1 Identification

- **Product name:** Black Glass-Filled Epoxy Powder, Non-stick
- **Part number:** 150-10105 - 150-10110
- **Application of the substance / the mixture:** Thermoset molding
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  Allied High Tech Products Inc.
  2376 East Pacifica Place
  USA-RANCHO DOMINGUEZ, CA 90220
  USA
  info@alliehdightech.com
- **Information department:** Product safety department
- **Emergency telephone number:**
  During normal opening times: +1 (310) 635-2466
  Chemtrec: +1 (202) 483-7616

2 Hazard(s) identification

- **Classification of the substance or mixture**

  - GHS08 Health hazard
    - Resp. Sens. 1  H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
    - Carc. 1A  H350  May cause cancer.

  - GHS05 Corrosion
    - Eye Dam. 1  H318  Causes serious eye damage.

  - GHS09 Environment
    - Aquatic Chronic 2  H411  Toxic to aquatic life with long lasting effects.

  - GHS07
    - Skin Sens. 1  H317  May cause an allergic skin reaction.

(Contd. on page 2)
STOT SE 3 H335 May cause respiratory irritation.

Aquatic Acute 2 H401 Toxic to aquatic life.

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

GHS05 GHS07 GHS08 GHS09

- Signal word Danger

- Hazard-determining components of labeling:
  Quartz (SiO2)
  Alkyl phenol polyether
tetrachlorophthalic anhydride
  Carbon black

- Hazard statements
  Causes serious eye damage.
  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  May cause an allergic skin reaction.
  May cause cancer.
  May cause respiratory irritation.
  Toxic to aquatic life.
  Toxic to aquatic life with long lasting effects.

- Precautionary statements
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Use only outdoors or in a well-ventilated area.
  Contaminated work clothing must not be allowed out of the workplace.
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.
  [In case of inadequate ventilation] wear respiratory protection.
  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.
  Immediately call a poison center/doctor.
  IF exposed or concerned: Get medical advice/attention.
  Specific treatment (see on this label).
  If skin irritation or rash occurs: Get medical advice/attention.
  If experiencing respiratory symptoms: Call a poison center/doctor.
  Wash contaminated clothing before reuse.
  Collect spillage.
  Store in a well-ventilated place. Keep container tightly closed.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
Product name: Black Glass-Filled Epoxy Powder, Non-stick

· Classification system:
  · NFPA ratings (scale 0 - 4)
    Health = 3
    Fire = 1
    Reactivity = 0
  · HMIS-ratings (scale 0 - 4)
    Health = 3
    Fire = 1
    Reactivity = 0

· Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.

3 Composition/Information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture of the substances listed below with nonhazardous additions.

· Hazardous Components:

<table>
<thead>
<tr>
<th>Component ID</th>
<th>Substance</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>50-100%</td>
</tr>
<tr>
<td></td>
<td>Carc. 1A, H330</td>
<td></td>
</tr>
<tr>
<td>25036-25-3</td>
<td>Alkyl phenol polyether</td>
<td>10-25%</td>
</tr>
<tr>
<td></td>
<td>Skin Sens. 1, H317; STOT SE 3, H335-H336; Eye Irrit. 2B, H320</td>
<td></td>
</tr>
<tr>
<td>65997-17-3</td>
<td>Fibrous Glass</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>117-08-8</td>
<td>tetrachlorophthalic anhydride</td>
<td>2.5-10%</td>
</tr>
<tr>
<td></td>
<td>Resp. Sens. 1, H334; Eye Dam. 1, H318; Aquatic Chronic 1, H410; Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>2421-28-5</td>
<td>benzophenone-3,3',4,4'-tetracarboxylic dianhydride</td>
<td>≤2.5%</td>
</tr>
<tr>
<td></td>
<td>Eye Irrit. 2A, H319; STOT SE 3, H335</td>
<td></td>
</tr>
<tr>
<td>557-05-1</td>
<td>zinc distearate, pure</td>
<td>≤2.5%</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 4, H312</td>
<td></td>
</tr>
<tr>
<td>1333-86-4</td>
<td>Carbon black</td>
<td>≤2.5%</td>
</tr>
<tr>
<td></td>
<td>Self-heat. 2, H252; Carc. 2, H351</td>
<td></td>
</tr>
<tr>
<td>1344-95-2</td>
<td>Silicic acid, calcium salt</td>
<td>≤2.5%</td>
</tr>
<tr>
<td>111-90-0</td>
<td>Diethylene glycol monoethyl ether</td>
<td>≤2.5%</td>
</tr>
<tr>
<td></td>
<td>Flam. Liq. 4, H227</td>
<td></td>
</tr>
</tbody>
</table>

· Non-hazardous Components:

<table>
<thead>
<tr>
<th>Component ID</th>
<th>Substance</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>68476-03-9</td>
<td>Montan wax acids</td>
<td>≤2.5%</td>
</tr>
<tr>
<td>136-53-8</td>
<td>Ethylhexanoic acid zinc salt</td>
<td>Flam. Liq. 3, H226</td>
</tr>
</tbody>
</table>

· Additional information:
  Mixture contains a higher quartz and carbon black content than standard Epoxy Powder.
4 First-aid measures

· Description of first aid measures
  · After inhalation:
  Supply fresh air and to be sure call for a doctor.
  In case of unconsciousness place patient stably in side position for transportation.
  · After skin contact: Immediately wash with water and soap and rinse thoroughly.
  · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  · After swallowing: If symptoms persist consult doctor.

· Information for doctor:
  · Most important symptoms and effects, both acute and delayed
    Breathing difficulty
    Headache
    Dizziness
    Nausea
  · Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Fire-fighting measures

· Extinguishing media
  · Suitable extinguishing agents: Use fire fighting measures that suit the environment.

· 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.

· Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Do not allow to enter sewers/ surface or ground water.
  Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:
  Use neutralizing agent.
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.

· 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 disposal information.

· Protective Action Criteria for Chemicals

  · PAC-1:
    14808-60-7 Quartz (SiO2) 0.075 mg/m³
    25036-25-3 Alkyl phenol polyether 12 mg/m³
    65997-17-3 Fibrous Glass 15 mg/m³
    2421-28-5 benzophenone-3,3’,4,4’-tetracarboxylic dianhydride 30 mg/m³
    557-05-1 zinc distearate, pure 30 mg/m³
    1333-86-4 Carbon black 9 mg/m³

(Contd. on page 5)
Product name: Black Glass-Filled Epoxy Powder, Non-stick

| PAC-2: 
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14808-60-7</strong> Quartz (SiO2)</td>
</tr>
<tr>
<td><strong>25036-25-3</strong> Alkyl phenol polyether</td>
</tr>
<tr>
<td><strong>65997-17-3</strong> Fibrous Glass</td>
</tr>
<tr>
<td><strong>2421-28-5</strong> benzophenone-3,3',4,4'-tetracarboxylic dianhydride</td>
</tr>
<tr>
<td><strong>557-05-1</strong> zinc distearate, pure</td>
</tr>
<tr>
<td><strong>1333-86-4</strong> Carbon black</td>
</tr>
<tr>
<td><strong>111-90-0</strong> Diethylene glycol monoethyl ether</td>
</tr>
</tbody>
</table>

| PAC-3: 
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14808-60-7</strong> Quartz (SiO2)</td>
</tr>
<tr>
<td><strong>25036-25-3</strong> Alkyl phenol polyether</td>
</tr>
<tr>
<td><strong>65997-17-3</strong> Fibrous Glass</td>
</tr>
<tr>
<td><strong>2421-28-5</strong> benzophenone-3,3',4,4'-tetracarboxylic dianhydride</td>
</tr>
<tr>
<td><strong>557-05-1</strong> zinc distearate, pure</td>
</tr>
<tr>
<td><strong>1333-86-4</strong> Carbon black</td>
</tr>
<tr>
<td><strong>111-90-0</strong> Diethylene glycol monoethyl ether</td>
</tr>
</tbody>
</table>

7 Handling and storage

· Handling:
  · Precautions for safe handling: Thorough dedusting.
  · Information about protection against explosions and fires: No special measures required.

· Conditions for safe storage, including any incompatibilities

· Storage:
  · Requirements to be met by storerooms and receptacles: Store in a cool location.
  · Information about storage in one common storage facility: Not required.
  · Further information about storage conditions:
    Keep receptacle tightly sealed.
    Store receptacle in a well-ventilated area.
  · 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
  · Components with limit values that require monitoring at the workplace:
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>14808-60-7 Quartz (SiO2)</th>
</tr>
</thead>
</table>
| **PEL** Long-term value: 0.05* mg/m³  
*resp. dust; 30 mg/m³ SiO2 + 2 **REL** Long-term value: 0.05* mg/m³  
*resp. dust; See Pocket Guide App. A |
### TLV Long-term values:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Long-term value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>65997-17-3 Fibrous Glass</strong></td>
<td>0.025* mg/m³</td>
<td>as respirable fraction</td>
</tr>
<tr>
<td><strong>557-05-1 zinc distearate, pure</strong></td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td><strong>1333-86-4 Carbon black</strong></td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td><strong>1344-95-2 Silicic acid, calcium salt</strong></td>
<td>3* mg/m³</td>
<td>inhalable fraction</td>
</tr>
<tr>
<td><strong>111-90-0 Diethylene glycol monoethyl ether</strong></td>
<td>25 ppm</td>
<td></td>
</tr>
</tbody>
</table>

### Additional information:
- The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Store protective clothing separately.
- **Avoid contact with the eyes.**
- **Avoid contact with the eyes and skin.**
- **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:**
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

### 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.
9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:**
      - **Form:** Powder
      - **Color:** Black
    - **Odor:** Mild
    - **Odor threshold:** Not determined.
    - **pH-value:** Not applicable.
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** Undetermined.
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Not determined.
  - **Decomposition temperature:** Not determined.
  - **Auto igniting:** Product is not selfigniting.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - **Lower:** Not determined.
    - **Upper:** Not determined.
  - **Vapor pressure:** Not applicable.
  - **Density at 20 °C (68 °F):** 1.6 g/cm³ (13.352 lbs/gal)
  - **Relative density**
    - Not determined.
  - **Vapor density**
    - Not applicable.
  - **Evaporation rate**
    - Not applicable.
  - **Solubility in / Miscibility with**
    - **Water:** Insoluble.
  - **Partition coefficient (n-octanol/water):** Not determined.
  - **Viscosity:**
    - **Dynamic:** Not applicable.
    - **Kinematic:** Not applicable.
  - **Solvent content:**
    - **Organic solvents:** 0.0 %
Product name: Black Glass-Filled Epoxy Powder, Non-stick

VOC content: 0.01 %
0.0 g/l / 0.00 lb/gl

Solids content: 99.7 %

Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability:
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid:
  - Keep away from oxidising agents and acidic substances.
  - Do not mix with alkalis.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products:
  - Carbon monoxide and carbon dioxide
  - At elevated temperatures: phenol, formaldehyde, alkyl phenols and aromatic hydrocarbons may be generated.

11 Toxicological information

- Information on toxicological effects:
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    - ATE (Acute Toxicity Estimate)
      | Oral   | LD50 | 395,038 mg/kg (rat) |
      | Dermal | LD50 | 158,015 mg/kg (rabbit) |
    - 117-08-8 tetrachlorophthalic anhydride
      | Oral   | LD50 | 15,800 mg/kg (rat) |
      | Dermal | LD50 | 5,010 mg/kg (rabbit) |
    - 557-05-1 zinc distearate, pure
      | Oral   | LD50 | 3,000 mg/kg (rat) |
      | Dermal | LD50 | 2,000 mg/kg (rabbit) |
    - 1333-86-4 Carbon black
      | Oral   | LD50 | 10,000 mg/kg (rat) |
    - 111-90-0 Diethylene glycol monoethyl ether
      | Oral   | LD50 | 5,500 mg/kg (rat) |
      | Dermal | LD50 | 8,500 mg/kg (rabbit) |
  - Primary chemical irritant effect:
    - on the skin: No irritant effect.
    - on the eye: Strong irritant with the danger of severe eye injury.
  - Sensitization:
    - Sensitization possible through inhalation.
    - Sensitization possible through skin contact.
  - Additional toxicological information:
    - Abrasive eye irritant
Product name: Black Glass-Filled Epoxy Powder, Non-stick

(Contd. of page 8)

12 Ecological information

· Toxicity
· Aquatic toxicity: No further relevant information available.
· Persistence and degradability: No further relevant information available.
· Behavior in environmental systems:
· Bioaccumulative potential: No further relevant information available.
· Mobility in soil: No further relevant information available.
· Ecotoxicological effects:
· Remark: Toxic for fish
· 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 course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
· 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: Contact waste processors for recycling information.
· Uncleaned packagings:
· Recommendation: Disposal must be made according to official regulations.

14 Transport information

· UN-Number
· DOT, ADN, IMDG, IATA: not regulated
· UN proper shipping name
· DOT, ADN, IMDG, IATA: not regulated
Product name: Black Glass-Filled Epoxy Powder, Non-stick

- **Transport hazard class(es)**
  - DOT, ADN, IMDG, IATA
  - Class: not regulated

- **Packing group**
  - DOT, IMDG, IATA: not regulated

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

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
  - Not applicable.

- **UN "Model Regulation":**
  - not regulated

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - None of the ingredients is listed.
    - **Section 313 (Specific toxic chemical listings):**
      - 557-05-1 zinc distearate, pure
      - 111-90-0 Diethylene glycol monoethyl ether
  - **TSCA (Toxic Substances Control Act):**
    - All ingredients are listed.

- **Proposition 65**
  - **Chemicals known to cause cancer:**
    - 14808-60-7 Quartz (SiO2)
    - 1333-86-4 Carbon black
  - **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.

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    - 557-05-1 zinc distearate, pure: D, I, II
  - **TLV (Threshold Limit Value established by ACGIH)**
    - 14808-60-7 Quartz (SiO2): A2
    - 1333-86-4 Carbon black: A4
    - 1344-95-2 Silicic acid, calcium salt: A4
Product name: Black Glass-Filled Epoxy Powder, Non-stick

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - 14808-60-7 Quartz (SiO2)
  - 1333-86-4 Carbon black

- **National regulations:**
  - **Additional classification according to Decree on Hazardous Materials:**
    Carcinogenic hazardous material group III (dangerous).

- **Information about limitation of use:**
  Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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

### 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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Kim Dermit
- **Date of preparation / last revision** 06/08/2018 / -
- **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)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - REL: Recommended Exposure Limit
  - PEL: Permissible Exposure Limit
  - Flam. Liq. 4: Flammable liquids – Category 4
  - Self-heat. 2: Self-heating substances and mixtures – Category 2
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Acute Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  - Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
  - Resp. Sens. 1: Respiratory sensitisation – Category 1
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Carc. 1A: Carcinogenicity – Category 1A
  - Carc. 2: Carcinogenicity – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  - Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  - Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
  - Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
  - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2