



SAFETY DATA SHEET

PBTP – STARBRIGHT ORANGE COPPER – SK18541

Revision date: 06/10/2018

Supplier Powder Buy The Pound
P.O. Box 535
Nolensville, TN. 37135

For non-emergency information contact: 615-776-7600

Emergency Telephone

Spill Emergency 800-424-9300
Health Emergency 800-441-3637
Chemtrec 800-424-9300

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Description: Product is a mixture of hazardous and non-hazardous ingredients compounded in Polymer

Hazardous components: CAS# PEL-OSHA TLV-ACGIH Conc.[%] T-Glycid-T-Cyanurate (TGIC)
2451-62-9 N/E 0.05 mg/m³ 5-10

3. HAZARDS IDENTIFICATION

Hazard Summary

CAUTION!

POWDER MAY FORM EXPLOSIVE MIXTURES WITH AIR.
MAY CAUSE SENSITIZATION BY SKIN CONTACT.
MAY CAUSE EYE/SKIN IRRITATION.
HARMFUL BY INHALATION AND IF SWALLOWED.
PROLONGED OR REPEATED OVEREXPOSURE TO BARIUM
SULFATE CAN CAUSE BARITOSIS (A BENIGN PNEUMOCONIOSIS)
TGIC IS A POTNETIAL MUTAGEN AND GENOTOXIN. TGIC
CAUSED SPERM SELL ABERRATIONS IN LABORATORY MICE.

Potential Health Effects

Eyes: Like any foreign body, particles can cause mechanical irritation. Causes eye irritation.

Skin: Material can cause the following: May cause sensitization by skin contact

Inhalation: Inhalation of dust can cause the following: headache, nausea

Primary Routes of Entry: Inhalation, Eye Contact, Skin Contact

Chronic Exposure: Prolonged or repeated overexposure to carbon black can cause lung effects. Prolonged or repeated overexposure to barium sulfate can cause baritosis (a benign pneumoconiosis). TGIC is a potential mutagen and genotoxin. TGIC caused sperm cell aberrations in laboratory mice.

Barium sulfate	IRIS	Not classifiable
Barium sulfate	ACGIH	Not classifiable as a human carcinogen
Clear resin	ACGIH	Not classifiable as a human carcinogen
Clear resin	IARC	Possible carcinogen
Clear resin	US CA CRT	Carcinogenic
Clear resin	NIOSH	Potentially carcinogenic

4. FIRST AID MEASURES

Inhalation: Move to fresh air. Give artificial respiration if breathing has stopped. When symptoms persist or in all cases of doubt, seek medical advice. If unconscious place in recovery position and seek medical advice. Keep patient warm and at rest.

Skin contact: Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. In case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. Resin particles, like other inert materials, are mechanically irritating to eyes.

Ingestion: Never give anything by mouth to an unconscious person. Consult a physician. Immediately give large quantities of water to drink. Include vomiting, but only if the victim is fully conscious. If a person vomits when lying on his back, place him in the recovery position.

5. FIRE-FIGHTING MEASURES

Flash point	Not Determined not applicable
Lower explosion limit	30-70% (V)
Upper explosion limit	Not Determined

Thermal decomposition During a fire, irritating and highly toxic gases and/or fumes may be generated during combustion or decomposition. Thermal decomposition may yield the following: sulfur oxides, Carbon oxides

Suitable extinguishing media: Dry powder, foam, sand

Specific hazards during fire fighting: Do not allow run-off from fire fighting to enter drains or water courses. Dusts at sufficient concentrations can form explosive mixtures with air. DO NOT use a solid stream of water. A solid stream of water directed at this material may create a potentially explosive airborne dust mixture.

Special protective equipment for fire fighters: Wear full protective clothing and self-contained breathing apparatus.

Further information: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Evacuate personnel to safe areas.

MATERIAL IS TOXIC. If exposed to material during clean-up operations, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid Measures for further information.

MATERIAL IS A POTENTIAL SENSITIZER.

Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations.

Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so.
Do not allow material to contaminate ground water system.
Do not flush into surface water or sanitary sewer system.
NOTE: Spills on porous surfaces can contaminate groundwater.

Methods for cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations (see section 13).
Clean contaminated surface thoroughly.
Clean up promptly by sweeping or vacuum.
Do not create a powder cloud by using a brush or compressed air.
No sparking tools should be used.
Remove all sources of ignition.

Additional advice: See SECTION 13, Disposal Considerations, for information regarding the disposal of contained spills. MATERIAL IS A POTENTIAL SKIN SENSITIZER. If exposed to material during clean-up operations, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water.

7. HANDLING AND STORAGE

For personal protection see section 8. Plan first aid action before beginning work with this product. Avoid exposure-obtain special instructions before use. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Avoid formation of respirable particles. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Avoid exceeding of the given occupational exposure limits (see section 8). Smoking, eating and drinking should be prohibited in the application area. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied. This material is a potential skin sensitizer. See SECTION 8, Exposure Controls/Personal Protection, prior to handling. This material is TOXIC. Use only in an area equipped with a safety shower. Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion: Avoid formation of dust and aerosols. During processing, dust may form explosive mixture in air.

Storage

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Store in a place accessible by authorized persons only.

Storage period: 12 months; For product stored in clean, dry conditions at less than 80°F expected shelf life is at least 12 Months from receipt date.

Other data: No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit(s)

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value
Barium sulfate	Powder Buy the Pound	TWA Respirable	3mg/m ³
	Powder Buy the Pound	TWA Total	10mg/m ³
	ACGIH	TWA	10mg/m ³
	NIOSH/GUIDE	REL Respirable	5mg/m ³
	NIOSH/GUIDE	REL Total	10mg/m ³
	OSHA_TRANS	PEL Respirable fraction	5mg/m ³
	OSHA_TRANS	PEL Total dust	15mg/m ³
	Z1A	TWA Respirable fraction	5mg/m ³

Z1A	TWA Total dust	10mg/m3
TX ESL	ST ESL Respirable	
TX ESL	AN ESL Respirable	
US CA OEL		

Component	Regulation	Type of listing	Value
Triglycidyl	Powder Buy the Pound	TWA	0.05mg/m3
	Powder Buy the Pound	STEL	0.15mg/m3
	ACGIH	TWA	0.05mg/m3
	TX ESL	ST ESL	
	TX ESL	AN ESL	

Component	Regulation	Type of listing	Value
Carbon black	Powder Buy the Pound	TWA	3.0mg/m3
	Powder Buy the Pound	STEL	6mg/m3
	ACGIH	TWA	3.5mg/m3
	OSHA_TRANS	PEL	3.5mg/m3
	TX ESL	ST ESL	
	TX ESL	AN ESL	

Eye protection: Use chemical splash goggles (ANSI Z87.1 or approved equivalent).

Hand protection: NOTE: Material is a possible skin sensitizer. Chemical-resistant gloves should be worn whenever this material is handled. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into the consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Skin and body protection: Safety shoes, complete suite protecting against chemicals. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection: None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. When dusty conditions are encountered, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirators use.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust or spray mist. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. When using do not eat or drink. When using do not smoke. Do not breathe dust.

Protective measures: Plan first aid action before beginning work with this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Do not breathe dust.

Engineering measures: Use explosion-proof local exhaust ventilation with a minimum capture velocity of 100ft/min (0.5m/sec) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Melting point/range
70 - 80 Degrees C or 158 - 176 Degrees F
- Boiling point/range Not Applicable
- Flash point Not Applicable
- Auto igniting Product is still not self-igniting

- Danger of explosion Product does not normally present an explosive hazard. However, dust can combine with air to form an explosive mixture if it comes in contact with a source of ignition. LOWER EXPLOSION LIMIT: 15 g/m³ UPPER EXPLOSION LIMIT: 50 g/m³
- Density: 1.2 g/cm³ - 1.7 g/cm³
- Solubility in/miscibility with water Not miscible or difficult to mix
- Solvent content Organic solvents – 0 Solids content – 1

11. TOXICOLOGICAL INFORMATION

No toxicity data are available for this material.

Skin irritation Powder can cause localized skin irritation in folds of the skin or under tight clothing.

Component: **Barium sulfate**

Acute oral toxicity LD50 mouse >3,000mg/kg

Component: **Triglycidyl isocyanurate**

Acute oral toxicity LD50 rat 188mg/kg

Component: **Carbon black**

Acute oral toxicity LD50 rat >8,000mg/kg

Component: **Triglycidyl isocyanurate**

Acute inhalation toxicity LC50 rat 4h 0.3mg/l aerosol

Component: **Triglycidyl isocyanurate**

Acute dermal toxicity LD50 rabbit >3,000 mg/kg

Component: **Carbon black**

Acute dermal toxicity LD50 rabbit >3,000mg/kg

Component: **Triglycidyl isocyanurate**

Eye irritation rabbit Severe eye irritation

Component: **Carbon black**

Eye irritation rabbit No eye irritation

Component: **Triglycidyl isocyanurate**

Sensitization guinea pig Skin sensitizer

Component: **Triglycidyl isocyanurate**

Toxicity to reproduction Experiments have shown reproductive toxicity effects on laboratory animals.

Component: **Triglycidyl isocyanurate**

Mutagenicity Has been found to be mutagenic in a variety of systems.

Component: **Carbon black**

Teratogenicity When maternal toxicity occurred slight fetotoxicity but no teratogenicity was also observed in these animals.

12. ECOLOGICAL INFORMATION

Aquatic toxicity is unlikely due to low solubility.

Barium sulfate

Ecotoxicity effects

Toxicity to aquatic invertebrates EC50 Daphnia magna 48h 32mg/l

Triglycidyl isocyanurate

Elimination information

(persistence and degradability)

Biodegradability Inherently biodegradable

Biodegradability Not readily biodegraded

Ecotoxicity effects

Toxicity to fish LC50 Zebra fish (Danio/Brachydanio rerio) 96h >77mg/l

Toxicity to algae EC50 Algae 72h OECD Test Guideline 201 29mg/l

Toxicity to aquatic invertebrates

EC50 Daphnia magna 24h >100mg/l

13. DISPOSAL CONSIDERATIONS

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. NOTE: Spills on porous surfaces can contaminate groundwater.

Disposal

Waste Classification: When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosively, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristics Leaching Procedure (TCLP).

For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations (see 40 CFR Part 268).

Contaminated packaging: Store containers and offer for recycling of material when in accordance with the local regulations.

14. TRANSPORT INFORMATION

DOT _____ Not regulated for transport

IMO/IMDG _____ Not regulated (Not dangerous for transport)

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.

15. REGULATORY INFORMATION

Workplace Classification

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200)

This product is a "controlled product" under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE III: Section 311/312 Categorizations (40CFR370): Acute Health Hazard / Chronic Health Hazard

SARA TITLE III: Section 313 information (40CFR372)

SARA Title III Components: Epichlorohydrin 106-89-8

CERCLA Information (40CFR302.4)

CERCLA Components: Barium sulfate 7727-43-7 1,000lbs. RQ

US. Toxic Substances Control Act (TSCA): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Pennsylvania

Any material listed as “Not Hazardous” in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

California (Proposition 65)

This product contains trace levels of a component or components known to the state of California to cause cancer and birth defects or other reproductive harm:

Components: Epichlorohydrin 106-89-8

16. OTHER INFORMATION

Hazard Rating

	Health	Fire	Reactivity
HMIS	2*	1	0

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
Bac	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average
I	Bar denotes a revision from prior MSDS

The information provided in this Safety Data Sheet is correct to the best of Powder Buy The Pound's (PSS) knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.