1. IDENTIFICATION OF SUBSTANCE

- **Product description:** Powder Coating
- **Trade Name:** Polyester/TGIC
- **Article number:** 3836034
- **Manufacturer/Supplier:** TIGER DRYLAC U.S.A. INC.
  1261 EAST BELMONT STREET
  ONTARIO, CA 91761
- **Information department:** (909) 930-9100
- **Contact:**

2. HAZARDOUS INGREDIENTS

- **Chemical characterization**
- **Description:** Product is a mixture of hazardous and non-hazardous ingredients compounded in a polymer

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS#</th>
<th>PEL-OSHA</th>
<th>TLV-A CGIH</th>
<th>Conc. [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium Sulfate</td>
<td>7727-42-7</td>
<td>15.5 mg/m³</td>
<td>10/5 mg/m³</td>
<td>10 - 30</td>
</tr>
<tr>
<td>T-Glycid-T-Cyanurate (TGIC)</td>
<td>2451-62-9</td>
<td>N/E</td>
<td>0.05 mg/m³</td>
<td>5 - 10</td>
</tr>
</tbody>
</table>

3. POTENTIAL HEALTH EFFECTS

- **Information pertaining to particular danger for man and environment** Harmful by inhalation and if swallowed.
- **Classification system**
  Classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data
- **NFPA ratings (scale 0-4)**
  - Health 1
  - Fire 1
  - Reactivity 0
- **Effects of overexposure to:**
  - **Barium Sulfate**
    - TLV and PEL are for Total dust/Respirable fraction. May cause mechanical irritation of eyes or in great concentration overloading of the respiratory system.
    - Lungs may be affected by repeated or prolonged exposure to dust particles, resulting in baritosis (a form of benign pneumoconiosis).
    - Reacts violently with aluminium powder.
  - **T-Glycid-T-Cyanurate (TGIC)** Warning! Severe eye irritant. Toxic by ingestion or if inhaled. May cause dermatitis and sensitization. Can cause effects on the male reproduction system.

4. FIRST AID MEASURES

- **After inhalation**
  Supply fresh air and to be sure call for a doctor
- **After skin contact**
  Generally the product does not irritate the skin
- **After eye contact**
  Rinse opened eye for several minutes under running water
- **After swallowing**
  Rinse mouth out and then drink plenty of water. If symptoms persist consult doctor
5. FIRE FIGHTING MEASURES
   • Suitable extinguishing agents
     Use CO2 extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
   • Protective equipment
     Wear self-contained respiratory device

6. ACCIDENTAL RELEASE MEASURES
   • Person-related safety precautions
     Ensure adequate ventilation
   • Measures for environmental protection
     Do not allow to enter sewer/surface or ground water
   • Measures for cleaning/collecting
     Pick up mechanically. Dispose contaminated material as waste according to item 13

7. HANDLING AND STORAGE
   • Handling
     • Information for safe handling
       Prevent formation of dust; Ensure good ventilation/exhaustion at the workplace
     • Information about protection against explosions and fires –
       Dust can combine with air to form an explosive mixture
   • Storage
     • Requirements to be met by storerooms and receptacles
       Store in cool, dry place, in tightly closed container. Storage temperature not to exceed 25°C / 77°F to ensure product quality. Shelf life of the product at that temperature up to 2 years, after that the performance of the product will deteriorate. Protect from heat and direct sunlight. Protect from humidity and water
     • Information about storage in one common storage facility
       Not required

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION
   • Additional information about design of technical systems
     No further data; see item 7
   • Components with limited values that require monitoring at the workplace
     Barium Sulfate
     T-Glycidyl-7-Cyanurate (TGIC)
   • Personal protective equipment
     Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. The usual precautionary measures for handling chemicals shall be followed
   • General protective and hygienic measures
     • Inhalation:
       It is recommended to use MSHA approved respirator when handling powders. Powders are considered nuisance dust.
     • Skin contact:
       Avoid skin contact, use long sleeved shirts and impermeable gloves at a minimum when handling powders. TYVEK full body suits or equivalent are recommended for heavy exposure. Be sure to launder contaminated clothing before reuse. Wash skin with mild soap and water if contact occurs. If symptoms develop, consult with a physician.
     • Eye protection:
       Require the use of safety goggles with side shields. Powder particles can be abrasive on the cornea. In case of eye contact flush with plenty of fresh water. If irritation develops consult with a physician
9. PHYSICAL AND CHEMICAL PROPERTIES

- **Form**: Solid, finely divided powder
- **Colour**: According to product specifications
- **Odour**: Nearly odourless

- **Change in condition**
  - **Melting point/range**: 70-80°C/158-176°F
  - **Boiling point/range**: Not applicable
  - **Flash point**: Not applicable
  - **Auto igniting**: Product is not self-igniting
  - **Danger of explosion**: Product does not normally present an explosive hazard. However, dust can combine with air to form an explosive mixture if it comes in contact with a source of ignition.
    - LOWER EXPLOSION LIMIT: 15 g/m³
    - UPPER EXPLOSION LIMIT: 50 g/m³

- **Density**: 1.2 g/cm³ – 1.7 g/cm³
- **Solubility in/miscibility with water**: Not miscible or difficult to mix
- **Solvent content**: Organic solvents – 0.0%. Solids content – 100%

10. STABILITY AND REACTIVITY

- **Product Stability**: No decomposition if used according to specifications
- **Thermal decomposition/conditions to be avoided**: Decomposition at high temperatures may yield Carbon Dioxide, Carbon Monoxide, Nitrous Oxides and other hazardous gases.
  - **Dangerous Reactions**: 
  - **Dangerous products of decomposition**: 

11. TOXICOLOGICAL INFORMATION

- **Primary irritant effect**: On the skin – Powder can be irritating through mechanical action, also has a drying effect. On the eye – Powder can be irritating through mechanical action, can cause abrasion on the cornea.
- **Sensitization**: Sensitization possible through skin contact
- **Additional toxicological information**: The product shows the following danger according to internally approved calculation methods for preparations: Harmful

12. ECOLOGICAL INFORMATION

- **General notes**: Water hazard class 1 (self-assessment): slightly hazardous for water

13. DISPOSAL CONSIDERATIONS

- **Product**
  - **Recommendations**: Must not be disposed of together with household garbage. Do not allow product to reach sewage systems
- **Uncleaned packaging**
  - **Recommendations**: Disposal must be made according to official regulations
14. TRANSPORTATION INFORMATION

- DOT regulations
- Hazard class
  Non Regulated
- Maritime transportation IMDG
- Marine pollutant
  No

15. REGULATIONS

- Product related hazard information
  The product has been classified and marked in accordance with directives on hazardous materials
- Hazard symbols
  Harmful
- Hazard-determining components of labeling
  TGIC
- Risk phrases
  Harmful by inhalation and if swallowed
  May cause sensitization by skin contact
- Safety phrases
  Keep out of the reach of children
  Keep container dry
  Keep container in a well ventilated place
  Keep away from food, drink, and animal feed
  Do not breathe gas/fumes/vapour/spray
  If swallowed, seek medical advise immediately and show this container or label

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Pure, concentrated TGIC is toxic to humans. At the concentrations TGIC is found in powder coatings, it is not toxic and only contributes to nuisance dust. Users of TGIC containing powder coatings should be aware that such coatings could cause contact dermatitis or short term, asthma like symptoms in sensitive persons. The European Union regulates pure TGIC under its environment annex as a substance with potential reproductive effects.

WARNING: This product contains chemical(s) known by the State of California to cause cancer, birth defects or other reproductive harm.