



# SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**Product Identification:**

**Product ID:** MIT-PESBL-403-SG7  
**Product Name:** Polyester/TGIC-POST OFFICE BLUE  
**HMIS CODE:** H F R P  
1 1 0 E  
**Revision Date:** April 26, 2016

**Company Identification:**

MIT Online Store  
2825 17 Mile Rd Suite C  
Kent City, MI 49330

**Manufacturer's Phone:** (616) 350-8549

## SECTION 2 – HAZARD(S) IDENTIFICATION

Emergency Overview

**Signal Word:**

Danger

**Hazard Statements:**

May form combustible dust concentrations in air.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.  
May cause genetic defects.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Harmful if swallowed.

**Precautionary Statements:**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

**Response:** If exposed or concerned: Get medical attention.

If Swallowed: Call a poison center or physician if you feel unwell. Rinse mouth.

If on skin: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

Photosensitive agents: In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.

**Storage:** Store locked. Keep away from heat, sparks, and flames.

**Disposal:** Dispose of contents and containers to an approved waste disposal plant in accordance with federal, state and local regulations.

**Hazard Pictograms:**



PRIMARY ROUTES OF EXPOSURE: Eyes, Inhalation, Skin

**Skin Contact:** Incidental contact is not expected to cause irritation. However, exposure to this product may cause an allergic skin reaction and sensitization in some individuals.

**Eye Contact:** May cause slight to mild redness and burning. May cause mechanical irritation.

**Inhalation:** This product contains ingredients with established airborne exposure limits- see section 8. Otherwise it is considered a nuisance dust. No effects are expected when exposures are maintained below the exposure limits of section 8. However, exposure to this product may cause an allergic reaction and sensitization in some individuals. Lung and respiratory conditions may be aggravated by exposure.

**Ingestion:** May cause pain and upset stomach.

**SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

COMPONENT	CAS NO.	PERCENTAGE
CARBON BLACK	1333-86-4	< 2%
TRIGLYCIDYL IOSCYANURATE	2451-62-9	<5%
BARIUM SULPHATE	7727-43-7	26-28%
HYDRATED ALUMINA	1344-28-1	0.2%
TITANIUM DIOXIDE	13463-67-7	1-2%

This product should be treated and handled as a nuisance particulate. This product contains no chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act.

**SECTION 4 - FIRST AID MEASURES**

**Eye Contact:** Immediately flush eyes with cool water for 15 minutes, occasionally lifting lids to ensure complete rinsing. Seek medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. Remove and wash clothing and shoes before reuse. Seek medical attention if irritation persists.

**Inhalation:** Move to fresh air. If breathing difficulties develop, seek medical attention. If necessary, give artificial respiration.

**Ingestion:** Seek immediate medical attention. Wash out mouth with water followed by a cupful of a water to drink. Repeat if vomiting occurs. Never give anything by mouth to an unconscious person.

## **SECTION 5 - FIRE FIGHTING MEASURES**

**FLASH POINT:** N/A

**FLAMMABLE LIMITS IN AIR BY VOLUME:** LOWER: N/A      HIGHER: N/A

**EXTINGUISHING MEDIA:** FOAM, CO<sup>2</sup>, DRY CHEMICAL, WATER FOG

Fire and explosion hazards: An HMIS flammability rating of 1 applies to the product as supplied. However, airborne dust from the product can present a flammability hazard and may form explosive dust mixtures with air. A potentially dangerous situation exists when powder is transferred from a closed container to a process in which dust concentrations are within the explosion (flammability) limits. The concentration of powder dust in air should be maintained outside of the limits.

Firefighting instructions: Use fully protective equipment with self-contained breathing apparatus.

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

Sweep up carefully or use explosion-proof vacuum cleaner. Then dispose of in accordance with local, state and federal regulations.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

No sparking tools should be used.

## **SECTION 7 – HANDLING AND STORAGE**

### **NECESSARY STEPS IN CASE OF MATERIAL SPILLED OR RELEASED**

Remove all sources of ignition. Use vacuum equipment. Avoid breathing dust.

### **WASTE DISPOSAL METHOD**

Dispose in accordance with federal, state, and local laws.

### **PROPER HANDLING AND STORING**

Do not store above 80 degrees Fahrenheit. Keep away from heat, sparks, and flame.

### **OTHER PRECAUTIONS**

Prevent prolonged exposure to skin and contact with eyes. Do not take internally. Avoid breathing fumes when curing.

Keep containers closed after use. Clean hands after use and before eating or smoking.

## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Product ingredients other than ingredients with established airborne exposure limits may be considered under the PEL for particulates not otherwise regulated (nuisance dust).

### Occupational Exposure Limits

<b>Ingredients</b>	<b>ACGIH TLV</b>	<b>ACGIH TLV-C</b>	<b>ACGIH STEL</b>	<b>OSHA STEL</b>	<b>OSHA PEL</b>
1,3,5 Triglycidyl Isocyanurate	0.05 mg/m <sup>3</sup>	n/est	n/est	n/est	n/est
Carbon Black	3.5 mg/m <sup>3</sup>	n/est	n/est	n/est	3.5 mg/m <sup>3</sup>
Barium Sulphate	10 mg/m <sup>3</sup>	n/est	n/est	n/est	10 mg/m <sup>3</sup>
Hydrated Alumina	10 mg/m <sup>3</sup>	n/est	n/est	n/est	15 mg/m <sup>3</sup>
Titanium Dioxide	10 mg/m <sup>3</sup>	n/est	n/est	n/est	10 mg/m <sup>3</sup>

The Health and Safety Executive (Great Britain) has set a recommended exposure limit for powder coating products containing less than 5% (w/w) Triglycidyl Isocyanurate (TGIC) of 2 mf/me {Engineering Information Sheet No 15 (rev2)}. This limit value is based on an occupational exposure limit for pure TGIC of 0.1 mg/m<sup>3</sup>, which differs from the ACGIH TLV given above. Using the ACGIH TLV for TGIC of 0.05 mg/m<sup>3</sup> gives a recommended occupational exposure limit for powder coating products containing less than 5% (w/w) or more can be calculated based on the upper TGIC percentage in section 2. The formula to calculate limits is “5/(percent TGIC)=mg/m<sup>3</sup>.”

**ENGINEERING CONTROLS:** Provide ventilation to keep airborne particulate concentration below established airborne exposure limits (TLV's or PEL's). It is recommended that all dust controls handling this product be explosion proof, contain relief vents, or other commensurate measures. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Ventilation equipment, bag house, and cyclone dust collection should be grounded. Curing ovens and heating chambers should be properly vented to prevent any fumes from entering the workplace.

**RESPIRATORS:** Use a properly fitted NIOSH/MSHA approved respirator if needed to avoid breathing dust.

**SKIN PROTECTION:** Goggles or safety glasses with side-shields recommended.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

FORM: SOLID POWDER  
COLOR: BLUE  
ODOR: NEGLIGIBLE  
SOLUBILITY (in water): INSOLUBLE

Ph VALUE: N/A  
BOILING RANGE: N/A  
VAPOR PRESSURE (mmHg): N/A  
MELTING POINT: <300° F  
EVAPORATION RATE: N/A  
VAPOR DENSITY: N/A  
PARTITION COEFFICIENT: N/A  
% VOLATILE WEIGHT: < 1 (one hour at 110°C)  
%VOLATILE: SEE ABOVE  
SPECIFIC GRAVITY: 1.58 ± 0.05  
MOLECULAR WEIGHT:MIXTURE

## SECTION 10 – STABILITY AND REACTIVITY

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Extreme high temperatures

**INCOMPATIBILITY (MATERIALS TO AVOID):** Oxidizing materials

**HAZARDOUS DECOMPOSITION PRODUCTS:** Heat will produce fumes possibly containing carbon monoxide, aldehydes, and carboxylic acids.

**HAZARDOUS POLYMERIZATION:** Will not occur

## SECTION 11: TOXICOLOGICAL INFORMATION

### PRODUCT:

Exposure to this product may cause an allergic reaction and sensitization in some individuals. Extended inhalation of dust can lead to particulate deposition in the lungs.

### COMPONENTS:

**1,3,5, TRIGLYCIDYLISOCYANURATE (TGIC):** Overexposure to TGIC can cause irritation to the eyes, skin and respiratory tract; loss of appetite; may cause nose bleeds; toxic by ingestion and if absorbed through the skin. Prolonged or repeated contact may cause skin sensitization. Animal studies show that overexposure can result in toxic effects to the testes, possible effects on the liver and lungs, and possible male reproductive effects. Lethal Dose: LD50 (ORAL/RAT)=440 MG/KG; LD50 (skin/rat)=>2000 mg/kg; LD50 (inhalation/rat)=2000 mg/m<sup>3</sup>/4hr. With powder coating formulations containing ca. 6% TGIC, no toxic effects in rats were observed after 2 weeks of exposure at concentrations of 70mg/m<sup>3</sup>; no respiratory lesions or systematic toxicity was produced. Using a restriction research exposure method, mice exposed to 10mg/m<sup>3</sup> for 6 hours a day for 5days did not have any observable effects on their overall health or spermatogonia.

**CARBON BLACK:** Carbon Black may cause mechanical irritation to the eyes and temporary discomfort to the respiratory tract at concentrations above the occupational exposure limit (see section 8).

Temporary respiratory tract discomfort arising from Carbon Black exposure may occur due to mechanical irritation. No adverse reactions are usually expected from ingestion or dermal (skin) exposure. Carbon Black has not been reported as causing sensitization in humans. Epidemiological studies of workers in the carbon black producing industries of North America and Western Europe show no evidence of clinically significant adverse health effects due to occupational exposure to Carbon Black. Based on comprehensive independent review of a major epidemiological study, the validity of a relationship between Carbon Black Exposure and symptoms of cough and sputum cannot be supported by the available data. In a sub-chronic toxicity study of the effects of Carbon Black inhalation on the lungs of rats exposed to Carbon Black for ninety days found the effects included inflammation, hyperplasia, and fibrosis with NOEL of 1.1mg/m<sup>3</sup>. A chronic toxicity study of the effects of Carbon Black inhalation on the lungs of rats exposed to Carbon Black for 2 years found the effects included inflammation, fibrosis, and tumors (related to the fine particle overload rather than to a specific chemical effect). Acute Toxicity:LD50

(ORLA/RAT) = >8000 MG/KG. Carcinogenicity: NTP = No; IARC = Yes (IARC considers Carbon Black to be possibly carcinogenic to humans – group 2B); OSHA = No.

**BARIUM SULPHATE:** Pure Barium Sulphate is usually not considered to pose a significant toxicity risk in industrial environments where exposures are controlled with published exposure limits. Direct contact of the eyes with Barium Sulphate dust might cause mechanical irritation resulting in watering and redness. Direct contact with the skin with Barium Sulphate dust can have various effects. Repeated or prolonged overexposure may cause dermatitis (reddening, scaling and itching are characteristic of skin inflammation) or conjunctivitis (inflammation of the mucous membranes surrounding the eye). Inhalation of the fine Barium Sulphate dust may cause irritation of the nose and throat by mechanical action. Prolonged or repeated inhalation may cause baritosis, a benign pneumoconiosis, with some signs of bronchial irritation. Medical conditions aggravated by exposure include pre-existing respiratory, skin and eye diseases. Acute toxicity: LD50 (oral/rat)=.15,000 mg/kg. Carcinogenicity: NTP=No, IARC=No, OSHA=No

**HYDRATED ALUMINA:** Hydrated Alumina (aluminum hydroxide) is expected to be a low health risk by inhalation and should be treated as a nuisance dust particulate. However, exposure to Hydrated Alumina can cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath. Exposure to eyes can cause irritation, redness and pain. Exposure to skin may cause mild irritation. Short term oral toxicity is expected to be low. Acute animal ingestion toxicity values are generally not available since at higher dosages fatal intestinal blockage precludes observing systemic toxicity effects. In general, no adverse effects have been observed in experimental animals following ingestion of 1-2% Hydrated Alumina in the diet. Carcinogenicity: NTP=No, IARC=No, OSHA=No.

**TITANIUM DIOXIDE:** Sign and symptoms of acute exposure to titanium dioxide may include physical irritation of the skin and eyes with redness and swelling; cough; and sneezing. Signs and symptoms of chronic exposure to titanium dioxide may include X-ray evidence of mild fibrosis, dyspnea; cough and declines in pulmonary function. Titanium dioxide is not known to cause sensitization. LD50 (oral/rat)= >10,000 mg/kg, LD50 (dermal/rabbit) = > 10,000 mg/kg. In 2006 IARC concluded that titanium dioxide is possibly carcinogenic to humans (Group 2B). This conclusion was based on experimental evidence in animals (rat inhalation studies). There is inadequate evidence in humans for the carcinogenicity of titanium dioxide.

## **SECTION 12 - ECOLOGICAL INFORMATION**

No information on ecology is available.

## **SECTION 13 - DISPOSAL CONSIDERATION**

Disposal should be made in accordance with federal, state and local regulations.

## **SECTION 14 - TRANSPORTATION INFORMATION**

### **U.S. Department of Transportation**

UN ID Number (msds):	NRPDRY
Proper Shipping Name:	PAINT, DRY, NOT REGULATED

### **U.S. Hazmat and/or International DG shipment exceptions**

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply

with these exceptions.

**Reportable Quantity Description:**

**International Air Transport Association (IATA):**

Proper Shipping Name: NOT REGULATED

**International Maritime Organization (IMO):**

Proper Shipping Name: NOT REGULATED

Marine Pollutant NO

**SECTION 15 - REGULATORY INFORMATION**

The ingredients in this product are listed on the TSCA Inventory maintained by U.S. EPA or are otherwise approved for commercial use under TSCA.

This product contains the following toxic chemicals at levels above the applicable de minimis concentrations (40 CFR 372).

**None**

These Toxic Chemicals (SARA TITLE III SECTION 313) are subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372. California Proposition 65. This product contains a chemical known to the states of California to cause cancer, birth defects or other reproductive harm: Triglycidylisocyanurate = 1,3,5-Triglycidyl-s-triazinetrione = TGIC = CAS Number 2451-62-9.

**SECTION 16 - OTHER INFORMATION**

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

The information contained herein is based on the data available to us and is believed to be correct. However, we make no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof, we assume no responsibility for injury from the use of the product described herein.