1 Identification

Product identifier

Trade name POLYESTER EPOXY HYBRID BASED POWDER COATING METALLIC

Article number: (09,89)M

Product use No further relevant information available.

Manufacturer/Supplier:

USA:
TIGER Drylac U.S.A., Inc.
3865 Swenson Ave
St. Charles, IL 60174
Phone: +1 / 630 / 587 2918
Fax: +1 / 630 / 587 2923

Canada:
TIGER Drylac Canada Inc.
110 Southgate Drive
Guelph, Ontario, N1G 4P5
Phone: +1 / 519 / 766 4781
Fax: +1 / 519 / 766 4787

Informing department: Product Safety Department

Emergency telephone number: 24/7:1-800-255-3924; International:+01 or +001-813-248-0585

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Classification system

NFPA ratings (scale 0-4)

Health = 1
Fire = 1
Reactivity = 1

HMIS-RATINGS (SCALE 0 - 4)

HEALTH 1 Health = 1
FIRE 1 Fire = 1
REACTIVITY 1 Reactivity = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture consisting of the following components with harmless additives.

Hazardous ingredients:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
<td>10-25%</td>
</tr>
<tr>
<td>7727-43-7</td>
<td>barium sulphate, natural</td>
<td>10-25%</td>
</tr>
</tbody>
</table>
Trade name POLYESTER EPOXY HYBRID BASED POWDER COATING METALLIC

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>54553-90-1</td>
<td>benzene-1,2,4,5-tetracarboxylic acid, compound with 4,5-dihydro-2-phenyl-1H-imidazole (1:1)</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td>7429-90-5</td>
<td>aluminum powder (stabilized)</td>
<td>&lt; 2.5%</td>
</tr>
<tr>
<td>12001-26-2</td>
<td>mica</td>
<td>&lt; 2.5%</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

Description of first-aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of symptoms.

After skin contact: Instantly wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: In case of persistent symptoms consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire Fighting Measures

Extinguishing media

Suitable extinguishing agents: CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters:

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Avoid causing dust.

Environmental precautions: Do not allow product to reach sewage system or water bodies.

Methods and material for containment and cleaning up: Collect mechanically.

Reference to other sections:

No dangerous materials are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

Handling

Precautions for safe handling: No special measures required.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Dust can combine with air to form an explosive mixture.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store only in the original container.
### 8 Exposure controls/personal protection

**Additional information about design of technical systems:** No further data; see item 7.

**Control parameters**

**Components with critical values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL (U.S.A)</th>
<th>REL (U.S.A)</th>
<th>TLV (U.S.A)</th>
<th>EL (Canada)</th>
<th>EV (Canada)</th>
<th>LMPE (Mexico)</th>
</tr>
</thead>
</table>
| 13463-67-7 titanium dioxide| Long-term value: 15* mg/m³  
*total dust | See Pocket Guide App. A | Long-term value: 10 mg/m³  
withdrawn from NIC | Long-term value: 10* 3** mg/m³  
*total dust;**respirable fraction; IARC 2B | Long-term value: 10 mg/m³  
total dust | Long-term value: 10 mg/m³  
A4 |
| 7727-43-7 barium sulphate, natural | Long-term value: 15* 5** mg/m³  
*total dust **respirable fraction | Long-term value: 10* 5** mg/m³  
*total dust **respirable fraction | Long-term value: 5* mg/m³  
*inhalable fraction; E | Long-term value: 10* 3** mg/m³  
*total dust, **respirable fraction | Long-term value: 10 mg/m³  
total dust | Long-term value: 10 mg/m³  
A4 |
| 7429-90-5 aluminum powder (stabilized) | Long-term value: 15*; 15** mg/m³  
*Total dust; ** Respirable fraction | Long-term value: 10* 5** mg/m³  
as Al*Total dust**Respirable/pyro powd./welding f. | Long-term value: 1* mg/m³  
as Al; *as respirable fraction | Long-term value: 1.0 mg/m³  
respirable, as Al | Long-term value: 1* mg/m³  
A4, *fracciòn respirable | |
| 12001-26-2 mica            | Long-term value: 20 mppcf ppm  
<1% crystalline silica | Long-term value: 3* mg/m³  
*respirable dust; containing < 1% quartz | Long-term value: 3* mg/m³  
as respirable fraction | Long-term value: 3 mg/m³ | |

(Contd. on page 4)
Additional information:
The lists that were valid during the compilation were used as basis.

Exposure controls

Personal protective equipment

The usual precautionary measures should be adhered to in handling the chemicals.

Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Protection of hands:

Protective gloves.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety Glasses

Body protection: Protective work clothing.

9 Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Solid
Colour: According to Trade Name
Smell: Characteristic
Odour threshold: Not determined
pH-value: Not applicable

Change in condition

Melting point/Melting range: > 50 °C / 120°F
Boiling point/Boiling range: Not applicable

Flash point: Not applicable

Inflammability (solid, gaseous) Not determined
Ignition temperature: 400 °C (752 °F)
Decomposition temperature: Not determined
Safety Data Sheet
acc. GHS

Trade name POLYESTER EPOXY HYBRID BASED POWDER COATING METALLIC

. Self-inflammability: Product is not selfigniting.
. Danger of explosion: Product is not explosive. However, formation of explosive air/dust mixtures is possible

. Critical values for explosion:
   Lower: Not determined.
   Upper: Not determined.
. Steam pressure: Not applicable.
. Density (Specific gravity) at 20 °C (68 °F) 1.65 g/cm³ (13.769 lbs/gal)
. Relative density Not determined.
. Vapour density Not applicable.
. Evaporation rate Not applicable.
. Solubility in / Miscibility with Water: Unsoluble
. Partition coefficient (n-octanol/water): Not determined.
. Viscosity:
   dynamic: Not applicable.
   kinematic: Not applicable.
. Solvent content:
   Organic solvents: 0.0 %
   Solids content: 100.0 %
. Other information No further relevant information available.

*10 Stability and Reactivity

. Reactivity
. Chemical stability
. Conditions to be avoided: No decomposition if used according to specifications.
. Possibility of hazardous reactions No dangerous reactions known
. Conditions to avoid No further relevant information available.
. Incompatible materials: No further relevant information available.
. Hazardous decomposition products: In case of fire: CO, CO₂, NOₓ

*11 Toxicological Information

. Information on toxicological effects
. Acute toxicity:
. Primary irritant effect:
   on the skin: No irritant effect.
   on the eye: No irritant effect.
. Sensitization: No sensitizing effect known.
. Additional toxicological information:
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

. Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>2B</td>
</tr>
<tr>
<td>7631-86-9 silicon dioxide, chemically prepared</td>
<td>3</td>
</tr>
<tr>
<td>112926-00-8 Silicon dioxide</td>
<td>3</td>
</tr>
<tr>
<td>14808-60-7 quartz (SiO₂)</td>
<td>1</td>
</tr>
<tr>
<td>1309-37-1 diiron trioxide</td>
<td>3</td>
</tr>
</tbody>
</table>

(Contd. on page 6)
Trade name POLYESTER EPOXY HYBRID BASED POWDER COATING METALLIC

12 Ecological information

- **Toxicity**
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.

- **Behaviour in environmental systems:**
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.

- **Additional ecological information:**
  - General notes:
    - Water hazard class 1 (Self-assessment): slightly hazardous for water.
    - Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

**Results of PBT and vPvB assessment**

- PBT: Not applicable.
- vPvB: Not applicable.

**Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
  - Recommendation: Smaller quantities can be disposed with household garbage.

- **Uncleaned packagings:**
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
  - ADR: N/A
  - UN proper shipping name: N/A
  - DOT, ADR, IMDG, IATA: N/A

- **Transport hazard class(es)**
  - DOT, IMDG, IATA
    - Class: Not regulated.

- **Packing group**
  - ADR, IMDG, IATA: N/A

- **Environmental hazards:**
  - Marine pollutant: No

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **SARA (Superfund Amendments and Reauthorization Act):**
    - **Section 355 (Extremely hazardous substances):**
      - None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**
  - 7727-43-7 barium sulphate, natural
## Trade name

POLYESTER EPOXY HYBRID BASED POWDER COATING METALLIC

### Chemicals listed according to TSCA (Toxic Substances Control Act)

<table>
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<td>7429-90-5</td>
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</tr>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
</tr>
</tbody>
</table>

### Proposition 65

- **Chemicals known to cause cancer:**
  - 13463-67-7 titanium dioxide

### TSCA (Toxic Substances Control Act)

All ingredients are listed.

### Proposition 65

- **Chemicals known to cause reproductive toxicity for females:**
  - None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**
  - None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**
  - None of the ingredients is listed.

### Cancerogenity categories

- **EPA (Environmental Protection Agency)**
  - 7727-41-7 barium sulphate, natural D, CBD(inh), NL(oral)

### TLV (Threshold Limit Value established by ACGIH)

<table>
<thead>
<tr>
<th>CAS number</th>
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<tbody>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
<td>A4</td>
</tr>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
<td>A4</td>
</tr>
<tr>
<td>1332-58-7</td>
<td>kaolin</td>
<td>A4</td>
</tr>
<tr>
<td>1314-23-4</td>
<td>zirconium dioxide</td>
<td>A4</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>quartz (SiO2)</td>
<td>A2</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>diiron trioxide</td>
<td>A4</td>
</tr>
</tbody>
</table>

### NIOSH-Ca (National Institute for Occupational Safety and Health)

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<td>quartz (SiO2)</td>
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</tr>
</tbody>
</table>

### GHS label elements

- **Hazard pictograms**: Void
- **Signal word**: Void
- **Hazard statements**: Void
- **Chemical safety assessment**: A Chemical Safety Assessment has not been carried out.

### Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision**: 07/29/2015
- **Abbreviations and acronyms**:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - * Data compared to the previous version altered.