetone: Very slightly soluble Ethanol: Very slightly soluble Aliphatic hydrocarbons: Miscible (in all proportions). Aromatic hydrocarbons: Miscible (in all proportions). Chlorinated solvents: Miscible (in all proportions).
Partition coefficient (n-octanol/water):	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	> 200 °C
Kinematic viscosity:	90 mm ² /s
Particle characteristics:	Not applicable.

9.2 Other information:

Dynamic viscosity:	Approximate 90 mPa.s
Oxidizing properties:	According to the data on the components Not considered as oxidizing. (evaluation by structure-activity relationship)

10. Stability and reactivity

10.1 Reactivity:

No data available.

10.2 Chemical Stability:

Stable

10.3 Possibility of hazardous reactions:

Will not occur.

10.4 Conditions to avoid:

None known.

10.5 Incompatible Materials:

Strong oxidizers, strong acids, and strong bases.

10.6 Hazardous Decomposition Products:

Thermal decomposition may liberate oxides of carbon, tin and amorphous silica. During use or in contact with water, may generate hazardous substances.

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:

ATEmix : 1,696.54 mg/kg

Dermal:

Not classified for acute toxicity based on available data.

Inhalation:

Not classified for acute toxicity based on available data.

Repeated dose toxicity:

Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

LOAEL: 100 mg/kg ; (Rat ; Female, Male ; Oral) ; Method: OECD 422 ; Subacute exposure

NOAEL: 0.620 mg/l ; (Rat ; Female, Male ; Inhalation - vapour) ; Method: OECD 412 ; Subacute exposure

Skin Corrosion/Irritation:

Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

Not irritating (Rabbit) ; Method: OECD 404

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

Irritating. (EpiDerm™ Human Skin Model) ; Method: OECD 439

not corrosive to the skin (EpiDerm™ Human Skin Model) ; Method: OECD 431

Serious Eye Damage/Eye Irritation:

Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

Not irritating (Rabbit) ; Method: OECD 405

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

Not irritating (Bovine, cornea) ; Method: OECD 437

Respiratory or Skin Sensitization:

Based on our knowledge of the composition information: May cause an allergic skin reaction.

TRIMETHOXYPHENYLSILANE (2996-92-1):

Skin sensitization: Not a skin sensitizer. (Guinea Pig) ; Method: OECD 406 ; Results obtained on a similar product.

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

Skin sensitization: Skin sensitizer (Guinea Pig) ; Results obtained on a similar product.

Germ Cell Mutagenicity:

In vitro: Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

Bacterial reverse mutation test: No mutagenic effect. (Salmonella typhimurium and Escherichia coli ; with and without metabolic activation) ; Method: According to a standardised method.

In vitro gene mutations test on mammalian cells: No mutagenic effect. (Mouse lymphoma cells ; with and without metabolic activation) ; Method: OECD 476 ; Results obtained on a similar product.

Chromosomal aberration: Positive with metabolic activation., Negative without metabolic activation. (Chinese hamster lung cells) ; Method: OECD 473

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

Bacterial reverse mutation test: No mutagenic effect. (Salmonella typhimurium and Escherichia coli ; with and without metabolic activation) ; Method: OECD 471

In vivo: Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

Mammalian erythrocyte micronucleus test: negative (Rat ; Female, Male ; Inhalation) ; Method: According to a standardised method. ; Results obtained on a similar product.

Carcinogenicity:

No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities.

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogens present or none present in regulated quantities.

Reproductive toxicity:

Fertility: Based on our knowledge of the composition information: Suspected of damaging fertility.

TRIMETHOXYPHENYLSILANE (2996-92-1):

Not classified

Reproduction/developmental toxicity screening test: NOAEL (parent): 500 mg/kg ; NOAEL (F1): None. ; NOAEL (F2): None. (Rat ; Female, Male ; Ingestion) ; Method: OECD 422

Teratogenicity: Based on our knowledge of the composition information: Suspected of damaging fertility.

TRIMETHOXYPHENYLSILANE (2996-92-1):

Not classified

NOAEL (terato): 500 mg/kg ; NOAEL (mater): None. (Rat ; Ingestion) ; Method: OECD 422 ; The product is not considered to be toxic for development.

Specific Target Organ Toxicity - Single Exposure:

Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

Not classified

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

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

Specific Target Organ Toxicity - Repeated Exposure:

Based on our knowledge of the composition information: May cause damage to organs through prolonged or repeated exposure.

TRIMETHOXYPHENYLSILANE (2996-92-1):

May cause damage to organs through prolonged or repeated exposure. Target Organ(s): Urinary bladder

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

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

Aspiration Hazard:

Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):
Not classified

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):
Based on available data, the classification criteria are not met.

12. Ecological information

12.1 Toxicity:

Acute toxicity:

Fish: Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):
LC 50 (Oncorhynchus mykiss; 96 h) : > 100 mg/l ; Method: OECD 203 ; Results obtained on a similar product.

Aquatic Invertebrates: Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):
EC 50 (Water flea (Daphnia magna); 48 h) : > 100 mg/l ; Method: OECD 202 ; Results obtained on a similar product.

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):
EC 50 (Water flea (Daphnia magna); 48 h) : 39 mg/l ; Method: OECD 202

Aquatic plants: Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):
ErC50 (Algae (Pseudokirchneriella subcapitata); 72 h) : > 100 mg/l ; Method: OECD 201 ; Results obtained on a similar product.
NOEC (growth rate) (Algae (Pseudokirchneriella subcapitata); 72 h) : >= 100 mg/l ; Method: OECD 201 ; Results obtained on a similar product.

Toxicity to microorganisms: No data available.

Chronic Toxicity:

Fish: No data available.

Aquatic Invertebrates: No data available.

12.2 Persistence and Degradability:

Biodegradation: Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):
The 10-day window requirement is not fulfilled. 0 % (activated sludge, domestic (adaptation not specified) ; 28 d) ; Method: OECD 310 ; The product is not considered to be readily biodegradable. The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability. Results obtained on a similar product.

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):
The 10-day time window does not apply to complex, multi-constituent substances with structurally similar constituents. 0 % (activated sludge, domestic (adaptation not specified) ; 28 d) ; Method: OECD 301 B ; The product is not readily biodegradable. The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability.

BOD/COD Ratio: No data available.

12.3 Bioaccumulative potential:

Bioconcentration Factor (BCF): Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

The product is not considered to have a bioaccumulative potential.

Partition coefficient (n-octanol/water): Based on our knowledge of the composition information:

TRIMETHOXYPHENYLSILANE (2996-92-1):

Log Kow: 2

DIMETHYLBIS[(1-OXONEODECYL)OXY]STANNANE (68928-76-7):

Log Kow: 5.503 ; Method: QSAR

12.4 Mobility in soil:

No data available.

12.5 Other adverse effects:

No data available.

13. Disposal considerations

13.1 Waste treatment methods:

Disposal methods:

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

Contaminated Packaging:

Contaminated packages should be as empty as possible.

14. Transport information

DOT

Not regulated.

IMDG / IMO

Not regulated.

IATA

Not regulated.

15. Regulatory information

US Federal Regulations:

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4): None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Hazard categories:

Acute toxicity, Skin sensitizer, Specific Target Organ Toxicity - Repeated Exposure, Toxic to reproduction

SARA 304 Emergency Release Notification:

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required: None present or none present in regulated quantities.

US State Regulations:

US. California Proposition 65: No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act:

Chemical Identity:

Dimethylbis[(1-oxoneodecyl)oxy]stannane

US. Massachusetts RTK - Substance List: No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances: No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK: No ingredient regulated by RI Right-to-Know Law present.

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.
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.

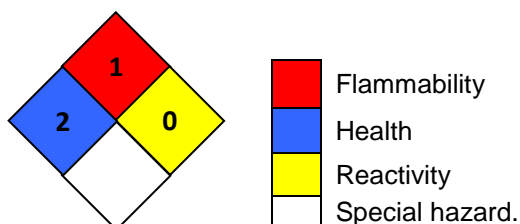
16. Other information, including date of preparation or last revision

HMIS Hazard ID:

Health	*	2
Flammability	1	
Physical Hazards	0	
PERSONAL PROTECTION	H	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect
 H - Goggles, Gloves, Apron & Vapor Respirator

NFPA Hazard ID:



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 10/05/2021

Version #: 16.0

Further Information:

No data available.

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.