1 Identification

. Product identifier

. Trade name **EPOXY BASED POWDER COATING**

. Article number: 2/3/4/5/8(69)

. 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

![GHS07]

Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

. Label elements

. GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

. Hazard pictograms

![GHS07]

. Signal word Warning

. Hazard-determining components of labeling:

  1-o-tolylbiguanide

. Hazard statements

Causes serious eye irritation.
May cause an allergic skin reaction.

. Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.

(Contd. on page 2)
Trade name EPOXY BASED POWDER COATING

If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of water. Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system

NFPA ratings (scale 0-4)

Health = 1
Fire = 1
Reactivity = 1

NFPA ratings (scale 0-4)

Health = 1
Fire = 1
Reactivity = 1

HMIS-RATINGS (SCALE 0 - 4)

HEALTH
FIRE
REACTIVITY
Health = 1
Fire = 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>
<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>2.5-10%</td>
</tr>
<tr>
<td>93-69-6</td>
<td>1-o-tolylbiguanide</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>936-49-2</td>
<td>2-phenyl-2-imidazoline</td>
<td>&lt; 1.0%</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

After inhalation
Supply fresh air and call for doctor for safety reasons.
In case of unconsciousness bring patient into stable side position for transport.

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.
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. Inform respective authorities in case product reaches water or sewage system.

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

- **Reference to other sections**
  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. Store in cool, dry place in tightly closed containers. Prevent formation of dust.
  - **Information about protection against explosions and fires:**

  ![No fire and explosion symbols]

  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. Static charges may build up in the powder.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    Store in cool, dry conditions in well sealed containers.
  - **Specific end use(s)**
    No further relevant information available.

8 Exposure controls/personal protection

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

- **Control parameters**

<table>
<thead>
<tr>
<th>Component</th>
<th>Control Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>PEL (U.S.A)</td>
<td>Long-term value: 15 mg/m³ *total dust</td>
</tr>
<tr>
<td></td>
<td>REL (U.S.A)</td>
<td>See Pocket Guide App. A</td>
</tr>
<tr>
<td></td>
<td>TLV (U.S.A)</td>
<td>Long-term value: 10 mg/m³ withdrawn from NIC</td>
</tr>
<tr>
<td></td>
<td>EL (Canada)</td>
<td>Long-term value: 10 mg/m³ *total dust; **respirable fraction; IARC 2B</td>
</tr>
<tr>
<td></td>
<td>EV (Canada)</td>
<td>Long-term value: 10 mg/m³ total dust</td>
</tr>
<tr>
<td></td>
<td>LMPE (Mexico)</td>
<td>Long-term value: 10 mg/m³ A4</td>
</tr>
</tbody>
</table>
Additional information:
The lists that were valid during the compilation were used as basis.

Exposure controls:

Personal protective equipment

General protective and hygienic measures
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.

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 / 120F
- Boiling point/Boiling range: > 260 °C (> 500 °F)
  Not applicable

Flash point: Not applicable

Inflammability (solid, gaseous) Not determined

Ignition temperature: 410 °C (770 °F)

Decomposition temperature: Not determined

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) 1.68 g/cm³ (14.02 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: Sensitization possible by skin contact.

Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Irritant
Carcinogenic categories

IARC (International Agency for Research on Cancer)
- 13463-67-7 titanium dioxide: Group 2B
- 7631-86-9 silicon dioxide, chemically prepared: Group 3
- 14808-60-7 quartz (SiO2): Group 1

NTP (National Toxicology Program)
- 14808-60-7 quartz (SiO2): K

OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients is listed.

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.
- Ecotoxicological effects:
- Remark: Harmful to fish
- Additional ecological information:
- General notes:
  - Generally not hazardous for water.
  - Harmful to aquatic organisms
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

Disposal considerations

Waste treatment methods
- Recommendation
  - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

Transport information

- UN-Number: N/A
- UN proper shipping name: N/A
- Transport hazard class(es):
- DOT, IMDG, IATA
  - Class: Not regulated.
- Packing group: 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 313 (Specific toxic chemical listings):
- 7727-43-7 barium sulphate, natural
- 1344-28-1 aluminium oxide

Section 311 (Specific toxic chemical listings):

TSCA (Toxic Substances Control Act):
- All ingredients are listed.

Proposition 65:

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

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)
- 7727-43-7 barium sulphate, natural

TLV (Threshold Limit Value established by ACGIH)
- 13463-67-7 titanium dioxide
- 1344-28-1 aluminium oxide
- 1332-58-7 kaolin
- 1314-23-4 zirconium dioxide
- 14808-60-7 quartz (SiO2)

NIOSH-Ca (National Institute for Occupational Safety and Health)
- 13463-67-7 titanium dioxide
- 14808-60-7 quartz (SiO2)

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

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<th>Warning</th>
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- 1-o-tolylbiguanide

Hazard statements
- Causes serious eye irritation.
- May cause an allergic skin reaction.

Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wear protective gloves.
- Wear eye protection / face protection.
Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If on skin: Wash with plenty of water.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 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 06/12/2015 / -

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)
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Skin Sens. 1: Sensitisation – Skin, Hazard Category 1