

**Safety Data Sheet**

**POLYBRITE 90.1**

Safety Data Sheet dated: 07/06/2022 - version 5

Date of first edition: 10/22/2021

**1. Identification**

**Product identifier**

Mixture identification:

Trade name: POLYBRITE 90.1

Trade code: 6PB901W5

**Recommended use and restrictions on use**

Recommended use: Coating

Restrictions on use: Not available

**Supplier's details**

Company: Polyglass U.S.A. Inc.

1111 West Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: 866-222-9782

Responsible: Not available

**Emergency phone number**

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887 Emergency Transport CANUTEC (Canada) 1-613-996-6666

**2. Hazard identification**



**Classification of the product**

Flammable Liquids — Category 4

Skin irritation, Category 2

Eye irritation, Category 2A

Carcinogenicity, Category 2

Reproductive toxicity, Category 2

Specific target organ toxicity following single exposure, Category 3

Chronic (long-term) aquatic hazard - Category 3

Skin Sensitization, Category 1

Combustible liquid

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed.

May cause respiratory irritation.

Harmful to aquatic life with long lasting effects.

May cause an allergic skin reaction.

**Label elements**

**Pictograms and Signal Words**



Warning

**Hazard statements:**

- H227 Combustible liquid
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
- H361 Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed.
- H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

- P201 Obtain special instructions before use.

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a doctor if you feel unwell.
P321	Specific treatment (see supplementary instructions on this label)
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire, use a dry powder fire extinguisher to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

**Other hazards**

None

**Ingredient(s) with unknown acute toxicity**

None

This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a dust hazard)

**3. Composition/information on ingredients**

**Substances**

Not Relevant

**Mixtures**

Hazardous components within the meaning of WHMIS 2015 and related classification:

**List of components**

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
5-10 %	titanium dioxide; Dioxotitanium	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	
2.5-5 %	2-butanone, o,o',o''-(methylsilylydyne)trioxime; Methyltris(Methylethylketoxime) silane	CAS:22984-54-9 EC:245-366-4	Eye Irrit. 2A, H319; STOT RE 2, H373; Skin Sens. 1B, H317	
2.5-5 %	octamethylcyclotetrasiloxane; Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl-	CAS:556-67-2 EC:209-136-7 Index:014-018-00-1	Flam. Liq. 3, H226; Repr. 2, H361; Aquatic Chronic 4, H413	
0.49-1 %	n-[3-(trimethoxysilyl)propyl] ethylenediamine; (2-Aminoethyl)(3-(trimethoxysilyl)propyl)amine	CAS:1760-24-3 EC:217-164-6	Flam. Liq. 4, H227; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317	

The actual concentration of the components listed above is withheld as a trade secret.

## 4. First-aid measures

### Description of necessary first-aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:

- Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- In case of inhalation, consult a doctor immediately and show him packing or label.

### Most important symptoms/effects, acute and delayed

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

### Indication of immediate medical attention and special treatment needed, if necessary

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

- (see paragraph 4.1)

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## 5. Fire-fighting measures

### Suitable and unsuitable extinguishing media

Suitable extinguishing media:

- In case of fire, use a dry powder fire extinguisher to extinguish.

Unsuitable extinguishing media:

- None in particular.

### Specific hazards arising from the hazardous product

- Do not inhale explosion and combustion gases.
- Burning produces heavy smoke.
- Hazardous combustion products: Not available
- Explosive properties: Not Relevant
- Oxidizing properties: Not Relevant

### Special protective equipment and precautions for fire-fighters

- Use suitable breathing apparatus.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Move undamaged containers from immediate hazard area if it can be done safely.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.
- Provide adequate ventilation.
- Use appropriate respiratory protection.
- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
- Limit leakages with earth or sand.

### Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Retain contaminated washing water and dispose it.

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## 7. Handling and storage

### Precautions for safe handling

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Exercise the greatest care when handling or opening the container.
- Do not use on extensive surface areas in premises where there are occupants.
- Use localized ventilation system.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### Conditions for safe storage, including any incompatibilities

Store cool and dry.

Storage temperature: Not available

Always keep in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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## 8. Exposure controls/personal protection

### Control parameters

#### List of components with OEL value

	OEL Type	Country	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Note
titanium dioxide; Dioxotitanium CAS: 13463-67-7	OSHA		15				
	ACGIH		10				A4 - Not Classifiable as a Human Carcinogen; lower respiratory tract irritation;
	MAK	GERMANY	0.3				
	MAK	AUSTRIA	5		10		
	MAK	SWITZERLAND	3				

### Appropriate engineering controls

Not available

### Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

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## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: viscous liquid various

Odour: Not Relevant

Odour threshold: Not Relevant

pH: Not Relevant

Melting point / freezing point: Not Relevant

Initial boiling point and boiling range: Not Relevant

Flash point: 65 °C (149 °F) Notes This product has been tested per ASTM D-4206. It was determined that it does not sustain combustion.

Evaporation rate: Not Relevant

Upper/lower flammability or explosive limits: Not Relevant  
Vapour density: Not Relevant  
Vapour pressure: Not Relevant  
Relative density: Not Relevant  
Solubility in water: Not Relevant  
Solubility in oil: Not Relevant  
Partition coefficient (n-octanol/water): Not Relevant  
Auto-ignition temperature: Not Relevant  
Decomposition temperature: Not Relevant  
Viscosity: Not Relevant  
Explosive properties: Not Relevant  
Oxidizing properties: Not Relevant  
Solid/gas flammability: Not Relevant

#### Other information

Substance Groups relevant properties Not Relevant  
Miscibility: Not Relevant  
Fat Solubility: Not Relevant  
Conductivity: Not Relevant

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## 10. Stability and reactivity

### Reactivity

Stable

### Chemical stability

Data not available.

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

None in particular.

### Hazardous decomposition products

None.

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## 11. Toxicological information

### Information on toxicological effects

#### Toxicological information of the mixture:

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin irritation, Category 2(H315)
c) serious eye damage/irritation	The product is classified: Eye irritation, Category 2A(H319)
d) respiratory or skin sensitisation	The product is classified: Skin Sensitization, Category 1(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	The product is classified: Carcinogenicity, Category 2(H351)
g) reproductive toxicity	The product is classified: Reproductive toxicity, Category 2(H361)
h) STOT-single exposure	The product is classified: Specific target organ toxicity following single exposure, Category 3(H335)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

#### Toxicological information on main components of the mixture:

titanium dioxide; a) acute toxicity LD50 Oral Rat > 10000 mg/kg  
Dioxotitanium

octamethylcyclotetrasiloxane; Cyclotetrasiloxane, 2,2,4,4,6,6,8,8- a) acute toxicity LD50 Skin Rabbit = 794 µL/kg

octamethyl-

LC50 Inhalation Rat = 36 g/m<sup>3</sup> 4h

LD50 Oral Rat = 1540 mg/kg

LD50 Skin Rabbit = 794 µL/kg

LC50 Inhalation Rat = 36 g/m<sup>3</sup> 4h

n-[3-(trimethoxysilyl)propyl] ethylenediamine; (2-Aminoethyl)(3-(trimethoxysilyl)propyl) amine

a) acute toxicity

LD50 Oral Rat = 2413 mg/kg

**Substance(s) listed on the IARC Monographs:**

titanium dioxide; Dioxititanium Group 2B

**Substance(s) listed as OSHA Carcinogen(s):**

titanium dioxide; Dioxititanium

**Substance(s) listed as NIOSH Carcinogen(s):**

titanium dioxide; Dioxititanium

**Substance(s) listed on the NTP report on Carcinogens:**

None

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**12. Ecological information**

**Ecotoxicity**

Adopt good working practices, so that the product is not released into the environment.

**List of Eco-Toxicological properties of the product**

The product is classified: Chronic (long-term) aquatic hazard - Category 3(H412)

**List of components with eco-toxicological properties**

**Component**

**Ident. Numb. Ecotox Infos**

octamethylcyclotetrasiloxane;  
Cyclotetrasiloxane, 2,2,4,4,6,6,8,  
8-octamethyl-

CAS: 556-67-2 -  
EINECS: 209-  
136-7 - INDEX:  
014-018-00-1

a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio > 500 mg/L 96h  
IUCLID

a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus > 1000 mg/L 96h  
IUCLID

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

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**13. Disposal considerations**

**Safe handling and methods for disposal**

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

**Special precautions:**

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Do not re-use empty containers.

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## 14. Transport information

Not classified as dangerous in the meaning of transport regulations.

**UN number**

TDG-UN number: Not Applicable  
ADR-UN number: Not Applicable  
DOT-UN Number: Not Applicable  
IATA-Un number: Not Applicable  
IMDG-Un number: Not Applicable

**UN proper shipping name**

TDG-Shipping Name: Not Applicable  
ADR-Shipping Name: Not Applicable  
DOT-Proper Shipping Name: Not Applicable  
IATA-Technical name: Not Applicable  
IMDG-Technical name: Not Applicable

**Transport hazard class(es)**

TDG-Class: Not Applicable  
ADR-Class: Not Applicable  
DOT-Hazard Class: Not Applicable  
IATA-Class: Not Applicable  
IMDG-Class: Not Applicable

**Packing group**

TDG-Packing Group: Not Applicable  
ADR-Packing Group: Not Applicable  
DOT Packing Group: Not Applicable  
IATA-Packing group: Not Applicable  
IMDG-Packing group: Not Applicable

**Environmental hazards**

Marine pollutant: No  
Environmental Pollutant: Not Applicable  
DOT-RQ: Not Applicable

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)**

Not Applicable

**Special precautions in connection with transport or conveyance**

TDG:

Not Applicable

Department of Transportation (DOT):

Not Applicable

Road and Rail ( ADR-RID ) :

Not Applicable

Air ( IATA ) :

Not Applicable

Sea ( IMDG ) :

Not Applicable

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## 15. Regulatory information

### Canada - Federal regulations

**DSL - Domestic Substances List**

**DSL Inventory:**

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

**NDSL Inventory:**

No substances listed

## **NPRI - National Pollutant Release Inventory**

### **Substances listed in NPRI:**

No substances listed

## **USA - Federal regulations**

### **TSCA - Toxic Substances Control Act**

#### **TSCA inventory:**

All the components are listed on the TSCA inventory

#### **TSCA listed substances:**

titanium dioxide; Dioxititanium is listed in TSCA Section 8b

2-butanone, o,o',o''-(methylsilylidyne)trioxime; Methyltris(Methylethylketoxime) silane is listed in TSCA Section 8b

octamethylcyclotetrasiloxane; Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl- is listed in TSCA Section 8b Section 8a - PAIR Section 12b

n-[3-(trimethoxysilyl)propyl] ethylenediamine; (2-Aminoethyl)(3-(trimethoxysilyl)propyl)amine is listed in TSCA Section 8b

### **SARA - Superfund Amendments and Reauthorization Act**

#### **Section 302 - Extremely Hazardous Substances:**

No substances listed

#### **Section 304 - Hazardous substances:**

No substances listed

#### **Section 313 - Toxic chemical list:**

No substances listed

### **CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

#### **Substance(s) listed under CERCLA:**

No substances listed

### **CAA - Clean Air Act**

#### **CAA listed substances:**

No substances listed

### **CWA - Clean Water Act**

#### **CWA listed substances:**

No substances listed

## **USA - State specific regulations**

### **California Proposition 65**

#### **Substance(s) listed under California Proposition 65:**

titanium dioxide; Dioxititanium Listed as carcinogen

### **Massachusetts Right to know**

#### **Substance(s) listed under Massachusetts Right to know:**

titanium dioxide; Dioxititanium

### **Pennsylvania Right to know**

#### **Substance(s) listed under Pennsylvania Right to know:**

titanium dioxide; Dioxititanium

### **New Jersey Right to know**

#### **Substance(s) listed under New Jersey Right to know:**

titanium dioxide; Dioxititanium

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## **16. Other information**

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Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

<b>Code</b>	<b>Description</b>
H226	Flammable liquid and vapour.
H227	Combustible liquid
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H413	May cause long lasting harmful effects to aquatic life.

<b>Code</b>	<b>Hazard class and hazard category</b>	<b>Description</b>
A.2/2	Skin Irrit. 2	Skin irritation, Category 2
A.3/1	Eye Dam. 1	Serious eye damage, Category 1
A.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.4.2/1B	Skin Sens. 1B	Skin Sensitization, Category 1B
A.6/2	Carc. 2	Carcinogenicity, Category 2
A.7/2	Repr. 2	Reproductive toxicity, Category 2
A.9/2	STOT RE 2	Specific target organ toxicity following repeated exposure, Category 2
B.6/3	Flam. Liq. 3	Flammable Liquids — Category 3
B.6/4	Flam. Liq. 4	Flammable Liquids — Category 4
CAN-HAE/C4	Aquatic Chronic 4	Chronic (long-term) aquatic hazard - Category 4

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION

