

MEMORANDUM

TO: **FILE – Mity-Lite Incorporated - Orem Manufacturing Facility**

THROUGH: Chad Gilgen, Minor Source Compliance Section Manager

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FROM: Daniel Riddle, Environmental Scientist

DR
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DATE: November 22, 2022

SUBJECT: **FULL COMPLIANCE EVALUATION**, Minor, Utah County

INSPECTION DATE: November 16, 2022

SOURCE LOCATION: 1301 West 400 North
Orem, 84057

SOURCE CONTACTS: Laurel Ellison, Safety Leader
801-310-6434 laurel.ellison@mityinc.com

OPERATING STATUS: Operating normally at the time of inspection.

PROCESS DESCRIPTION: Mity-Lite produces five major products: Tables, Upholstery Chairs, Dance Floors, Carts, Injection Molded Parts.

Mity-Lite produces folding tables and metal chairs for commercial use. Internal support pieces are cut to size in the saw shop. Dust generated during cutting, are captured by local exhaust ventilation and vented through an Alanco Model 49 AST pulsejet baghouse. The dust is captured on cartridge filters inside the baghouse; the cleaned airstream is vented back into the building. If desired, the airstream from the baghouse can be vented to ambient through outside ductwork located on the northwest corner of the facility. Plastic sheets are heated in an electric oven to make them malleable. The heated sheets are then placed over a vacuum mold table that draws the sheets down over forms and holds them in place until the sheets cool and harden into the desired shape. The plastic shapes and internal support pieces are then coated with an electrically heated polyurethane resin (PUR) using a roller coating machine. The resin-coated pieces are then placed together on a vacuum press that squeezes the individual pieces tightly together while the PUR sets. Then a strip of plastic edging is manually glued around the perimeter/circumference of the table using squeeze bottles containing a solvent-based adhesive called MEK. HAPs from the solvent-based adhesive are emitted inside the work area. There are no VOC/HAP emissions from the PUR roller coater as long as the temperature of the PUR remains below 270 °F. Prior to May 10,

1997, a MEK-based solvent glue was used in the roller coater. A fan and ductwork were installed to draw MEK emissions from the building. Today, the fan and ductwork still operate, even though emissions are no longer generated by the roller coating process.

Fabrication & Painting of Metal Table Leg Assemblies/Chairs:
Metal parts for table legs and chairs are stamped, cut, punched, and shaped using various presses. These parts are then welded together to form folding table leg assemblies and chairs. The table leg assemblies and chairs are then suspended from an overhead track and conveyed through the painting area. The metal assemblies/chairs first pass through a heated phosphate washer rated at 2.5 MMBTU/hr. Inside the washer, pressurized sprays clean the metal surfaces of any oil, dirt, and corrosion. Then, the assemblies/chairs pass through a heated oven rated at 3.5 MMBTU/hr., drying their metal surfaces. Then, the dry assemblies/chairs pass through an electrostatic powder coating booth. The powder coated assemblies/chairs are then conveyed back through the heated oven to bake the powder coating onto the surfaces. Combustion emissions from the natural gas-fired washer and oven are vented to ambient through vents in the roof of the building. There are no emissions from the powder coating booth.
Final Assembly: In the final assembly, plastic tabletops are fastened to painted, folding table leg assemblies and upholstered seats are fastened to painted metal chairs. The finished products are then inspected, packaged, and shipped to customers.

APPLICABLE REGULATIONS:

Approval Order (AO) DAQE-AN112330011-22, dated March 7, 2022

SOURCE EVALUATION:

Name of Permittee:

Mity-Lite Incorporated -
Orem Manufacturing Facility
1301 West 400 North
Orem, UT 84057

Permitted Location:

1301 West 400 North
Orem, 84057

SIC Code:

2522: (Office Furniture, Except Wood)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
- I.7 The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]

Status: In Compliance. No limits set forth in this AO have been exceeded. The source stated that there have been no modifications to the equipment or processes. The equipment appeared to be properly operated and maintained according to manufacturer recommendations. Records are kept as required and were made available after the inspection. No breakdowns have been reported since the previous inspection. An emissions inventory was submitted for 2020 and emissions data are reported below.

Section II: SPECIAL PROVISIONS

- II.A The approved installations shall consist of the following equipment:**
- II.A.1 **Orem Manufacturing Facility**
- II.A.2 **Two (2) Polyurethane Adhesive Roll Coaters**
Location: South Building
Includes: heated hoses and heated application guns
- II.A.3 **Water Heaters**
Location: South Building
Capacity: < 5 MMBtu/hr each
Fuel: Natural Gas
- II.A.4 **One (1) Powder Paint Booth System**
Location: South Building

- II.A.5 **One (1) Drying/Curing Oven**
Location: South Building
Capacity: 3.5 MMBtu/hr
Fuel: Natural Gas
- II.A.6 **One (1) Burn-off Oven**
Location: South Building
Capacity: 0.625 MMBtu/hr
Control Device: Afterburner
Fuel: Natural Gas
- II.A.7 **South Building Welding**
Control: Three (3) Dust Collectors
Capacity: 2,000 acfm Each
- II.A.8 **One (1) Water Heater**
Location: North Building
Capacity: < 5 MMBtu/hr each
Fuel: Natural Gas
- II.A.9 **One (1) Powder Paint Booth System**
Location: North Building
- II.A.10 **One (1) Drying/Curing Oven**
Location: North Building
Capacity: 4.0 MMBtu/hr
Fuel: Natural Gas
- II.A.11 **One (1) Burn-off Oven**
Location: North Building
Capacity: 0.925 MMBtu/hr
Control Device: Afterburner
Fuel: Natural Gas
- II.A.12 **One (1) Foam Molding Machine**
Location: North Building
- II.A.13 **North Building Welding**
Control: Dust Collector
Capacity: 2,000 acfm
- II.A.14 **Aluminum Grinding**
Control: Wet Scrubber
- II.A.15 **Various Space Heaters**
Location: Entire Site
Fuel: Natural Gas

II.A.16 **Woodshop**
Control: Cyclone & Baghouse
Location: South Building
Size: 6,000 acfm

Status: In Compliance. No unapproved equipment was observed during the inspection. Only one of the roll coaters in Condition II.A.2 is equipped with polyurethane.

II.B Requirements and Limitations

II.B.1 **Site-Wide Requirements**

II.B.1.a The owner/operator shall not allow visible emissions from any source on site to exceed 10% opacity. [R307-401-8]

II.B.1.a.1 Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-305-3]

Status: In Compliance. No visible emissions were observed at the time of inspection. Method 9 was utilized to verify opacity limits. See attached VEO form.

II.B.1.b The owner/operator shall ensure the temperature of the polyurethane resin glue used in the roll coaters is maintained below 265 degrees Fahrenheit to control off-gassing of MDI. [R307-401-8]

II.B.1.b.1 The owner/operator shall use the temperature gauge to measure the temperature of the polyurethane resin glue used in the roll coaters. The temperature gauge shall be located such that an inspector/operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 5 degrees Fahrenheit. The instrument shall be calibrated according to the manufacturer's instructions at least once every 12 months. Continuous recording of the reading is not required; however, the owner/operator shall record the gauge reading in an operations log at least once per operating day. [R307-401-8]

Status: In Compliance. The temperature gauge was last calibrated on October 12, 2022. Daily checks show that gauge typically operates around 260 degrees Fahrenheit.

II.B.1.c The owner/operator shall route emissions from the following operations to the applicable control equipment prior to venting to the atmosphere, as follows:

- A. Woodshop- Cyclone and Baghouse
- B. South Building Welding - Dust Collectors
- C. North Building Welding - Dust Collector. [R307-401-8]

Status: In Compliance. This is the correct emissions pathway for these processes.

II.B.1.d The owner/operator shall install a manometer or magnehelic pressure gauge to measure the static pressure differential across the baghouse. [R307-401-8]

II.B.1.d.1 The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. [R307-401-8]

II.B.1.d.2 The pressure gauge shall measure the pressure drop in 1-inch water column increments or less. [R307-401-8]

Status: In Compliance. Each baghouse is equipped with a pressure gauge. These are measured in the correct increments.

II.B.1.e The owner/operator shall ensure the static pressure differential across each baghouse and dust collector shall be maintained within one (1) to six (6) inches of water column. [R307-401-8]

II.B.1.e.1 The owner/operator shall record the static pressure differential at least once per operating day while the baghouse is operating. [R307-401-8]

II.B.1.e.2 The owner/operator shall maintain the following records of the static pressure differential:

- A. Unit identification;
- B. Daily static pressure differential readings;
- C. Date of reading;
- D. Record the pressure gauge calibrations and replacements. [R307-401-8]

Status: In Compliance. Records reviewed at the time of inspection showed that pressure gauges operated between 1 and 6 inches of water column and are checked daily.

II.B.1.f At least once every 12 months, the owner/operator shall calibrate the pressure gauge in accordance with the manufacturer's instructions or replace the pressure gauge. [R307-401-8]

Status: In Compliance. 2 pressure gauges were most recently calibrated on August 17, 2022; another on May 17, 2022; and the last on March 30, 2022.

II.B.2 Aluminum Grinding Requirements

II.B.2.a The owner/operator shall vent all emissions from the aluminum grinding process to the wet scrubber. [R307-401-8]

II.B.2.a.1 The owner/operator shall maintain the scrubber water and air flowrates within the ranges as specified by the manufacturer, to ensure proper operation. [R307-401-8]

II.B.2.a.2 The owner/operator shall record water and air flow rates in an operations log at least once per operating day. [R307-401-8]

Status: In Compliance. There is a gauge that is checked daily. The range of appropriate rates is 108 - 130, and records show the gauge typically reads 110.

II.B.3 VOC and HAP Requirements

II.B.3.a The owner/operator shall not emit more than the following from evaporative sources (painting, printing, coating, and/or cleaning) on site:

- A. 17.33 tons per rolling 12-month period for VOCs
- B. 2.01 tons total per rolling 12-month period for all HAPs combined
- C. 3,960 pounds per rolling 12-month period for Methanol, Methylene Chloride, and Toluene combined. [R307-401-8]

II.B.3.a.1 The owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. The owner/operator shall use a mass-balance method to calculate emissions from evaporative sources. The owner/operator may use the following

equations with applicable units to comply with the mass-balance method:

$$\text{VOCs} = [\% \text{ VOCs by Weight}/100] \times [\text{Density}] \times [\text{Volume Consumed}]$$

$$\text{HAP} = [\% \text{ HAP by Weight}/100] \times [\text{Density}] \times [\text{Volume Consumed}]. \text{ [R307-401-8]}$$

II.B.3.a.2 The owner/operator shall use a mass-balance method to quantify any amount of VOCs and HAPs reclaimed. The owner/operator shall subtract the amount of VOCs and HAPs reclaimed from the quantities calculated above to provide the monthly total emissions of VOCs and HAPs. [R307-401-8]

II.B.3.a.3 The owner/operator shall keep records each month of the following:

- A. The name (as per SDS) of the VOC- and HAP-emitting material
- B. The maximum percent by weight of VOCs and each HAP in each material used
- C. The density of each material used
- D. The volume of each VOC- and HAP-emitting material used
- E. The amount of VOCs and the amount of each HAP emitted from each material
- F. The amount of VOCs and the amount of each HAP reclaimed and/or controlled from each material
- G. The total amount of VOCs, the total amount of each HAP, and the total amount of all HAPs combined emitted from all materials (in tons). [R307-401-8]

Status: In Compliance. VOC and HAP emissions appear to be calculated correctly. For the rolling 12-month period from November 2021 - October 2022:

5.4 tons of VOCs

0.45 tons of HAPs combined

1 pound of Methanol, methylene chloride, and toluene combined

Mity-Lite Incorporated stated that they rarely use methanol, methylene chloride, or toluene anymore, so emissions are decreased significantly. See attached summary.

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

AREA SOURCE RULES EVALUATION:

The following Area Source Rules were evaluated during this inspection:

Fabric and Vinyl Coatings [R307-345]

Status: Not applicable. The contact at Mity-Lite stated that they do not coat any vinyl or fabric products. Products are shipped from the mill and only cut or sewn at Mity-Lite.

Metal Furniture Surface Coatings [R307-346]

Status: Not applicable. SDS sheets for powder coatings provided showed no VOC emissions. See attached SDS sheets.

EMISSION INVENTORY:

Listed before are the Actual Emissions Inventory provided from Mity-Lite Incorporated- Orem Manufacturing Facility. A comparison of the estimated total potential emissions (PTE) on AO: DAQE-AN112330011-22, dated March 7, 2022 is provided.
(PTE) are supplied for supplemental purposes only.

Criteria Pollutant	PTE tons/yr	Actuals tons/yr
Carbon Monoxide	4.48	1.09248
Nitrogen Oxides	3.01	1.88034
Particulate Matter - PM ₁₀	1.79	0.57785
Particulate Matter - PM _{2.5}	1.79	0.50446
Sulfur Dioxide	1.67	0.0105
Volatile Organic Compounds	17.70	4.62015

Hazardous Air Pollutant	PTE lbs/yr	Actuals lbs/yr
Methylene Chloride (Dichloromethane) (CAS #75092)	1500	0.02
Toluene (CAS #108883)	1336	200

PREVIOUS ENFORCEMENT ACTIONS:

A Compliance Advisory (DAQC-1568-21) was sent to the source on December 21, 2021, and a response was received from the source on January 11, 2022. An Early Settlement Agreement was paid (DAQC-210-22).

COMPLIANCE STATUS & RECOMMENDATIONS:

In regards to Approval Order (AO) DAQE-AN112330011-22, dated March 7, 2022: In compliance at the time of inspection.

HPV STATUS:

Not Applicable.

RECOMMENDATION FOR NEXT INSPECTION:

Inspect at typical frequency. Safety glasses are required PPE for inspection.

ATTACHMENTS:

VEO form, maintenance records, VOC and HAP emissions, powder SDS sheets

Safety Data Sheet

1. Product and company identification

GHS product identifier : JN139QF 30-7728A INTERPON 600 GEN GLOSS BLK
Product code : 8131510
Other means of identification : JN139QF/25KG 30-7728A
Product type : Powder.

Relevant identified uses of the substance or mixture and uses advised against

Electrostatic coating for use in industrial plants.

Supplier's details : Akzo Nobel Coatings Inc.
 150 Columbia Street
 Reading, PA 19601 USA
 1-610-372-3600

Validation date : 5/29/2015.

Print date : 5/29/2015.

Emergency telephone number (with hours of operation) : Chemtrec 800-424-9300
 Chemtrec (International) 703-527-3887 (outside the US collect calls accepted)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : COMBUSTIBLE DUSTS
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
 SKIN SENSITIZATION - Category 1
 GERM CELL MUTAGENICITY - Category 1B
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

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

Precautionary statements

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Do not breathe dust or mist. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
- Hazards not otherwise classified** : Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Product code** : 8131510
- Other means of identification** : JN139QF/25KG

CAS number/other identifiers

- CAS number** : Not applicable.

Ingredient name	%	CAS number
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	2.5 - 10	2451-62-9
carbon black	1 - 2.5	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

Specific hazards arising from the chemical : Fine dust clouds may form explosive mixtures with air.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione carbon black	ACGIH TLV (United States, 6/2013). TWA: 0.05 mg/m ³ 8 hours. ACGIH TLV (United States, 6/2013). TWA: 3 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 3.5 mg/m ³ 10 hours. TWA: 0.1 mg of PAHs/cm ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 3.5 mg/m ³ 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. Physical and chemical properties

Physical state	: Solid. [Powder.]
Flash point	: Closed cup: Not applicable.
Auto-ignition temperature	: 450 to 600°C (842 to 1112°F)
Flammable limits	: 20 - 70 g/m ³
Odor	: Odorless.
Relative density	: 1.2 to 1.9 [ISO 8130-2/-3]
Solubility	: Insoluble in the following materials: cold water and hot water.
Minimum ignition energy (mJ)	: 5 to 20

In operations where the powder is recovered for reuse, the average particle size may change and this in turn can lead to an alteration in MIE.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	LC50 Inhalation Dusts and mists	Rat	0.65 mg/l	4 hours
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-
carbon black	LD50 Oral	Rat	188 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>4.6 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>8000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	Eyes - Severe irritant	Rabbit	-	-	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	skin	Guinea pig	Sensitizing
carbon black	skin	Guinea pig	Not sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
carbon black	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : May cause genetic defects.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	4376.4 mg/kg
Inhalation (dusts and mists)	15.13 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	Acute EC50 29 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
carbon black	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	24 hours
	Acute LC50 >77 mg/l Fresh water	Fish - Danio rerio	96 hours
	Acute EC50 >10000 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 >5600 mg/l Fresh water	Daphnia - Daphnia magna	24 hours
	Acute LC50 >1000 mg/l Fresh water	Fish - Danio rerio	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	0.5 % - 44 days	-	Activated sludge

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	-0.8	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions 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 non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been

cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated.	Not regulated.
UN proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated.	Not regulated.
Transport hazard class(es)	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated.	Not regulated.
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-	2.5 - 10	No.	No.	No.	Yes.	Yes.
2,4,6(1H,3H,5H)-trione carbon black	1 - 2.5	No.	No.	No.	No.	Yes.

SARA 313

	Product name
Form R - Reporting requirements	No SARA(Superfund Amendments & Reauthorization Act) 313 chemicals are present
Supplier notification	No SARA(Superfund Amendments & Reauthorization Act) 313 chemicals are present

State regulations

Massachusetts : The following components are listed: CALCIUM CARBONATE; CARBON BLACK
New York : None of the components are listed.
New Jersey : The following components are listed: CALCIUM CARBONATE; LIMESTONE; 1,3,5-TRIGLYCIDYL-s-TRIAZINETRIONE; 1,3,5-TRIAZINE-2,4,6(1H,3H,5H)-TRIONE, 1,3,5-TRIS(OXIRANYLMETHYL)-; CARBON BLACK
Pennsylvania : The following components are listed: LIMESTONE; CARBON BLACK

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
crystalline silica respirable	Yes.	No.	No.	No.

Canada inventory : Not determined.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Europe	: Not determined.
Japan	: Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing	: 5/29/2015.
Date of issue/Date of revision	: 5/29/2015.
Date of previous issue	: 4/14/2015.

Version : 2

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

▣ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Safety Data Sheet

1. Identification

Product Information.	TCIS-5166-10B
Product Name:	ML PEWTER SAND
Recommended Use.	Coating
Uses advised against.	No information available
Supplier.	TCI Powder Coatings 734 Dixon Drive Ellaville, GA 31806 Phone: 1-800-533-9067 E-Mail: ehs@tcipowder.com
Emergency telephone number.	Chemtrec: +1-800-424-9300 USA Chemtrec: +1 703-527-3887 ex-USA 24 hrs./day, 7 days/week

2. Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200

Acute Toxicity, Inhalation, category 4
Carcinogenicity, category 2
Combustible Dust (US OSHA)
Serious Eye Damage, category 1
Germ Cell Mutagenicity, category 1B
Skin Sensitizer, category 1
STOT, repeated exposure, category 2

GHS Pictograms



Signal Word

Danger

Unknown Acute Toxicity

1.6% of the mixture consists of ingredient(s) of unknown acute toxicity

HAZARD STATEMENTS

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

Precautionary Statements - Prevention.

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/ vapors/spray.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response.

If on skin: Wash with plenty of water.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: Get medical advice/attention.

Immediately call a poison center/doctor.

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

Precautionary Statements - Storage.

Store locked up.

Precautionary Statements - Disposal.

Dispose of contents in accordance with local/regional/national/international regulations.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>
Barium Sulfate	7727-43-7	2.5-10
1,3,5-Triglycidyl Isocyanurate	2451-62-9	2.5-10
Titanium dioxide	13463-67-7	2.5-10
Aluminium powder	7429-90-5	1.0-2.5
POLYETHYLENE	9002-88-4	0.1-1.0
Carbon black	1333-86-4	0.1-1.0
Iron oxide	1309-37-1	0.1-1.0
POLYTETRAFLUOROETHYLENE	9002-84-0	0.1-1.0
Amorphous Silica	7631-86-9	0.1-1.0

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

4. First-aid Measures

Description of first-aid measures.

General advice.

No Information

Inhalation.

Remove to fresh air.

Skin contact.

Wash skin with soap and water.

Eye contact.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion.

Clean mouth with water and drink afterwards plenty of water.

Symptoms.

See Section 2 and Section 11, Toxicological effects for description of potential symptoms.

Notes to physician.

Treat symptomatically.

5. Fire-fighting Measures

Extinguishing media.

Suitable extinguishing media.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons.

None.

Special hazards arising from the substance or mixture.

No information available.

Advice for firefighters.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures**Personal precautions, protective equipment and emergency procedures.****Personal precautions.**

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). Nonsparking tools should be used.

Advice for emergency responders.

No Information

Environmental precautions.

See Section 12 for additional Ecological information.

Methods and materials for containment and cleaning up.**Methods for Containment.**

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up.

Pick up and transfer to properly labelled containers.

Reference to other sections.

See section 8 for more information.

7. Handling and Storage**Conditions for safe storage, including any incompatibilities.****Advice on safe handling.**

Use only with adequate ventilation/personal protection.

Hygiene measures.

Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions.

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protection**Ingredients with Occupational Exposure Limits**

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Barium Sulfate	5 mg/m ³	N.E.	15 mg/m ³	N.E.
1,3,5-Triglycidyl Isocyanurate	0.05 mg/m ³	N.E.	N.E.	N.E.
Titanium dioxide	10 mg/m ³	N.E.	15 mg/m ³	N.E.
Aluminium powder	1 mg/m ³	N.E.	15 mg/m ³	N.E.
Carbon black	3 mg/m ³	N.E.	3.5 mg/m ³	N.E.
Iron oxide	5 mg/m ³	N.E.	10 mg/m ³	N.E.

TLV = Threshold Limit Value TWA = Time Weighted Average PEL = Permissible Exposure Limit STEL = Short-Term Exposure Limit N.E. = Not Established

Engineering Measures.

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment is not a source of ignition.

Personal protective equipment.**Eye/Face Protection.**

Safety glasses with side-shields.

Skin and body protection.

Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection.

NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

9. Physical and chemical properties.

Information on basic physical and chemical properties.

Physical state	Powder
Appearance	Powder
Color	Metallic
Odor	No Information
Odor Threshold	No Information
pH	No Information
Melting/freezing point., °C (°F)	No Information
Flash Point., °C (°F)	No Information
Boiling point/boiling range., °C (°F)	3,000 (5432)
Evaporation rate	No Information Available
Explosive properties.	No Information
Vapor pressure.	No Information
Vapor density.	No Information
Specific Gravity. (g/cm ³)	1.517
Water solubility.	No Information
Partition coefficient.	No Information
Autoignition temperature., °C	No Information
Decomposition Temperature °C.	No Information
Viscosity, kinematic.	No Information

Other information.

Volatile organic compounds (VOC) content.	No Information
Density, lb/gal	12.658

10. Stability and Reactivity

Reactivity.

Stable under normal conditions.

Chemical stability.

Stable under recommended storage conditions.

Possibility of hazardous reactions.

None known based on information supplied.

Conditions to Avoid.

Extremes of temperature and direct sunlight.

Incompatible Materials.

None known based on information supplied.

Hazardous Decomposition Products.

None known based on information supplied.

11. Toxicological Information

Information on toxicological effects.

Acute toxicity.

Product Information

No Information

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	6,792.2 mg/kg
ATEmix (dermal)	44,981.6 mg/kg
ATEmix (inhalation - dust/mist)	11.25 mg/l

Component Information.

CAS-No.	Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2451-62-9	1,3,5-Triglycidyl Isocyanurate	302 mg/kg Rat	>2000 mg/kg Rat	N.I.
1333-86-4	Carbon black	>15400 mg/kg Rat	N.I.	N.I.
7631-86-9	Amorphous Silica	7900 mg/kg Rat	>5000 mg/kg Rabbit	N.I.

N.I. = No Information

Skin corrosion/irritation.

SKIN IRRITANT.

Eye damage/irritation.

No Information

Respiratory or skin sensitization.

No Information

Ingestion.

No Information

Germ cell mutagenicity.

No Information

Carcinogenicity.

This product contains a known or suspected carcinogen.

CAS-No.	Chemical Name	IARC	NTP	OSHA
13463-67-7	Titanium dioxide	IARC Group 2B	-	-
9002-88-4	POLYETHYLENE	IARC Group 3	-	-
1333-86-4	Carbon black	IARC Group 2B	-	-
1309-37-1	Iron oxide	IARC Group 3	-	-
9002-84-0	POLYTETRAFLUOROETHYLENE	IARC Group 3	-	-
7631-86-9	Amorphous Silica	IARC Group 3	-	-

Reproductive toxicity.

No Information

Specific target organ systemic toxicity (single exposure).

No Information

Specific target organ systemic toxicity (repeated exposure).

No Information

Aspiration hazard.

No Information

Primary Route(s) of Entry

No Information

12. Ecological Information

Toxicity.

11.54% of the mixture consists of ingredient(s) of unknown aquatic toxicity

Ecotoxicity effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
1,3,5-Triglycidyl Isocyanurate 2451-62-9	-	LC50 96 h Danio rerio >77 mg/L	-

Iron oxide 1309-37-1	-	LC50 96 h Danio rerio 100000 mg/L	-
Amorphous Silica 7631-86-9	EC50 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50 96 h Brachydanio rerio 5000 mg/L	EC50 48 h Ceriodaphnia dubia 7600 mg/L

Persistence and degradability.

No data are available on the product itself.

Bioaccumulative potential.

Discharge into the environment must be avoided.

Mobility in soil.

No information

Other adverse effects.

No information

13. Disposal Considerations

Waste Disposal Guidance.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT

Shipping Name: Not Regulated

IMDG

Proper Shipping Name: Not Regulated

IATA

Proper Shipping Name: Not Regulated

15. Regulatory Information

International Inventories:

TSCA	Complies
DSL	Complies
DSL/NDSL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECI	-
PICCS	-
AICS	-
NZIoC	Complies

TCSI

TSCA	United States Toxic Substances Control Act Section 8(b) Inventory.
DSL	Canadian Domestic Substances List.
DSL/NDSL	Canadian Domestic Substances List/Canadian Non-Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.
ENCS	Japan Existing and New Chemical Substances.
IECSC	China Inventory of Existing Chemical Substances.
KECL	Korean Existing and Evaluated Chemical Substances.
PICCS	Philippines Inventory of Chemicals and Chemical Substances.
AICS	Australian Inventory of Chemical Substances.
NZIoC	New Zealand Inventory of Chemicals.
TCSI	Taiwan Chemical Substance Inventory

U.S. Federal Regulations:

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372. .


<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Weight Percent</u>
Aluminium powder	7429-90-5	1.0-2.5

TOXIC SUBSTANCES CONTROL ACT 12(b):

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:.

<u>Chemical Name</u>	<u>CAS-No.</u>
Zinc	7440-66-6

CALIFORNIA PROPOSITION 65 CARCINOGENS

 **WARNING**

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:.

<u>Chemical Name</u>	<u>CAS-No.</u>
Titanium dioxide	13463-67-7
Carbon black	1333-86-4
Crystalline silica (Quartz) (Respirable)	14808-60-7
Nickel	7440-02-0

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

 **WARNING**

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethylene glycol	107-21-1

16. Other Information

Revision Date: 5/13/2021 Supersedes Date: 5/5/2021

Reason for revision: Product Composition Changed
Revision Statement(s) Changed

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	N.I.	Flammability:	N.I.	Physical Hazard:	N.I.	Personal Protection:	N.I.
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NFPA Ratings:

Health:	N.I.	Flammability:	N.I.	Instability:	N.I.	Physical & Chemical:	N.I.
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Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

Safety Data Sheet

1. Identification

Product Information.	TCIS-5170-7A
Product Name:	ML URBAN BRONZE
Recommended Use.	Coating
Uses advised against.	No information available
Supplier.	TCI Powder Coatings 734 Dixon Drive Ellaville, GA 31806 Phone: 1-800-533-9067 E-Mail: ehs@tcpowder.com
Emergency telephone number.	Chemtrec: +1-800-424-9300 USA Chemtrec: +1 703-527-3887 ex-USA 24 hrs./day, 7 days/week

2. Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200

Acute Toxicity, Inhalation, category 4
Carcinogenicity, category 2
Combustible Dust (US OSHA)
Serious Eye Damage, category 1
Germ Cell Mutagenicity, category 1B
Skin Sensitizer, category 1
STOT, repeated exposure, category 2

GHS Pictograms



Signal Word

Danger

Unknown Acute Toxicity

2.1% of the mixture consists of ingredient(s) of unknown acute toxicity

HAZARD STATEMENTS

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

Precautionary Statements - Prevention.

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/ vapors/spray.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response.

If on skin: Wash with plenty of water.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: Get medical advice/attention.

Immediately call a poison center/doctor.

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

Precautionary Statements - Storage.

Store locked up.

Precautionary Statements - Disposal.

Dispose of contents in accordance with local/regional/national/international regulations.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>
Barium Sulfate	7727-43-7	2.5-10
1,3,5-Triglycidyl Isocyanurate	2451-62-9	2.5-10
Titanium dioxide	13463-67-7	1.0-2.5
Iron hydroxide oxide yellow (C.I. Pigment yellow 42)	51274-00-1	1.0-2.5
POLYETHYLENE	9002-88-4	0.1-1.0
Carbon black	1333-86-4	0.1-1.0
Iron oxide	1309-37-1	0.1-1.0
Amorphous silixon dioxide	112926-00-8	0.1-1.0

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

4. First-aid Measures

Description of first-aid measures.

General advice.

No Information

Inhalation.

Remove to fresh air.

Skin contact.

Wash skin with soap and water.

Eye contact.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion.

Clean mouth with water and drink afterwards plenty of water.

Symptoms.

See Section 2 and Section 11, Toxicological effects for description of potential symptoms.

Notes to physician.

Treat symptomatically.

5. Fire-fighting Measures

Extinguishing media.

Suitable extinguishing media.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons.

None.

Special hazards arising from the substance or mixture.

No information available.

Advice for firefighters.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures.

Personal precautions.

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). Nonsparking tools should be used.

Advice for emergency responders.

No Information

Environmental precautions.

See Section 12 for additional Ecological information.

Methods and materials for containment and cleaning up.

Methods for Containment.

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up.

Pick up and transfer to properly labelled containers.

Reference to other sections.

See section 8 for more information.

7. Handling and Storage

Conditions for safe storage, including any incompatibilities.

Advice on safe handling.

Use only with adequate ventilation/personal protection.

Hygiene measures.

Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions.

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Barium Sulfate	5 mg/m ³	N.E.	15 mg/m ³	N.E.
1,3,5-Triglycidyl Isocyanurate	0.05 mg/m ³	N.E.	N.E.	N.E.
Titanium dioxide	10 mg/m ³	N.E.	15 mg/m ³	N.E.
Carbon black	3 mg/m ³	N.E.	3.5 mg/m ³	N.E.
Iron oxide	5 mg/m ³	N.E.	10 mg/m ³	N.E.

TLV = Threshold Limit Value TWA = Time Weighted Average PEL = Permissible Exposure Limit STEL = Short-Term Exposure Limit N.E. = Not Established

Engineering Measures.

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment is not a source of ignition.

Personal protective equipment.

Eye/Face Protection.

Safety glasses with side-shields.

Skin and body protection.

Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection.

NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

9. Physical and chemical properties.

Information on basic physical and chemical properties.

Physical state	Powder
Appearance	Powder
Color	Metallic
Odor	No Information
Odor Threshold	No Information
pH	No Information
Melting/freezing point., °C (°F)	No Information
Flash Point., °C (°F)	No Information
Boiling point/boiling range., °C (°F)	3,000 (5432)
Evaporation rate	No Information Available
Explosive properties.	No Information
Vapor pressure.	No Information
Vapor density.	No Information
Specific Gravity. (g/cm ³)	1.510
Water solubility.	No Information
Partition coefficient.	No Information
Autoignition temperature., °C	No Information
Decomposition Temperature °C.	No Information
Viscosity, kinematic.	No Information

Other information.

Volatile organic compounds (VOC) content.	No Information
Density, lb/gal	12.598

10. Stability and Reactivity

Reactivity.

Stable under normal conditions.

Chemical stability.

Stable under recommended storage conditions.

Possibility of hazardous reactions.

None known based on information supplied.

Conditions to Avoid.

Extremes of temperature and direct sunlight.

Incompatible Materials.

None known based on information supplied.

Hazardous Decomposition Products.

None known based on information supplied.

11. Toxicological Information

Information on toxicological effects.

Acute toxicity.

Product Information

No Information

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	6,568.5 mg/kg
ATEmix (dermal)	43,500.0 mg/kg
ATEmix (inhalation - dust/mist)	10.88 mg/l

Component Information.

CAS-No.	Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2451-62-9	1,3,5-Triglycidyl Isocyanurate	302 mg/kg Rat	>2000 mg/kg Rat	N.I.
1333-86-4	Carbon black	>15400 mg/kg Rat	N.I.	N.I.

N.I. = No Information

Skin corrosion/irritation.

SKIN IRRITANT.

Eye damage/irritation.

No Information

Respiratory or skin sensitization.

No Information

Ingestion.

No Information

Germ cell mutagenicity.

No Information

Carcinogenicity.

This product contains a known or suspected carcinogen.

CAS-No.	Chemical Name	IARC	NTP	OSHA
13463-67-7	Titanium dioxide	IARC Group 2B	-	-
9002-88-4	POLYETHYLENE	IARC Group 3	-	-
1333-86-4	Carbon black	IARC Group 2B	-	-
1309-37-1	Iron oxide	IARC Group 3	-	-
112926-00-8	Amorphous silixon dioxide	IARC Group 3	-	-

Reproductive toxicity.

No Information

Specific target organ systemic toxicity (single exposure).

No Information

Specific target organ systemic toxicity (repeated exposure).

No Information

Aspiration hazard.

No Information

Primary Route(s) of Entry

No Information

12. Ecological Information

Toxicity.

13.47% of the mixture consists of ingredient(s) of unknown aquatic toxicity

Ecotoxicity effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
1,3,5-Triglycidyl Isocyanurate 2451-62-9	-	LC50 96 h Danio rerio >77 mg/L	-
Iron oxide 1309-37-1	-	LC50 96 h Danio rerio 100000 mg/L	-

Persistence and degradability.

No data are available on the product itself.

Bioaccumulative potential.

Discharge into the environment must be avoided.

Mobility in soil.

No information

Other adverse effects.

No information

13. Disposal Considerations**Waste Disposal Guidance.**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information**DOT**

Shipping Name: Not Regulated

IMDG

Proper Shipping Name: Not Regulated

IATA

Proper Shipping Name: Not Regulated

15. Regulatory Information**International Inventories:**

TSCA	Complies
DSL	Complies
DSL/NDSL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECI	-
PICCS	-
AICS	-
NZIoC	-
TCSI	
TSCA	United States Toxic Substances Control Act Section 8(b) Inventory.
DSL	Canadian Domestic Substances List.
DSL/NDSL	Canadian Domestic Substances List/Canadian Non-Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.
ENCS	Japan Existing and New Chemical Substances.
IECSC	China Inventory of Existing Chemical Substances.
KECL	Korean Existing and Evaluated Chemical Substances.
PICCS	Philippines Inventory of Chemicals and Chemical Substances.
AICS	Australian Inventory of Chemical Substances.
NZIoC	New Zealand Inventory of Chemicals.
TCSI	Taiwan Chemical Substance Inventory

U.S. Federal Regulations:

SARA SECTION 313:

This product does not contain any chemicals that are subject to the reporting requirements of SARA 313.

TOXIC SUBSTANCES CONTROL ACT 12(b):

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:.

<u>Chemical Name</u>	<u>CAS-No.</u>
Zinc	7440-66-6

CALIFORNIA PROPOSITION 65 CARCINOGENS**WARNING**

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:.

<u>Chemical Name</u>	<u>CAS-No.</u>
Titanium dioxide	13463-67-7
Carbon black	1333-86-4
Crystalline silica (Quartz) (Respirable)	14808-60-7
Nickel	7440-02-0

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS**WARNING**

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethylene glycol	107-21-1

16. Other Information

Revision Date:	5/13/2021	Supersedes Date:	5/5/2021
Reason for revision:	Revision Statement(s) Changed		
Datasheet produced by:	Regulatory Department		

HMIS Ratings:

Health:	N.I.	Flammability:	N.I.	Physical Hazard:	N.I.	Personal Protection:	N.I.
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NFPA Ratings:

Health:	N.I.	Flammability:	N.I.	Instability:	N.I.	Physical & Chemical:	N.I.
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Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

Safety Data Sheet

1. Identification

Product Information. TCIS-5167-20A

Product Name: ML TUNGSTEN SAND

Recommended Use. Coating

Uses advised against. No information available

Supplier. TCI Powder Coatings
734 Dixon Drive
Ellaville, GA 31806
Phone: 1-800-533-9067
E-Mail: ehs@tcipowder.com

Emergency telephone number. Chemtrec: +1-800-424-9300 USA
Chemtrec: +1 703-527-3887 ex-USA
24 hrs./day, 7 days/week

2. Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200

Acute Toxicity, Inhalation, category 4
Carcinogenicity, category 2
Combustible Dust (US OSHA)
Serious Eye Damage, category 1
Germ Cell Mutagenicity, category 1B
Skin Sensitizer, category 1
STOT, repeated exposure, category 2

GHS Pictograms



Signal Word
Danger

Unknown Acute Toxicity

1.2% of the mixture consists of ingredient(s) of unknown acute toxicity

HAZARD STATEMENTS

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

Precautionary Statements - Prevention.

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/ vapors/spray.
Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response.

If on skin: Wash with plenty of water.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: Get medical advice/attention.

Immediately call a poison center/doctor.

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

Precautionary Statements - Storage.

Store locked up.

Precautionary Statements - Disposal.

Dispose of contents in accordance with local/regional/national/international regulations.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>
1,3,5-Triglycidyl Isocyanurate	2451-62-9	2.5-10
Titanium dioxide	13463-67-7	2.5-10
Iron hydroxide oxide yellow (C.I. Pigment yellow 42)	51274-00-1	1.0-2.5
POLYETHYLENE	9002-88-4	0.1-1.0
Carbon black	1333-86-4	0.1-1.0
Aluminium powder	7429-90-5	0.1-1.0
POLYTETRAFLUOROETHYLENE	9002-84-0	0.1-1.0
Iron oxide	1309-37-1	0.1-1.0

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

4. First-aid Measures

Description of first-aid measures.

General advice.

No Information

Inhalation.

Remove to fresh air.

Skin contact.

Wash skin with soap and water.

Eye contact.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion.

Clean mouth with water and drink afterwards plenty of water.

Symptoms.

See Section 2 and Section 11, Toxicological effects for description of potential symptoms.

Notes to physician.

Treat symptomatically.

5. Fire-fighting Measures

Extinguishing media.

Suitable extinguishing media.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons.

None.

Special hazards arising from the substance or mixture.

No information available.

Advice for firefighters.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures.

Personal precautions.

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). Nonsparking tools should be used.

Advice for emergency responders.

No Information

Environmental precautions.

See Section 12 for additional Ecological information.

Methods and materials for containment and cleaning up.

Methods for Containment.

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up.

Pick up and transfer to properly labelled containers.

Reference to other sections.

See section 8 for more information.

7. Handling and Storage

Conditions for safe storage, including any incompatibilities.

Advice on safe handling.

Use only with adequate ventilation/personal protection.

Hygiene measures.

Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions.

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
1,3,5-Triglycidyl Isocyanurate	0.05 mg/m ³	N.E.	N.E.	N.E.
Titanium dioxide	10 mg/m ³	N.E.	15 mg/m ³	N.E.
Carbon black	3 mg/m ³	N.E.	3.5 mg/m ³	N.E.
Aluminium powder	1 mg/m ³	N.E.	15 mg/m ³	N.E.
Iron oxide	5 mg/m ³	N.E.	10 mg/m ³	N.E.

TLV = Threshold Limit Value TWA = Time Weighted Average PEL = Permissible Exposure Limit STEL = Short-Term Exposure Limit N.E. = Not Established

Engineering Measures.

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment is not a source of ignition.

Personal protective equipment.

Eye/Face Protection.

Safety glasses with side-shields.

Skin and body protection.

Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection.

NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

9. Physical and chemical properties.

Information on basic physical and chemical properties.

Physical state	Powder
Appearance	Powder
Color	Metallic
Odor	No Information
Odor Threshold	No Information
pH	No Information
Melting/freezing point., °C (°F)	No Information
Flash Point., °C (°F)	No Information
Boiling point/boiling range., °C (°F)	3,000 (5432)
Evaporation rate	No Information Available
Explosive properties.	No Information
Vapor pressure.	No Information
Vapor density.	No Information
Specific Gravity. (g/cm ³)	1.447
Water solubility.	No Information
Partition coefficient.	No Information
Autoignition temperature., °C	No Information
Decomposition Temperature °C.	No Information
Viscosity, kinematic.	No Information

Other information.

Volatile organic compounds (VOC) content.	No Information
Density, lb/gal	12.072

10. Stability and Reactivity

Reactivity.

Stable under normal conditions.

Chemical stability.

Stable under recommended storage conditions.

Possibility of hazardous reactions.

None known based on information supplied.

Conditions to Avoid.

Extremes of temperature and direct sunlight.

Incompatible Materials.

None known based on information supplied.

Hazardous Decomposition Products.

None known based on information supplied.

11. Toxicological Information

Information on toxicological effects.

Acute toxicity.

Product Information

No Information

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	6,205.5 mg/kg
ATEmix (dermal)	41,095.8 mg/kg
ATEmix (inhalation - dust/mist)	10.27 mg/l

Component Information.

CAS-No.	Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2451-62-9	1,3,5-Triglycidyl Isocyanurate	302 mg/kg Rat	>2000 mg/kg Rat	N.I.
1333-86-4	Carbon black	>15400 mg/kg Rat	N.I.	N.I.

N.I. = No Information

Skin corrosion/irritation.

SKIN IRRITANT.

Eye damage/irritation.

No Information

Respiratory or skin sensitization.

No Information

Ingestion.

No Information

Germ cell mutagenicity.

No Information

Carcinogenicity.

This product contains a known or suspected carcinogen.

CAS-No.	Chemical Name	IARC	NTP	OSHA
13463-67-7	Titanium dioxide	IARC Group 2B	-	-
9002-88-4	POLYETHYLENE	IARC Group 3	-	-
1333-86-4	Carbon black	IARC Group 2B	-	-
9002-84-0	POLYTETRAFLUOROETHYLENE	IARC Group 3	-	-
1309-37-1	Iron oxide	IARC Group 3	-	-

Reproductive toxicity.

No Information

Specific target organ systemic toxicity (single exposure).

No Information

Specific target organ systemic toxicity (repeated exposure).

No Information

Aspiration hazard.

No Information

Primary Route(s) of Entry

No Information

12. Ecological Information

Toxicity.

6.77% of the mixture consists of ingredient(s) of unknown aquatic toxicity

Ecotoxicity effects.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
1,3,5-Triglycidyl Isocyanurate 2451-62-9	-	LC50 96 h Danio rerio >77 mg/L	-
Iron oxide 1309-37-1	-	LC50 96 h Danio rerio 100000 mg/L	-

Persistence and degradability.

No data are available on the product itself.

Bioaccumulative potential.

Discharge into the environment must be avoided.

Mobility in soil.

No information

Other adverse effects.

No information

13. Disposal Considerations**Waste Disposal Guidance.**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information**DOT**

Shipping Name: Not Regulated

IMDG

Proper Shipping Name: Not Regulated

IATA

Proper Shipping Name: Not Regulated

15. Regulatory Information**International Inventories:**

TSCA	Complies
DSL	Complies
DSL/NDSL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECI	-
PICCS	-
AICS	-
NZIoC	Complies

TCSI

TSCA	United States Toxic Substances Control Act Section 8(b) Inventory.
DSL	Canadian Domestic Substances List.
DSL/NDSL	Canadian Domestic Substances List/Canadian Non-Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances.
ENCS	Japan Existing and New Chemical Substances.
IECSC	China Inventory of Existing Chemical Substances.
KECL	Korean Existing and Evaluated Chemical Substances.
PICCS	Philippines Inventory of Chemicals and Chemical Substances.
AICS	Australian Inventory of Chemical Substances.
NZIoC	New Zealand Inventory of Chemicals.
TCSI	Taiwan Chemical Substance Inventory

U.S. Federal Regulations:

SARA SECTION 313:

This product does not contain any chemicals that are subject to the reporting requirements of SARA 313.

TOXIC SUBSTANCES CONTROL ACT 12(b):

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:.

<u>Chemical Name</u>	<u>CAS-No.</u>
Zinc	7440-66-6

CALIFORNIA PROPOSITION 65 CARCINOGENS**WARNING**

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:.

<u>Chemical Name</u>	<u>CAS-No.</u>
Titanium dioxide	13463-67-7
Carbon black	1333-86-4
Crystalline silica (Quartz) (Respirable)	14808-60-7
Nickel	7440-02-0

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS**WARNING**

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethylene glycol	107-21-1

16. Other Information

Revision Date: 5/13/2021 Supersedes Date: 5/5/2021

Reason for revision: Product Composition Changed
Revision Statement(s) Changed

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	N.I.	Flammability:	N.I.	Physical Hazard:	N.I.	Personal Protection:	N.I.
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NFPA Ratings:

Health:	N.I.	Flammability:	N.I.	Instability:	N.I.	Physical & Chemical:	N.I.
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Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

SAFETY DATA SHEET



Revision Date 08-Oct-2020
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name MITY BLACK TEX
Product code 9022-93378

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Coating
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier TCI Powder Coatings
734 Dixon Drive
Ellaville, GA 31806

E-mail Address ehs@tcpowder.com

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B

Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

2.2 Label elements

Signal Word

Danger

Hazard Statements

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



Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Contaminated work clothing should not be allowed out of the workplace
- Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

- If exposed or concerned: Get medical advice/attention
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor
- IF ON SKIN: Wash with plenty of water and soap
- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity

4.9% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

Mixture

Chemical Name	CAS No.	Weight-%
Nepheline Syenite (Particulates not otherwise classified)	37244-96-5	20 - 30
1,3,5-Triglycidyl Isocyanurate	2451-62-9	1 - 5

Carbon black	1333-86-4	< 1
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The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice	No information available.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin contact	Wash skin with soap and water.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	See Section 2.2, Label Elements and/or Section 11, Toxicological effects.
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4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically.
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5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media	None.
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5.2 Special hazards arising from the substance or mixture

Special Hazard

None known based on information supplied.

Hazardous Combustion Products	No information available.
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Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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). Nonsparking tools should be used.

6.2 Environmental precautions

See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1 Precautions for safe handling

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Nepheline Syenite (Particulates not otherwise classified) 37244-96-5	-	-				TWA: 10 mg/m ³
1,3,5-Triglycidyl Isocyanurate 2451-62-9	TWA: 0.05 mg/m ³	-	TWA: 0.05 mg/m ³ Adverse reproductive effect Sensitizer	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³
Carbon black 1333-86-4	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³	TWA: 3 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3 mg/m ³

8.2 Appropriate engineering controls

Engineering Measures Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment is not a source of ignition.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection . NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Powder		
Appearance	Powder	Color	Black or White
Odor	No information available	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point		No information available
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity		No information available
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content No information available

10. Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

None known based on information supplied.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity 4.9% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50 3,837.00 mg/kg

LC50 (Dust/Mist) 10.22 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,3,5-Triglycidyl Isocyanurate 2451-62-9	188 mg/kg (Rat)	-	-

11.2 Information on toxicological effects

Skin corrosion/irritation

Product Information

• No information available

Component Information

• No information available

Serious eye damage/eye irritation

Product Information

• No information available

Component Information

• No information available

Respiratory or skin sensitization

Product Information

• No information available

Component Information

• No information available

Germ cell mutagenicity

Product Information

• No information available

Component Information

• No information available

Carcinogenicity

Product Information

• The table below indicates whether each agency has listed any ingredient as a carcinogen

Component Information

• Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Carbon black 1333-86-4	-	Group 2B	-	

Reproductive toxicity

Product Information

• No information available

Component Information

• No information available

STOT - single exposure

No information available

STOT - repeated exposure

No information available

Other adverse effects

Product Information

• No information available

Component Information

• No information available

Aspiration hazard

Product Information

• No information available

Component Information

• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity

No information available

28.006 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT

Not regulated

MEX

Not regulated

IMDG

Not regulated

IATA

Not regulated

15. Regulatory information

15.1 International Inventories

TSCA

Complies

DSL

Complies

EINECS/ELINCS

-

ENCS	Complies
IECSC	Complies
KECL	-
PICCS	-
AICS	-
NZIoC	-

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL** - Canadian Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances
- NZIoC** - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Carbon black - 1333-86-4	Carcinogen

16. Other information

NFPA	Health Hazard 0	Flammability 0	Instability 0	Physical and chemical hazards *
HMIS	Health Hazard 0	Flammability 0	Physical Hazard 0	Personal protection X

Legend:

- ACGIH (American Conference of Governmental Industrial Hygienists)
- Ceiling (C)
- DOT (Department of Transportation)
- EPA (Environmental Protection Agency)
- IARC (International Agency for Research on Cancer)
- International Air Transport Association (IATA)
- International Maritime Dangerous Goods (IMDG)
- NIOSH (National Institute for Occupational Safety and Health)
- NTP (National Toxicology Program)
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- PEL (Permissible Exposure Limit)
- Reportable Quantity (RQ)
- Skin designation (S*)
- STEL (Short Term Exposure Limit)
- TLV® (Threshold Limit Value)
- TWA (time-weighted average)

Revision Date 08-Oct-2020

Revision Note
No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its

publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet