

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 V-06 RED

Product No.: PRCO90054240

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 1601
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:

Physical Hazards:

Flammable liquids	Category 2	H225: Highly flammable liquid and vapor.
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Health Hazards:

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye damage	Category 1	H318: Causes serious eye damage.
Toxic to reproduction	Category 1B	H360: May damage fertility or the unborn child.
Specific Target Organ Toxicity - Single Exposure	Category 3	H336: May cause drowsiness or dizziness. (Target Organs: Narcotic effect.)
Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters airways.

Environmental Hazards:

Acute hazards to the aquatic environment	Category 3	H402: Harmful to aquatic life.
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2.2 Label Elements:

Hazard pictograms:



Signal Word:

Danger

Hazard statements:

H225: Highly flammable liquid and vapor.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H336: May cause drowsiness or dizziness.
H304: May be fatal if swallowed and enters airways.
H360: May damage fertility or the unborn child.
H402: Harmful to aquatic life.

Precautionary Statements:

Prevention:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting/equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P261: Avoid breathing vapors.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P273: Avoid release to the environment.

Response:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P350+P332+P313: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Get immediate medical advice/attention.
P301+P330+P331+P315: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

Storage:

Store in tightly closed original container in a dry, cool and well-ventilated place.

Disposal:

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in GHS classification:

No data available.

3. Composition/information on ingredients

Mixtures:

General information:

Solution of organosiloxanes, additives.

Hazardous Component(s):

Chemical name	Concentration*	Type	CAS number
Solvent naphtha (petroleum), light aliph.	85 - <95%	Component	64742-89-8
Tetrakis(2-methoxyethyl) orthosilicate	1 - <10%	Component	2157-45-1
Titanium tetrabutanolat	1 - <5%	Component	5593-70-4
2-Methoxyethanol	0.1 - <1%	Impurities	109-86-4

* 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:

In case of inhalation: Move person into fresh air and keep at rest. Get medical attention immediately. If breathing is difficult, trained personnel should give oxygen. If breathing stops, provide artificial respiration.

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. Remove any contact lenses after the initial 1-2 minutes of flushing and after advice from the attending physician. Continue flushing for several additional minutes. Open eyes wide apart. Get medical attention immediately, preferably an ophthalmologist.

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. Get medical attention immediately.

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. Due to the irritant properties of this product, ingestion may lead to burning or ulcers in the mouth, stomach and gastrointestinal tract, followed by stenosis. Most important symptoms/effects: Respiratory discomfort, Burning, Itching.

None known.

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

Hazards:

Any material aspirated during vomiting may cause severe lung injury.

Notes to the physician:

No specific recommendations. Show this Safety Data Sheet to the attending physician. Treat appropriately, avoid vomiting and normal rinse of stomach.

5. Fire-fighting measures

General Fire Hazards:

Vapors may travel considerable distance to a source of ignition and flash back. Containers may explode (due to the build-up of pressure) when exposed to extreme heat.

5.1 Extinguishing media:**Suitable extinguishing media:**

Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media:

Avoid water in straight hose stream; will scatter and spread fire.

5.2 Special hazards arising from the substance or mixture:

Flammable liquid. 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.

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:**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Do not breathe vapor. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

6.2 Environmental Precautions:

Collect spillage. Do not allow to enter drains, sewers or watercourses.

Spills may be reportable to the National Response Center (800-424-8802). and to state and/or local agencies.

6.3 Methods and material for containment and cleaning up:

Use non-sparking tools. Absorb with sand or other inert absorbent and place into containers. For waste disposal, see Section 13 of the SDS.

6.4 Reference to other sections:

For waste disposal, see Section 13 of the SDS.

7. Handling and storage**7.1 Precautions for safe handling:****Precautions:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. In partly emptied containers formation of explosive mixture is possible. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Use spark-proof tools and/or explosion-proof equipment. Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. If ventilation is insufficient, suitable respiratory protection must be provided. 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:

No data available.

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local/regional/national regulations. Store in original tightly closed container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Nitrogen blanketing of containers is recommended. Keep in properly labelled containers.

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:

Solvent naphtha (petroleum), light aliph.

Type	Exposure Limit Values	Source	Date	Remarks
TWA	100 ppm 400 mg/m3	OSHA Z1A	1989	
REL	100 ppm 400 mg/m3	NIOSH	2010	
PEL	100 ppm 400 mg/m3	OSHA Z1	03 2016	
IDLH	1,000 ppm -	NIOSH IDLH	10 2017	IDLH values based on the 1994 Revised Criteria
LEL	- 1.0 %	NIOSH IDLH	10 2017	

Biological Limit Values:

2-Methoxyethanol

Exposure Limit Values	Type	Source	Date
1 mg/g (Creatinine in urine)	2-Methoxyacetic acid (Sampling time: End of shift at end of work week.)	ACGIH BEI	03 2013

8.2 Exposure controls:

Appropriate Engineering Controls:

Use explosion-proof ventilation equipment to stay below exposure limits. In case of inadequate ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment:

Avoid inhalation of vapors/aerosols/dusts and contact with skin and eyes. Personal protective equipment should be chosen according to applicable standards, adapted to the conditions of use of the product and in discussion with the supplier of the personal protective equipment.

Eye/face protection:

Goggles/face shield are recommended.

Hand Protection:

Protective gloves are recommended.

Skin and Body Protection:

Wear appropriate clothing to prevent any possibility of skin contact. Apron and long sleeves are recommended.

Respiratory Protection:

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to fumes at levels exceeding the exposure limits.

Environmental Controls:

No data available.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	
Physical state:	Liquid
Form:	Viscous
Color:	Red
Odor:	Petroleum
pH:	Not applicable.
Melting point/freezing point:	No data available.
Boiling Point:	> 115 °C
Flash Point:	> 15 °C / 59 °F (Tagliabue Open Cup)
Flammability:	No data available.
Flammability Limit - Upper (%):	7.6 %(V) Petroleum distillate.
Flammability Limit - Lower (%):	1.4 %(V) Petroleum distillate.
Vapor pressure:	No data available.
Relative vapor density:	No data available.
Evaporation Rate:	No data available.
Density:	Approximate 0.77 kg/dm ³ (20 °C)
Solubility(ies):	
Solubility in Water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	1 - 10 mm ² /s
Particle characteristics:	Not applicable.

9.2 Other information: No data available.

10. Stability and reactivity

10.1 Reactivity:

Not relevant.

10.2 Chemical Stability:

Stable

10.3 Possibility of hazardous reactions:

Will not occur.

10.4 Conditions to avoid:

Avoid heat, sparks, open flames and other ignition sources.

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.

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:

Not classified for acute toxicity based on available data.

Dermal:

Not classified for acute toxicity based on available data.

Inhalation: Based on our knowledge of the composition information:

TITANIUM TETRABUTANOLATE (5593-70-4):

LC 50 (Rat): 20,100 mg/l

Repeated dose toxicity:

Based on our knowledge of the composition information:

TITANIUM TETRABUTANOLATE (5593-70-4):

NOAEL: 125 mg/kg ; (Rat ; Female, Male ; Gavage (Oral)) ; Results obtained on a similar product.
Subchronic exposure.

NOAEL: 2.35 mg/l ; (Rat ; Female, Male ; Inhalation - vapour) ; Results obtained on a similar product.
Subchronic exposure.

Skin Corrosion/Irritation:

Based on our knowledge of the composition information: Causes skin irritation.

TITANIUM TETRABUTANOLATE (5593-70-4):

Causes skin irritation.

Serious Eye Damage/Eye Irritation:

Based on our knowledge of the composition information: Causes serious eye damage.

TITANIUM TETRABUTANOLATE (5593-70-4):

Causes serious eye damage. (Rabbit) ; Method: Expert judgement

Respiratory or Skin Sensitization:

No data available.

Germ Cell Mutagenicity:

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

TITANIUM TETRABUTANOLATE (5593-70-4):

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

Chromosomal aberration: No clastogenic effect. (Human lymphocytes ; with and without metabolic activation) ; Method: OECD 473

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

In vivo: No data available.

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: May damage fertility or the unborn child.

TITANIUM TETRABUTANOLATE (5593-70-4):

Not classified

Fertility study 1 generation: NOAEL (parent): 18.5 mg/l ; NOAEL (F1): 18.5 mg/l ; NOAEL (F2): None. (Rat ; Female, Male ; Inhalation - vapor) ; The product is not considered to affect fertility. Results obtained on a similar product.

Teratogenicity: Based on our knowledge of the composition information: May damage fertility or the unborn child.

TITANIUM TETRABUTANOLATE (5593-70-4):

Not classified

NOAEL (terato): 10.8 mg/l ; NOAEL (mater): 10.8 mg/l (Rat ; Inhalation - vapor) ; The product is not considered to be toxic for development. Results obtained on a similar product.

Specific Target Organ Toxicity - Single Exposure:

Based on our knowledge of the composition information: May cause drowsiness or dizziness.

TITANIUM TETRABUTANOLATE (5593-70-4):

May cause drowsiness or dizziness. Oral: Target Organ(s): Central nervous system.

May cause respiratory irritation. Inhalation: Target Organ(s): Respiratory system

Specific Target Organ Toxicity - Repeated Exposure:

Based on our knowledge of the composition information:

TITANIUM TETRABUTANOLATE (5593-70-4):

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

Aspiration Hazard:

Based on our knowledge of the composition information: May be fatal if swallowed and enters airways.

TITANIUM TETRABUTANOLATE (5593-70-4):

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:

TITANIUM TETRABUTANOLATE (5593-70-4):

LC 50 (Pimephales promelas; 96 h ; Static) : 1,910 mg/l ; Method: OECD 203 ; Results obtained on a similar product.

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

TITANIUM TETRABUTANOLATE (5593-70-4):

EC 50 (Water flea (Daphnia magna); 48 h ; Static) : 590 mg/l ; Method: OECD 202 ; Results obtained on a similar product.

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

TITANIUM TETRABUTANOLATE (5593-70-4):

EC 50 (Green algae (Scenedesmus subspicatus); 72 h ; Static) : > 820 mg/l ; Method: OECD 201 ; Results obtained on a similar product.

NOEC (growth rate) (Green algae (Scenedesmus subspicatus); 72 h ; Static) : 201 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: Based on our knowledge of the composition information:

TITANIUM TETRABUTANOLATE (5593-70-4):

NOEC (Water flea (Daphnia magna); 21 d ; semi-static) : 4 mg/l ; Results obtained on a similar product.

12.2 Persistence and Degradability:

Biodegradation: Based on our knowledge of the composition information:

TITANIUM TETRABUTANOLATE (5593-70-4):

92 % (sewage, domestic, non-adapted ; 20 d ; Oxygen depletion) ; Method: According to a standardised method. ; Readily biodegradable. Results obtained on a similar product.

BOD/COD Ratio: No data available.

12.3 Bioaccumulative potential:

Bioconcentration Factor (BCF): No data available.

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

TITANIUM TETRABUTANOLATE (5593-70-4):

Log Kow: 0.88 (20 °C) ; Results obtained on a similar product.

2-METHOXYETHANOL (109-86-4):

Log Kow: -0.77

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. Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability.

Contaminated Packaging:

Contaminated packages should be as empty as possible.

Waste code:

EPA RCRA HAZARDOUS WASTE CODE: D001

14. Transport information

DOT

14.1 UN number or ID number:	UN 1268
14.2 UN Proper Shipping Name:	PETROLEUM DISTILLATES, N.O.S.
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
EmS No.:	128,
14.4 Packing Group:	II
14.5 Environmental hazards:	Not a Marine Pollutant
14.6 Special precautions for user:	None.

IMDG / IMO

14.1 UN number or ID number:	UN 1268
14.2 UN Proper Shipping Name:	PETROLEUM DISTILLATES, N.O.S.
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
EmS No.:	F-E , S-E
14.4 Packing Group:	II
14.5 Environmental hazards:	Not a Marine Pollutant
14.6 Special precautions for user:	None.
14.7 Maritime transport in bulk according to IMO instruments:	Not applicable.

IATA

14.1 UN number or ID number:	UN 1268
14.2 Proper Shipping Name:	PETROLEUM DISTILLATES, N.O.S.
14.3 Transport Hazard Class(es):	
Class:	3
Label(s):	3
14.4 Packing Group:	II
14.5 Environmental hazards:	No
14.6 Special precautions for user:	None.
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

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:

Flammable (gases, aerosols, liquids, or solids), Skin Corrosion or Irritation, Serious eye damage or eye irritation, Reproductive toxicity, Specific target organ toxicity (single or repeated exposure), Aspiration Hazard, Hazards Not Otherwise Classified (HNOC)

SARA 304 Emergency Release Notification: None present or none present in regulated quantities.

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:



This product can expose you to chemicals including: 2-Methoxyethanol (<0.2%): which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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

Chemical Identity:

Solvent naphtha (petroleum), light aliph.
Tetrakis(2-methoxyethyl) orthosilicate
Titanium tetrabutanolate
Titanium tetraisopropanolate
Butan-1-ol
2-Methoxyethanol

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

US. Pennsylvania RTK - Hazardous Substances:

Chemical Identity:

Solvent naphtha (petroleum), light aliph.

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.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory.

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

HMIS Hazard ID:

Health	*	3
Flammability		3
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: 01/27/2022

Version #: 12.2

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.