

SAFETY DATA SHEET

1. Identification

Product identifier: BLUESIL V-330

Other means of identification

Synonyms: RHODORSIL V-330

Recommended use and restriction on use

Recommended use: Molding diverse objects.

Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Bluestar Silicones USA Corp.
Address: 7979 Park Place Road
29745 York, SC
Telephone: +1 (803) 792-3000
Fax: +1 (803) 684-7202
Contact Person:
E-mail: product.stewardship@bluestarsilicones.com

Supplier

Company Name: Bluestar Silicones USA Corp.
Address: Two Tower Blvd, Suite 1601
08816-1100 East Brunswick, NJ
Telephone: +1 (732) 227-2060
Fax: +1 (732) 249-7000

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

2. Hazard(s) identification

Hazard Classification

Label Elements

Hazard Symbol: No symbol.

Signal Word: No signal word.

Hazard Statement: Quartz : When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use.

Precautionary Statement

Prevention: Not applicable.

Response: Not applicable.

Storage: Not applicable.

Other hazards which do not result in GHS classification: No data available.

3. Composition/information on ingredients

Mixtures

Composition Comments: Mixture of Polyorganosiloxanes, fillers, additives.

4. First-aid measures

General information: For further information refer to section 8 "Exposure-controls/personal protection".

Ingestion: Do not induce vomiting. Rinse mouth thoroughly. Get medical attention if symptoms occur.

Inhalation: Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin Contact: Immediately wipe excess material off skin with a dry cloth; then wash skin with plenty of soap and water. Seek medical attention if irritation develops or persists.

Eye contact: In case of contact, immediately absorb excess with clean absorbent cloth or cotton. Then, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur.

Most important symptoms/effects, acute and delayed

Symptoms: None known.

Hazards: No specific recommendations.

Indication of immediate medical attention and special treatment needed

Treatment: No specific recommendations.

5. Fire-fighting measures

General Fire Hazards: No specific recommendations.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Dry chemical, alcohol resistant foam or carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Product will burn under fire conditions. Hazardous Decomposition Products : formaldehyde, oxides of carbon and silica.

Special protective equipment and precautions for firefighters

| | |
|--|---|
| Special fire fighting procedures: | Water spray should be used to cool containers. |
| Special protective equipment for fire-fighters: | Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Use water to keep fire exposed containers cool and disperse vapors. |

6. Accidental release measures

| | |
|---|--|
| Personal precautions, protective equipment and emergency procedures: | Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment. |
| Methods and material for containment and cleaning up: | Absorb with inert material. Scrape up and place in appropriate closed container see Section 7 of the MSDS. |
| Notification Procedures: | Caution: Contaminated surfaces may be slippery. For waste disposal, see section 13 of the SDS. |
| Environmental Precautions: | Do not allow to enter drains, sewers or watercourses. |

7. Handling and storage

| | |
|--|---|
| Precautions for safe handling: | See Section 8 of the SDS for Personal Protective Equipment. For further information, refer to Section 10: "Stability and Reactivity". |
| Conditions for safe storage, including any incompatibilities: | Store in tightly closed original container in a dry, cool and well-ventilated place. |

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

Quartz : When encapsulated in a polymer, is not expected to pose a health hazard when processed under normal conditions of use.

| | |
|---|------------------------------|
| Appropriate Engineering Controls | No specific recommendations. |
|---|------------------------------|

Individual protection measures, such as personal protective equipment

| | |
|-----------------------------|---|
| General information: | Provide sufficient ventilation during operations which cause vapor formation. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air. |
| Eye/face protection: | Wear approved safety glasses. |
| Skin Protection | |
| Hand Protection: | Protective gloves are recommended. |
| Other: | Wear suitable protective clothing. |

| | |
|--------------------------------|---|
| Respiratory Protection: | No protection is ordinarily required under normal conditions of use and with adequate ventilation. |
| 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. |

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance

| | |
|---|--|
| Physical state: | Liquid |
| Form: | Viscous. |
| Color: | Beige. |
| Odor: | Slight odor |
| Odor threshold: | No data available. |
| pH: | Not applicable. |
| Freezing point: | No data available. |
| Boiling Point: | No data available. |
| Flash Point: | > 392 °F (200 °C) |
| 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: | < 0.013 hPa (68 °F (20 °C)) |
| Vapor density: | No data available. |
| Relative density: | 1.36 (77 °F (25 °C)) |
| Solubility(ies) | |
| Solubility in water: | Insoluble in water |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | > 752 °F (400 °C) |
| Decomposition temperature: | No data available. |
| Viscosity: | 18,000 - 22,000 mm ² /s (68 °F (20 °C)) |

10. Stability and reactivity

| | |
|--|---|
| Reactivity: | No data available. |
| Chemical Stability: | Stable. |
| Possibility of Hazardous Reactions: | Will not occur. |
| Conditions to Avoid: | None known. |
| Incompatible Materials: | Strong oxidizers, strong acids, and strong bases. |

Hazardous Decomposition Products: Thermal decomposition may liberate dimethylcyclsiloxanes. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air.

11. Toxicological information

Information on likely routes of exposure

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: ATEmix: 20,142.33 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:Quartz (SiO₂) Overall evaluation: Carcinogenic to humans.**US. National Toxicology Program (NTP) Report on Carcinogens:**Quartz (SiO₂) Known carcinogen.**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

Germ Cell Mutagenicity**In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**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.**Other effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.

Persistence and Degradability**Biodegradation****Product:** No data available.**BOD/COD Ratio****Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Mobility in Soil:** No data available.**Other Adverse Effects:** No data available.**13. Disposal considerations****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.**14. Transport information**

This material is not subject to transport regulations.

Environmental hazards: Not regulated.**Special precautions for user:** No special precautions.**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 (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations**US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Quartz (SiO₂) Carcinogenic.

US. New Jersey Worker and Community Right-to-Know Act**Chemical Identity**

Quartz (SiO₂)

US. Massachusetts RTK - Substance List**Chemical Identity**

Quartz (SiO₂)

US. Pennsylvania RTK - Hazardous Substances**Chemical Identity**

Quartz (SiO₂)

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. |
| EU EINECS 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. |

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

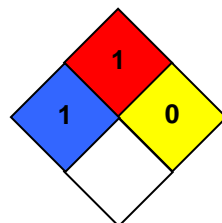
HMIS Hazard ID

| | | |
|----------------------------|--|----------|
| Health | | 1 |
| Flammability | | 1 |
| Physical Hazards | | 0 |
| PERSONAL PROTECTION | | B |

Safety glasses and gloves

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

NFPA Hazard ID



| | |
|--|-----------------|
| | Flammability |
| | Health |
| | Reactivity |
| | Special hazard. |

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

Issue Date: 01/06/2016
Revision Date: No data available.
Version #: 9.1

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.

SAFETY DATA SHEET

1. Identification

Product identifier: BLUESIL CA-45 BLUE

Other means of identification

Synonyms: RHODORSIL CA-45 BLUE

Recommended use and restriction on use

Recommended use: Catalyst

Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Bluestar Silicones USA Corp.
Address: 7979 Park Place Road
29745 York, SC
Telephone: +1 (803) 792-3000
Fax: +1 (803) 684-7202
Contact Person:
e-mail: product.stewardship@bluestarsilicones.com

Supplier

Company Name: Bluestar Silicones USA Corp.
Address: Two Tower Blvd, Suite 1601
08816-1100 East Brunswick, NJ
Telephone: +1 (732) 227-2060
Fax: +1 (732) 249-7000
Contact Person:
e-mail: product.stewardship@bluestarsilicones.com

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

2. Hazard(s) identification

Hazard Classification

Health Hazards

Toxic to reproduction

Category 2

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Suspected of damaging fertility or the unborn child.

Precautionary Statement

| | |
|--------------------|--|
| Prevention: | Use personal protective equipment as required. |
| Response: | If exposed or concerned: Get medical advice/attention. |
| Storage: | Store in well-ventilated place. |
| Disposal: | 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. |

Other hazards which do not result in GHS classification: Chemical compounds containing silicon - hydrogen bonds (SiH). This product may generate hydrogen gas. For further information, refer to Section 10: "Stability and Reactivity".

3. Composition/information on ingredients
Mixtures

| Chemical Identity | Common name and synonyms | CAS number | Content in percent (%)* |
|------------------------------|--------------------------|------------|-------------------------|
| Octamethylcyclotetrasiloxane | D4, | 556-67-2 | 0.1 - 1% |

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

Composition Comments: Mixture of Polyorganosiloxanes, fillers.

4. First-aid measures

| | |
|-----------------------------|--|
| General information: | For further information refer to section 8 "Exposure-controls/personal protection". |
| Ingestion: | Do not induce vomiting. Rinse mouth thoroughly. Get medical attention if symptoms occur. |
| Inhalation: | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin Contact: | Remove contaminated clothing and shoes. Immediately wipe excess material off skin with a dry cloth; then wash skin with plenty of soap and water. Seek medical attention if irritation develops or persists. |
| Eye contact: | In case of contact, immediately absorb excess with clean absorbent cloth or cotton. Then, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur. |

Most important symptoms/effects, acute and delayed

| | |
|------------------|------------------------------|
| Symptoms: | None known. |
| Hazards: | No specific recommendations. |

Indication of immediate medical attention and special treatment needed

Treatment: No specific recommendations.

5. Fire-fighting measures

General Fire Hazards: Water spray should be used to cool containers.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Dry chemical, alcohol resistant foam or carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire. Do not use alkaline powders.

Specific hazards arising from the chemical: Product will burn under fire conditions. This product may generate hydrogen gas. Vapors may form explosive mixtures with air. For further information, refer to Section 10: "Stability and Reactivity". Hazardous Decomposition Products : formaldehyde, oxides of carbon and silica.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Water spray should be used to cool containers.

Special protective equipment for fire-fighters: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Avoid contact with bases. Eliminate all sources of ignition.

Methods and material for containment and cleaning up: Ventilate the area. Use only non-sparking tools. Absorb with inert material. Avoid contact with bases. Scrape up and place in appropriate vented container.

Notification Procedures: Caution: Contaminated surfaces may be slippery. For waste disposal, see section 13 of the MSDS.

Environmental Precautions: Do not allow to enter drains, sewers or watercourses.

7. Handling and storage

Precautions for safe handling: Provide adequate ventilation if fumes or vapors are generated. Do not mix with incompatible materials. For further information, refer to Section 10: "Stability and Reactivity". Read and follow manufacturer's recommendations.

Conditions for safe storage, including any incompatibilities: Store in original vented container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

None of the components have assigned exposure limits.

Appropriate Engineering Controls No specific recommendations.

Individual protection measures, such as personal protective equipment

General information: Provide sufficient ventilation during operations which cause vapor formation. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air.

Eye/face protection: Wear approved safety glasses.

Skin Protection

Hand Protection: Protective gloves are recommended.

Other: Wear suitable protective clothing.

Respiratory Protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation.

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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance

| | |
|---|--|
| Physical state: | Liquid |
| Form: | Viscous. |
| Color: | Blue |
| Odor: | Slight odor |
| Odor threshold: | No data available. |
| pH: | Not applicable |
| Melting point/freezing point: | No data available. |
| International Inventories: | No data available. |
| Flash Point: | > 201 °F (94 °C) |
| Evaporation rate: | No data available. |
| Flammability (solid, gas): | No data available. |
| Flammability limit - upper (%): | 74 %(V) Hydrogen. |
| Flammability limit - lower (%): | 4 %(V) Hydrogen. |
| Vapor pressure: | No data available. |
| Vapor density: | No data available. |
| Relative density: | 1.04 (77 °F (25 °C)) |
| Solubility(ies) | |
| Solubility in water: | Practically Insoluble |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | > 752 °F (400 °C) |
| Decomposition temperature: | No data available. |
| Viscosity: | 400 - 600 mm ² /s (77 °F (25 °C)) |

10. Stability and reactivity

| | |
|--|--|
| Reactivity: | No data available. |
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of Hazardous Reactions: | This product may generate hydrogen gas. |
| Conditions to Avoid: | Avoid heat, sparks, open flames and other ignition sources. |
| Incompatible Materials: | A fire or explosion hazard arises because highly flammable gas (hydrogen) is released when it is in contact with : Strong oxidizers, strong bases and chemical compounds with mobile hydrogen, in the presence of metal salts and complexes. |
| Hazardous Decomposition Products: | Thermal decomposition may liberate dimethylcyclsiloxanes. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air. |

11. Toxicological information**Information on likely routes of exposure**

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

Symptoms related to the physical, chemical and toxicological characteristics

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

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

| | |
|----------------------------|--------------------|
| Oral Product: | No data available. |
| Dermal Product: | No data available. |
| Inhalation Product: | No data available. |

Specified substance(s):
Octamethylcyclotetrasiloxane LC 50 (Rat, 4 h): 36 mg/l

Repeated Dose Toxicity

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
NOAEL (Rat, Inhalation, 24 months): 1.820 mg/l
NOAEL (Rabbit, Dermal, 3 weeks): 960 mg/kg

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
(Rabbit, 24 h): Not irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
(Rabbit, 24 h): Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
(Pig)Not a skin sensitizer.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

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

No carcinogenic components identified

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

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
Bacteria: No mutagenic components identified
Chromosomal aberration: No mutagenic components identified

In vivo

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane
(Rat)No mutagenic components identified

Reproductive Toxicity

Product: No data available.

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.**Other Effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane LC 50 (Oncorhynchus mykiss, 96 h): ≥ 0.022 mg/l**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane EC 50 (Water flea (Daphnia magna), 48 h): > 0.015 mg/l**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane NOEC (Oncorhynchus mykiss, 93 d): ≥ 0.0044 mg/l**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane NOEC (Water flea (Daphnia magna), 21 d): 0.0079 mg/l**Toxicity to Aquatic Plants****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane EC 50 (Green algae (Selenastrum capricornutum), 96 h): > 0.022 mg/l**Persistence and Degradability**

Biodegradation**Product:** No data available.**Specified substance(s):**

Octamethylcyclotetrasiloxane 3.7 % (29 d)

BOD/COD Ratio**Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)****Product:** No data available.**Specified substance(s):**

Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12,400

Partition Coefficient n-octanol / water (log Kow)**Product:** No data available.**Mobility in Soil:** No data available.**Known or predicted distribution to environmental compartments**

Octamethylcyclotetrasiloxane No data available.

Other Adverse Effects: No data available.**13. Disposal considerations****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. Waste of this material should not be mixed with other waste. Provide measures such as vented bungs to ensure pressure relief in the waste container.**14. Transport information**

This material is not subject to transport regulations.

Environmental hazards: Not regulated.**Special precautions for user:** Packaging with a breathing/venting bung are FORBIDDEN for transport by air.**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 (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations**US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

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

No ingredient regulated by NJ Right-to-Know Law present.

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 |
| EU EINECS 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 |

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

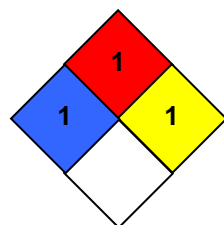
HMIS Hazard ID

| | |
|----------------------------|-----|
| Health | * 1 |
| Flammability | 1 |
| Physical Hazards | 1 |
| PERSONAL PROTECTION | B |

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect

NFPA Hazard ID



| | |
|--|-----------------|
| | Flammability |
| | Health |
| | Reactivity |
| | Special hazard. |

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

| | |
|-----------------------------|--------------------|
| Issue Date: | 05/21/2015 |
| Revision Date: | No data available. |
| Version #: | 7.0 |
| 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.

SAFETY DATA SHEET

1. Identification

Product identifier: BLUESIL CA-45 FC

Other means of identification

Synonyms: RHODORSIL CA-45 FC

Recommended use and restriction on use

Recommended use: Catalyst

Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Bluestar Silicones USA Corp.
Address: 7979 Park Place Road
29745 York, SC
Telephone: +1 (803) 792-3000
Fax: +1 (803) 684-7202
Contact Person:
e-mail: product.stewardship@bluestarsilicones.com

Supplier

Company Name: Bluestar Silicones USA Corp.
Address: Two Tower Blvd, Suite 1601
08816-1100 East Brunswick, NJ
Telephone: +1 (732) 227-2060
Fax: +1 (732) 249-7000
Contact Person:
e-mail: product.stewardship@bluestarsilicones.com

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

2. Hazard(s) identification

Hazard Classification

Health Hazards

Toxic to reproduction Category 2

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Suspected of damaging fertility or the unborn child.

Precautionary Statement

- Prevention:** Use personal protective equipment as required.
- Response:** If exposed or concerned: Get medical advice/attention.
- Storage:** Store in well-ventilated place.
- Disposal:** 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.

Other hazards which do not result in GHS classification: Chemical compounds containing silicon - hydrogen bonds (SiH). This product may generate hydrogen gas. For further information, refer to Section 10: "Stability and Reactivity".

3. Composition/information on ingredients**Mixtures**

| Chemical Identity | Common name and synonyms | CAS number | Content in percent (%)* |
|------------------------------|--------------------------|------------|-------------------------|
| Octamethylcyclotetrasiloxane | D4, | 556-67-2 | 0.1 - 1% |

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

Composition Comments: Mixture of Polyorganosiloxanes, fillers.

4. First-aid measures

- General information:** For further information refer to section 8 "Exposure-controls/personal protection".
- Ingestion:** Do not induce vomiting. Rinse mouth thoroughly. Get medical attention if symptoms occur.
- Inhalation:** Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
- Skin Contact:** Remove contaminated clothing and shoes. Immediately wipe excess material off skin with a dry cloth; then wash skin with plenty of soap and water. Seek medical attention if irritation develops or persists.
- Eye contact:** In case of contact, immediately absorb excess with clean absorbent cloth or cotton. Then, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur.

Most important symptoms/effects, acute and delayed

- Symptoms:** None known.
- Hazards:** No specific recommendations.

Indication of immediate medical attention and special treatment needed

- Treatment:** No specific recommendations.

5. Fire-fighting measures

General Fire Hazards: Water spray should be used to cool containers.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Dry chemical, alcohol resistant foam or carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire. Do not use alkaline powders.

Specific hazards arising from the chemical: Product will burn under fire conditions. This product may generate hydrogen gas. Vapors may form explosive mixtures with air. For further information, refer to Section 10: "Stability and Reactivity". Hazardous Decomposition Products : formaldehyde, oxides of carbon and silica.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Water spray should be used to cool containers.

Special protective equipment for fire-fighters: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Avoid contact with bases. Eliminate all sources of ignition.

Methods and material for containment and cleaning up: Ventilate the area. Use only non-sparking tools. Absorb with inert material. Avoid contact with bases. Scrape up and place in appropriate vented container.

Notification Procedures: Caution: Contaminated surfaces may be slippery. For waste disposal, see section 13 of the MSDS.

Environmental Precautions: Do not allow to enter drains, sewers or watercourses.

7. Handling and storage

Precautions for safe handling: Provide adequate ventilation if fumes or vapors are generated. Do not mix with incompatible materials. For further information, refer to Section 10: "Stability and Reactivity". Read and follow manufacturer's recommendations.

Conditions for safe storage, including any incompatibilities: Store in original vented container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

None of the components have assigned exposure limits.

Appropriate Engineering Controls No specific recommendations.

Individual protection measures, such as personal protective equipment

General information: Provide sufficient ventilation during operations which cause vapor formation. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air.

Eye/face protection: Wear approved safety glasses.

Skin Protection

Hand Protection: Protective gloves are recommended.

Other: Wear suitable protective clothing.

Respiratory Protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation.

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.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance

| | |
|---|--|
| Physical state: | Liquid |
| Form: | Viscous. |
| Color: | Violet |
| Odor: | Slight odor |
| Odor threshold: | No data available. |
| pH: | Not applicable |
| Melting point/freezing point: | No data available. |
| International Inventories: | No data available. |
| Flash Point: | > 201 °F (94 °C) |
| Evaporation rate: | No data available. |
| Flammability (solid, gas): | No data available. |
| Flammability limit - upper (%): | 74 %(V) Hydrogen. |
| Flammability limit - lower (%): | 4 %(V) Hydrogen. |
| Vapor pressure: | No data available. |
| Vapor density: | No data available. |
| Relative density: | 1.04 (77 °F (25 °C)) |
| Solubility(ies) | |
| Solubility in water: | Practically Insoluble |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Auto-ignition temperature: | > 752 °F (400 °C) |
| Decomposition temperature: | No data available. |
| Viscosity: | 400 - 800 mm ² /s (77 °F (25 °C)) |

10. Stability and reactivity

| | |
|--|--|
| Reactivity: | No data available. |
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of Hazardous Reactions: | This product may generate hydrogen gas. |
| Conditions to Avoid: | Avoid heat, sparks, open flames and other ignition sources. |
| Incompatible Materials: | A fire or explosion hazard arises because highly flammable gas (hydrogen) is released when it is in contact with : Strong oxidizers, strong bases and chemical compounds with mobile hydrogen, in the presence of metal salts and complexes. |
| Hazardous Decomposition Products: | Thermal decomposition may liberate dimethylcyclsiloxanes. This product can form formaldehyde vapors when heated to temperatures above 150 degrees C in the presence of air. |

11. Toxicological information**Information on likely routes of exposure**

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

Symptoms related to the physical, chemical and toxicological characteristics

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

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

| | |
|----------------------------|--------------------|
| Oral Product: | No data available. |
| Dermal Product: | No data available. |
| Inhalation Product: | No data available. |

Specified substance(s):
Octamethylcyclotetrasiloxane LC 50 (Rat, 4 h): 36 mg/l

Repeated Dose Toxicity

Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane
NOAEL (Rat, Inhalation, 24 months): 1.820 mg/l
NOAEL (Rabbit, Dermal, 3 weeks): 960 mg/kg

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane
(Rabbit, 24 h): Not irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane
(Rabbit, 24 h): Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane
(Pig)Not a skin sensitizer.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane
Bacteria: No mutagenic components identified
Chromosomal aberration: No mutagenic components identified

In vivo
Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane
(Rat)No mutagenic components identified

Reproductive Toxicity

Product: No data available.

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.**Other Effects:** No data available.**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane LC 50 (Oncorhynchus mykiss, 96 h): ≥ 0.022 mg/l**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane EC 50 (Water flea (Daphnia magna), 48 h): > 0.015 mg/l**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane NOEC (Oncorhynchus mykiss, 93 d): ≥ 0.0044 mg/l**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane NOEC (Water flea (Daphnia magna), 21 d): 0.0079 mg/l**Toxicity to Aquatic Plants****Product:** No data available.**Specified substance(s):**Octamethylcyclotetrasiloxane EC 50 (Green algae (Selenastrum capricornutum), 96 h): > 0.022 mg/l**Persistence and Degradability**

Biodegradation**Product:** No data available.**Specified substance(s):**

Octamethylcyclotetrasiloxane 3.7 % (29 d)

BOD/COD Ratio**Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)****Product:** No data available.**Specified substance(s):**

Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12,400

Partition Coefficient n-octanol / water (log Kow)**Product:** No data available.**Mobility in Soil:** No data available.**Known or predicted distribution to environmental compartments**

Octamethylcyclotetrasiloxane No data available.

Other Adverse Effects: No data available.**13. Disposal considerations****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. Waste of this material should not be mixed with other waste. Provide measures such as vented bungs to ensure pressure relief in the waste container.**14. Transport information**

This material is not subject to transport regulations.

Environmental hazards: Not regulated.**Special precautions for user:** Packaging with a breathing/venting bung are FORBIDDEN for transport by air.**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 (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations**US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

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

No ingredient regulated by NJ Right-to-Know Law present.

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 |
| EU EINECS List: | 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 |

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

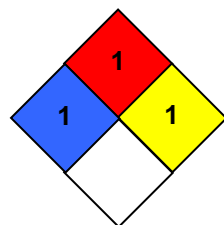
HMIS Hazard ID

| | | |
|----------------------------|---|----------|
| Health | * | 1 |
| Flammability | 1 | |
| Physical Hazards | 1 | |
| PERSONAL PROTECTION | | B |

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect

NFPA Hazard ID



Flammability
 Health
 Reactivity
 Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date: 05/23/2015

Revision Date: No data available.

Version #: 3.0

SDS_US

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.