

SECTION 1 PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: Polybrite 90

Recommended Use: Silicone Roof Coating

Restriction on Use: None

Manufacturer:
Polyglass U.S.A. Inc.
1111 West Newport Center Drive
Deerfield Beach, Florida 33442
866-222-9782

SDS Date of Preparation: 8/8/18

Emergency Contact: (800) 424-9300 CHEMTREC (USA)

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification:

| Physical | Health |
|---------------|---|
| Not Hazardous | Skin Sensitization Category 1B |
| | Specific Target Organ Toxicity Repeated Exposure Category 2 (blood) |

Label Elements:





WARNING

May cause an allergic reaction.

May cause damage to blood through prolonged or repeated ingestion.

Do not breathe mists or spray.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

Get medical attention if you feel unwell.

Dispose of contents and container in accordance with local and national regulations.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENTS</u> | <u>CAS#.</u> | <u>WT.%</u> |
|-----------------------------|--------------|-------------|
| Crystalline Silica, quartz* | 14808-60-7 | 30-35% |
| Methyl Oximino Silane | 22984-54-9 | <7 |
| Titanium Dioxide* | 13463-67-7 | 5-10% |
| Carbon Black* | 1333-86-4 | <0.5% |

Polybrite 90



The crystalline silica, titanium dioxide and carbon black in this product are inextricably bound in the polymer matrix. No exposure occurs during normal use or in an emergency.

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURERS

Eyes: Flush with large quantities of water, holding the eyelids apart. Get medical attention if irritation develops.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation develops, get medical attention. Launder clothing before re-use.

Inhalation: If symptoms develop, move to fresh air. If irritation persists or breathing is difficult, get medical attention.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to a person who is unconscious or convulsing. If large amount if swallowed or gastrointestinal effects develop, get medical attention.

Most important symptoms/effects, acute and delayed: May cause eye irritation. Prolonged skin contact may cause irritation. May cause skin sensitization. Inhalation of spray or mists may cause upper respiratory tract irritation. Ingestion may cause nausea, vomiting and diarrhea. Prolonged or repeated ingestion may cause effects on the cardiovascular system, blood and blood forming organs.

Indication of immediate medical attention and special treatment, if necessary: None expected under normal conditions of use.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Use water fog, carbon dioxide, dry chemical or foam to extinguish fire. Cool fire exposed containers with water.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

Specific Hazards Arising from the Chemical: The product is not flammable or combustible but may burn under fire conditions. Combustion products include carbon, nitrogen and silicone oxides and various hydrocarbon fragments.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate protective clothing to avoid eye and skin contact. Do not eat, drink or smoke while cleaning up. Ensure adequate ventilation.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and Materials for Containment and Cleaning Up: Dike the spilled material. Attempt to reclaim the free product, if this is possible. Collect with an inert material and place into a closable container for disposal. Wash spill area with soap and water.

SECTION 7 HANDLING and STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Avoid breathing aerosols, mists and spray. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. . Do not eat, drink or smoke while handling.

Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

Polybrite 90



Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well-ventilated area. Store in a tightly closed container. Storing between 35-85 °F (2-30°C). Do not store at temperatures above 120°F to protect product quality. Keep in original container.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

| INGREDIENTS | EXPOSURE LIMITS |
|----------------------------|---|
| Crystalline Silica, Quartz | 0.05 mg/m³ TWA (respirable dust) OSHA PEL* |
| | 0.025 mg/m³ TWA ACGIH TLV (respirable fraction) |
| Methyl Oximino Silane | None Established |
| Titanium Dioxide* | 15 mg/m ³ TWA OSHA PEL (total dust) |
| | 10 mg/m ³ TWA ACGIH |
| Carbon Black* | 3.5 mg/m³ TWA OSHA PEL |
| | 3 mg/m³ TWA ACGIH TLV (inhalable) |

^{* 2016} OSHA PEL effective as follows:

Construction June 23, 2017 29CFR 1926.1153

General Industry and Maritime June 23, 2018 29CFR 1910.1053 / 1915.1053

Oil and Gas including Hydraulic Fracturing June 23, 2018 29CFR 1910.1053

The OSHA PEL for Quartz until the effective dates for new PEL above:

_____10 mg/m3 TWA (respirable dust) _____30 mg/m3 TWA (total dust) %SiO₂ + 2

Appropriate Engineering Controls: No special controls usually required. If the exposures are excessive, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Respiratory Protection: None normally required. If the exposures the product is heated or sprayed, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Gloves: Impervious gloves are recommended to prevent prolonged skin contact.

Eye Protection: Chemical safety goggles recommended if contact is possible.

Other Protective Equipment: Impervious clothing as needed to prevent contact.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

Appearance And Odor: Colored viscous liquid with a slight sweet odor.

| Boiling Point (@ 760 mmHg): Not available | Freezing Point: Not available |
|--|---|
| Odor Threshold: Not available | Viscosity: Not available |
| Relative density (H2O=1): 1.26-1.30 | Vapor Pressure: Not available |
| VOC: <100 gm/L | Vapor Density (AIR=1): >1 |
| Evaporation Rate: Slower than ether | Solubility In Water: Negligible |
| pH: Not available | Partition Coefficient n-Octanol/Water: Not determined |
| Flash Point: >200°F / >93.3°C COC | Autoignition Temperature: Not available |
| Decomposition Temperature: Not available | Flammability (solid, gas): Not applicable |
| Flammable Limits: (vol % in air) LEL – N/A | UEL – N/A |



SECTION 10 STABILITY and REACTIVITY

Reactivity: Reacts with water.

Chemical Stability: Stable under normal storage and handling conditions

Possibility of Hazardous Reactions: Reacts with water to form methyl ethyl ketoxime when exposed to water or humid air. Methyl ethyl ketoxime has been shown to cause severe eye irritation with permanent damage, skin sensitization, effects to the red blood cells and anemia and irritation of mucous membranes of the nasal cavity. Methyl ethyl ketoxime has been shown to cause liver cancer in mice and rats.

Conditions to avoid: Avoid contact with water or humid air.

Incompatible materials: Avoid water, strong oxidizing agents, concentrated nitric and sulfuric acids, halogen, and molten sulfur

Hazardous decomposition products: Thermal decomposition may yield oxides of carbon and nitrogen and hydrocarbon fragments.

SECTION 11 TOXICOLOGICAL INFORMATION

Eve: Contact may cause irritation with redness and tearing.

Skin: Prolonged skin contact may cause irritation with redness, itching and pain.

Inhalation Excessive inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea and diarrhea.

Sensitization: Methyl Oximino Silane was positive in a guinea maximization test.

Chronic Effects: In a 28 day combined repeated dose toxicity study with the developmental toxicity screening test, rats were administer methyl oximino silane at 10 mg, 50 mg and 250 mg per day. Effects on haematology, blood chemistry and histopathological changes were reported at 50 and 250 mg/kg per day. NOAEL 10 mg/kg.

Carcinogenicity: Crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC, "Known to be a Human Carcinogen" by NTP and "Suspected Human Carcinogen" (A2) by ACGIH. Titanium dioxide and carbon black are listed by IARC as Possibly Carcinogenic to Humans (Group 2B). Carbon black is listed as a "Confirmed Animal Carcinogen with Unknown Relevance to Humans" (A3) by ACGIH. The crystalline silica, quartz, titanium dioxide and carbon black are inextricably bound and no exposure occurs during use. None of the other components present at 0.1% or greater are listed as a carcinogen by NTP, IARC, ACGIH or OSHA.

Numerical Measures of Toxicity:

Crystalline Silica: Oral rat LD50: >10,000 mg/kg; Inhalation rat LC50: >0.139 mg/l/4 hr; Dermal rabbit LD50: >5000 mg/kg Methyl Oximino Silane: Oral rat LD50 2463 mg/kg, Dermal rat LD50 >2000 mg/kg

Titanium Dioxide: Oral rat LD50: >5000 mg/kg Carbon black: Oral rat LD50: >8000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Crystalline Silica: 72 hr LC50 carp >10,000 mg/L

Methyl Oximino Silane: 96 hr EC50 Oncorhynchus mykiss >120 mg/L, 48 hr EC50 daphnia magna >120 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 94 mg/L

Titanium Dioxide: 96 hr LĊ50 Pimephales promelas >1000 mg/L, 48 hr EC50 daphnia magna >1000 mg/L, 72 hr EC50 Pseudokirchneriella subcapitata 61 mg/L

Carbon Black: 96 hr LC0 Danio rerio 1000 mg/L, 24 hr EC50 daphnia magna > 5600 mg/L, EC50 Desmodesmus subspicatus > 10000 mg/L

Persistence and degradability: Methyl oximino silane is not readily biodegradable.

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility in soil: No data available.

Other adverse effects: No data available.



SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name: Not Regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

Environmental hazards: None known

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only

in packaged form.

Special precautions: None known

SECTION 15: REGULATORY INFORMATION

SARA Hazard Category (311/312): See OSHA Hazard Classification in Section 2.

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313: None

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: This product contains the following chemical known to the State of California to cause cancer or reproductive toxicity: none – crystalline silica, quartz, carbon black and titanium dioxide are inextricably bound.

SECTION 16: OTHER INFORMATION

NFPA Rating:Health = 2Fire = 0Instability = 0HMIS Rating:Health = 2Fire = 0Physical Hazard = 0

SDS Date of Preparation: 8/8/18

Revision Summary: Section 8: OEL, Section 9: VOC, and Section 15: SARA 311/312 statement.