

Safety Data Sheet

Section 1. Identification

GHS product Identifier Blue Barrier™ Liquid Flashing
Other means of identification PG.BB.LF

Relevant identified used of the substance or mixtures and uses advised against

Sealant.

Supplier's details Polyguard Products, Inc.
3801 South Interstate 45
Ennis, TX 75119
Tel: (214) 515-5000 (M-F 7 am-5 pm CST)
Emergency telephone number) with hours of operation) CHEMTREC, US 1-800-424-9300 International 1-703-527-3887 (24/7)

Section 2. Hazards Identification

Classification of the substance or mixture Skin Sensitization Category 1
Reproductive toxicity Category 1B

Hazard pictogram



Signal word **Danger**
Hazard statement H317- May cause an allergic skin reaction
H360- May cause fertility to the unborn child.

Prevention P201- Obtain special instructions before use.
P202- Do not handle until all safety precautions have been read and understood.
P261-Avoid breathing dust/fume/gas/mist/vapors/spray.
P 272- Contaminated work clothing must not be allowed out of the workplace.
P280- Wear protective gloves/protective clothing/eye protection/face protection.

Response P302+P352- If on skin: wash with plenty of water.
P308+P313- If exposed or concerned: Get medical advice/attention.
P321- Specific treatment (see supplement first aid instructions on this label).
P333+P313-If skin irritation or rash occurs: Get medical advice/attention.
P363- Wash contaminated clothing before reuse.

Storage P405- Store locked up.
Disposal P501-Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

Other Hazards which do not result in classification

No additional information available.

Unknown acute toxicity (GHS US)

No additional information available.

Section 3. Composition/Information on Ingredients**Substance/Mixture**

Mixture

Ingredient name	CAS Number	Percentage	GHS US Classification
Proprietary	Trade Secret	≥ 1	Flam.Liq 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation: Vapor), H332 Skin Sens. 1B, H317
Titanium Dioxide	13463-67-7	1 -5	Carc. 2, H317
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	1760-24-3	< 1	Acute Tox. 4 (Inhalation, dust, mist), H332 Eye dam. 1, H318 Skin Sens. 1, H317 STOT RE 3, H335
Quartz, conc. Respirable crystalline silica ≥ 10 %	14808-60-7	< 1	Muta. 2, H341 Carc. 1A, H350 STOT RE 1, H372
Proprietary	Trade Secret	< 1	Repr. 1B, H360 STOT RE1, H372

* Chemical name, CAS number and/or exact concentration have been withheld as a trade secret.

This product contains Titanium Dioxide, which is suspected of causing cancer when inhaled in fine particle form. Titanium Dioxide should not be respirable in this formulation.

This product contains Crystalline Silica, which is suspected of causing cancer when inhaled in fine particle form. Crystalline Silica should not be respirable in this formulation.

Section 4. First Aid Measures**Description of necessary first aid measures.****General measures**

If exposed or concerned: Get medical advice/attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing.

Skin contact

Wash with plenty of soap and water. Take off contaminated clothing.

If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

Rinse eyes with water as a precaution.

Ingestion

Call a poison center/doctor/physician if you feel unwell.

Most Important Symptoms and Effects:**Symptoms/effects after inhalation**

Although no appropriate human or animal health effect data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact

May cause an allergic skin reaction.

Symptoms/effects after eye contact

None under normal conditions

Symptoms/effects after ingestion

None under normal conditions

Chronic symptoms

May damage fertility or the unborn child.

Note to Physician

Treat symptomatically

Section 5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media

Water spray, Dry powder, foam, or carbon dioxide.

Unsuitable extinguishing media

Do not use heavy water stream.

Fire hazard

No fire hazard.

Explosion hazard

No direct explosion hazard.

Hazardous decomposition products in case of fire:

Toxic fumes may be released.

Firefighting instructions

Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures.

General measures

Stop leakage if safe to do so. Notify authorities if product enters sewer or public waters. Absorb spillage to prevent material damage.

For non emergency personal

Wear recommended personal protective equipment.

Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapors/ spray.

For emergency responders

Do not attempt to take action without suitable protective equipment.

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

Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

Methods and materials for containment and cleaning up

Spill

Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

Section 7. Handling and Storage

Precautions for safe handling

Additional hazards when processing

Not expected to present a significant hazard under anticipated conditions of normal use.

Protective measures

Ensure good ventilation of the workstation. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personnel protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapor/spray.

Advice on general occupational hygiene

Separate working clothing from regular clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink, or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Keep in a cool, well-ventilated place away from heat. Store locked up. Store product in container of the same material as original container.

Section 8. Exposure Controls/Personal Protection

Occupational exposure limits

Chemical Component	CAS #	Exposure Limits
Quartz, conc. Respirable crystalline silica $\geq 10\%$	14808-60-7	ACGIH OEL TWA: 0.25 mg/m ³ (respirable fraction)
Titanium Dioxide	13463-67-7	ACGIH OEL TWA: 0.2 mg/m ³ (respirable fraction)
Proprietary	Proprietary	ACGIH OEL TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³

Appropriate engineering controls
Environmental exposure controls
Personal protective equipment
Hand protection
Eye protection
Skin and body protection
Respiratory protection

Ensure good ventilation of the work station.
 Avoid release to the environment.
 Wear recommended personal protective equipment.
 Wear appropriate chemical resistant gloves.
 Safety glasses
 Wear suitable protective clothing.
 In case of inadequate ventilation, wear respiratory protection.

Section 9. Physical and Chemical Properties

Appearance

Physical state	Paste
Color	Blue
Odor	Odorless
Odor threshold	No data available
pH	No data available
Melting point	No data available
Boiling point	No data available
Flash Point	No data available
Evaporation rate (butyl acetate=1):	No data available
Flammability (solid, gas)	No data available
Lower & upper explosive (flammable) limits	Lower: No data available Upper: No data available
Relative density	No data available
Vapor pressure	No data available
Solubility in other solvents	No data available
Partition coefficient: n- octanol/water (Log P _{ow})	No data available
Auto- ignition temperature	No data available
Decomposition temperature	No data available
Kinematic Viscosity	No data available
Viscosity, Dynamic	No data available
Explosion limits	No data available
Explosion properties	No data available
Oxidizing properties	No data available
VOC	17 g/l less water and exempt solvent

No additional information available.

Section 10. Stability and Reactivity

Reactivity	Not reactive under normal conditions.
Chemical stability	This product is stable under normal storage conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous Polymerization	No dangerous reactions known under normal conditions of use.
Conditions to avoid:	None under recommended storage and handling conditions (see section 7).
Incompatible materials	No additional information available.
Hazardous decomposition products	Under normal storage conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Acute toxicity (oral)	Not classified.
Acute toxicity (dermal)	Not classified.
Acute toxicity (inhalation)	Not classified.

Chemical	CAS #	Results	Species	Dose	Exposure
Titanium Dioxide	13463-67-6	LD ₅₀ Oral LD ₅₀ Oral LC ₅₀ Inhalation LC ₅₀ inhalation- Dust/mist ATE US(Oral)	Rat - Rat Rat -	> 2000 mg/kg 5000 mg/kg > 5.09 mg/l > 3.43 mg/l 5000 mg/kg body weight	14 days - 4 hrs. - -
Proprietary	Proprietary	LD ₅₀ Oral LD ₅₀ Oral LD ₅₀ Dermal LD ₅₀ Dermal LC ₅₀ inhalation LC ₅₀ inhalation- Vapors ATE US(Oral) ATE US (Dermal) ATE US (Gases) ATE US (Vapors) ATE US (Dust, mist)	Rat - Rabbit - Rat Rat - - - - -	6899-7012 mg/kg 7120 mg/kg 3158-3760 mg/kg 3256 mg/kg 16.8 mg/l 16.81 mg/l 6899 mg/kg 3158 mg/kg Body weight 4500 ppm/V 16.8 mg/l 1.5 mg/l	14 days - 14 days - 4 hrs. 4 hrs. - - 4 hrs. 4 hrs. 4 hrs.
1,2-ethanediamine, N1-[3-(trimethoxysilyl)propyl]-	1760-24-3	LD ₅₀ Oral LD ₅₀ Dermal LC ₅₀ inhalation (aerosol) ATE US(Oral) ATE US (Vapors) ATE US (Dust, mist)	Rat Rabbit Rat - - -	2295 mg/kg > 2000 mg/kg 1.49-2.44 mg/l 2295 mg/kg 1.49 mg/l 1.49 mg/l	14 days 14 days 14 days - 4 hrs. 4 hrs.
Proprietary	Proprietary	LD ₅₀ Oral LD ₅₀ Dermal LC ₅₀ inhalation ATE US(Oral)	Rat Rat Rat -	1864 mg/kg > 2000 mg/kg > 2000 mg/kg 1864 mg/kg	14 days 14 days - -

Skin corrosion/irritation Not classified

Section 11. Toxicological Information

Name	CAS #	pH
Quartz, conc. Respirable crystalline silica \geq 10 %	14808-60-7	6-7
Titanium Dioxide	13463-67-7	7 (aqueous suspension, 10 %)
Proprietary	Trade Secret	No data available in literature
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	1760-24-3	10.2 (1%)
Proprietary	Trade Secret	No data available in literature

Serious eye damage/irritation

Not classified

Name	CAS #	pH
Quartz, conc. Respirable crystalline silica \geq 10 %	14808-60-7	6-7
Titanium Dioxide	13463-67-7	7 (aqueous suspension, 10 %)
Proprietary	Trade Secret	No data available in literature
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	1760-24-3	10.2 (1%)
Proprietary	Trade Secret	No data available in literature

Respiratory or skin sensitization

May cause an allergic skin reaction

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Name	CAS #	IARC group
Titanium Dioxide	13463-67-7	2B- Possibly carcinogenic to humans

* Not a respirable hazard as contained in this liquid mixture.

Reproductive toxicity

May cause fertility of the unborn child.

STOT- single exposure

Not classified

Name	CAS#	Exposure	Result
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	1760-24-3	STOT- Single STOT- repeated exposure NOAEL (Oral, rat, 90 days)	May cause respiratory irritation. Not classified \geq 500 mg/kg body weight Animal: rate guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction/Development Toxicity Screening Test. \geq 1545 mg/kg body weight Animal: rat
Quartz, conc. Respirable crystalline silica \geq 10 % Proprietary	14808-60-7 Trade Secret	NOAEL (dermal, rat/rabbit, 90 days) STOT- repeated exposure NOAEL (Oral, rat, 90 days)	Causes damage to organs through prolonged or repeated exposure. 62.5 mg/kg body weight Animal: rate guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction/Development Toxicity Screening Test.
Proprietary	Trade Secret	STOT- repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Section 11. Toxicological Information**Aspiration hazard**

Not classified

Viscosity, kinematic

No data available

Name	CAS#	Viscosity, kinematic
Quartz, conc. Respirable crystalline silica ≥ 10 %	14808-60-7	Not applicable (solid)
Titanium Dioxide	13463-67-7	Not applicable (solid)
Proprietary	Trade Secret	0.7 mm ² /s (20 °C)
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	1760-24-3	3.1 mm ² /s (20 °C, calculated)
Proprietary	Trade Secret	No data in literature

Symptoms/effects after inhalation

Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact

May cause an allergic skin reaction.

Symptoms/effects after eye contact

None under normal conditions.

Symptoms/effects after ingestion

None under normal conditions.

Chronic symptoms

May cause fertility of the unborn child.

Section 12. Ecological Information**Ecology- general**

The product is not considered harmful to aquatic organisms or to cause long-term adverse effects on the environment.

Product/ingredient name	Result	Species	Exposure
Titanium Dioxide	LC50 >1000 mg/L Fresh water	Fish	-
	EC50 >1000 mg/l, Fresh water	Crustacea- Invertebrata	-
	EC50 > 100 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hrs.
Proprietary	LC50 191 mg/L Fresh water	Fish - Oncorhynchus mykiss	-
	EC50 169 mg/l, Fresh water	Daphnia - Daphnia magna	48 hrs.
	EC50 > 957 Fresh water	Algae- Desmodesmus subspicatus	-
	ErC50 >89 mg/l- Fresh water	Algae - Pseudokirchneriella subcapitata	75 hrs.
	LOEC (Chronic) 52.4 mg/l	Daphnia - Daphnia magna	21 days
	NOEC (Chronic) 28.1 mg/l	Daphnia - Daphnia magna	21 days
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	NOEC chronic 10 mg/l	-	-
	LC50 597 mg/l, Fresh water	Fish – Danio rerio	96 hrs.
	EC50 81 mg/l, Fresh water	Daphnia - Daphnia magna	48 hrs.
	EC50 126 mg/l	Algae- Desmodesmus subspicatus	-
	EC50 352 mg/l	Algae- Desmodesmus subspicatus	-
Proprietary	ErC50 8.8 mg/l, Fresh water	Algae- Selenastrum capricornutum	75 hrs.
	LC50 >2 mg/L source ECHA	Fish	-
	EC50 0.004 mg/l Source ECHA	Crustacea	-
	EC50 > 2 mg/l Source ECHA	Algae	72 hrs.

Persistence and degradability

Not rapidly degradable.

Section 12. Ecological Information

Name	Persistence & degradability	Result
Quartz, conc. Respirable crystalline silica \geq 10 % (CAS # 14808-60-7)	Persistence & degradability Chemical Oxygen Demand (COD) ThOD	Biodegradability: not applicable Not applicable (inorganic) Not applicable (inorganic)
Proprietary 1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	Persistence & degradability Persistence & degradability	Not readily biodegradable in water. Not readily biodegradable in water.
Proprietary	Persistence & degradability	Not readily biodegradable in water.

Name	Bioaccumulation Potential	Result
Quartz, conc. Respirable crystalline silica \geq 10 % (CAS # 14808-60-7)	Bioaccumulation potential	Not applicable
Titanium Dioxide (CAS# 13463-67-7)	Bioaccumulation potential	Not applicable
Proprietary	Partition coefficient n-octanol/water (Log P _{ow}) Bioaccumulation potential	1.1 (QSAR, KOWWIN, 20 °C) Low potential for bioaccumulation (Log K _{ow} <4)
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	Partition coefficient n-octanol/water (Log P _{ow}) Bioaccumulation potential	-0.3 (QSAR, 20 °C)
Proprietary	BCF- Other aquatic organisms [1] Partition coefficient n-octanol/water (Log P _{ow}) Bioaccumulation potential	Not bioaccumulative 100 l/kg (BCFAF, v3.01, Estimated value, Fresh weight) 0.29 (Estimated value, KOWWIN) Low potential for bioaccumulation (BCF <500)

Name	Mobility in soil	Result
Quartz, conc. Respirable crystalline silica \geq 10 % (CAS # 14808-60-7)	Ecology-soil	No test data on mobility of the substrate available
Titanium Dioxide (CAS# 13463-67-7)	Surface Tension	No test data on mobility of the substrate available.
Proprietary	Ecology-soil Surface Tension Organic Carbon Normalized Adsorption Coefficient (Log K _{oc})	Low potential for mobility in soil. No data available in the literature. 2.8 (log K _{oc} , SRC PCKOCWIN v2.0, Calculated value)
1,2-Ethanediammine, N1-[3-trimethoxysilyl) propyl]-	Ecology-soil Surface Tension Organic Carbon Normalized Adsorption Coefficient (Log K _{oc})	Low potential for mobility in soil. No data available in the literature. 3.5 (log K _{oc} , SRC PCKOCWIN v2.0, Calculated value)
Proprietary	Ecology-soil Surface Tension Organic Carbon Normalized Adsorption Coefficient (Log K _{oc}) Ecology-soil	Low potential for mobility in soil. 33.05 mN/m (20°C, 92 %, OECD 115: Surface Tension of Aqueous Solutions) 3.942 (log K _{oc} , SRC PCKOCWIN v2.0, Calculated value) Low potential for mobility in soil.

Other Adverse effects

No additional information available

Section 13. Disposal Considerations

Disposal methods Dispose of contents/containers in accordance with all local, state, tribal, provincial, and federal regulations.

Section 14. Transportation Information**DOT/IATA/IMDG**

DOT Not Regulated
IATA Not Regulated
IMDG Not Regulated

Section 15. Regulatory Information

U.S. Federal regulations: All components are listed on the US TSCA inventory list except for Quartz, conc. Respirable crystalline silica $\geq 10\%$ (CAS # 14808-60-7) at a level of $< 1\%$.


Canadian Regulations All components are listed on the Canadian DSL (Domestic Substance List)

EU- Regulations No additional information available.

National regulations

Titanium Dioxide Listed on IARC (International Agency for Research on Cancer)
 Listed on INSQ (Mexican National Inventory of Chemical Substances)

State regulations**California Prop 65**

 **WARNING:** This product can expose you to chemicals including Methanol, 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.

State right to know

Chemical name	New Jersey	Massachusetts	Pennsylvania
Titanium Dioxide CAS# 13463-67-7	X	X	X

16. Other Information

Date of revision: 7/23/2024
Date of previous issue 11/8/2022
Revisions: Update contact phone number, classification of substance, chemical and toxicology information
Version 2
Prepared by C. Rogalski

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