1 Identification

Product identifier

Trade name: Monokote Z-106 HY

SDS ID Number: 2695

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

Specialty construction product. Not intended for other uses.

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
GCP Applied Technologies
62 Whittemore Avenue
Cambridge, MA 02140 USA

GCP Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Information department:
Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
   +1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)
Email address: msds.gcp@gcpat.com

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

Label elements:

Hazard pictograms

GHS05  GHS07  GHS08

Danger

Hazard statements
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause cancer.
May cause respiratory irritation.

Precautionary statements
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
If skin irritation or rash occurs: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.

(Cont. on page 2)

USGHS
Additional information: This product should be handled with care to avoid dust generation.

Hazard description: Danger

NFPA ratings (scale 0 - 4)

- Health = 2
- Fire = 0
- Reactivity = 0

HMIS-ratings (scale 0 - 4)

- HEALTH = *2
- FIRE = 0
- REACTIVITY = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixture

Description: Mixture of the hazardous substance(s) listed below with additional nonhazardous ingredients.

<table>
<thead>
<tr>
<th>Hazardous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1 Portland cement</td>
<td>50 - 90%</td>
</tr>
<tr>
<td>7778-18-9 Calcium sulfate, natural</td>
<td>10 - 20%</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>&lt; 2.0%</td>
</tr>
<tr>
<td>18450-29-9 Hexavalent Chromium</td>
<td>0.0 - 0.1%</td>
</tr>
</tbody>
</table>

Additional information: Non-hazardous ingredients may be listed in Section 15; Right-To-Know disclosure.

4 First-aid measures

Description of first aid measures

General information: Get medical advice/attention if you feel unwell.

After inhalation:
If symptoms develop, supply fresh air. If required, provide artificial respiration and seek immediate medical treatment.

After skin contact:
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
Wet cement may cause skin irritation or burns.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available.
**Trade name: Monokote Z-106 HY**

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

### 5 Fire-fighting measures

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

**Additional information:** No further relevant information available.

### 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

**Environmental precautions:** Avoid release to the environment.

**Methods and material for containment and cleaning up:**

Sweep up spilled product into receptacles.

Avoid formation of dust.

Vacuuming or wet sweeping may be used to avoid dust dispersal.

Dispose contaminated material as waste according to section 13 of the SDS.

**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.

### 7 Handling and storage

**Handling:**

**Precautions for safe handling**

Risk of serious damage to eyes.

Avoid contact with skin.

Do not breathe dust.

Fit dust covers to mixers.

Prior to welding or cutting, Monokote must be removed from steel surfaces likely to be exposed to excessive heating. Danger of wet slippery surfaces.

**Information about protection against explosions and fires:** Keep respiratorator available.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Further information about storage conditions:** Store in cool, dry conditions in well sealed original receptacles.

**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 constituent is the only constituent of the product which has 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>
<tbody>
<tr>
<td><strong>PEL (USA)</strong> Long-term value: 0.05 mg/m³</td>
</tr>
<tr>
<td><strong>REL (USA)</strong> Long-term value: 0.05* mg/m³</td>
</tr>
<tr>
<td>*respirable dust; See Pocket Guide App. A</td>
</tr>
<tr>
<td><strong>TLV (USA)</strong> Long-term value: 0.025* mg/m³</td>
</tr>
<tr>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

Additional Occupational Exposure Limit Values for possible hazards during processing:
In addition to the exposure limits referenced above, the following non-specific limits for dust apply to this product; OSHA, 15 mg/m³-TWA for Total Dust and 5 mg/m³-TWA as Respirable Dust, ACGIH, 10 mg/m³-TWA as Total Dust and 3 mg/m³-TWA as Respirable Dust.

Additional information:
The lists that were valid during the creation were used as basis.
Canadian employers must consult the exposure limits in their province.
Work/Hygienic Practices: The usual precautionary measures for handling chemicals should be followed.

Exposure controls
Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organizational measures, eg. by isolating personnel from dusty areas.
Remove and wash soiled clothing.

Personal protective equipment:

General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Store protective clothing separately.

Breathing equipment:
Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.
If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands:

Alkaline resistant gloves

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves
Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.
Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.
9 Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Form:</td>
<td>Powder</td>
</tr>
<tr>
<td>Appearance:</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value (~):</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

| Flammability (solid, gaseous):       | Not determined.  |
| Ignition temperature:                | Undetermined.    |

| Decomposition temperature:           | Not determined.  |
| Auto igniting:                       | Product is not self-igniting. |
| Danger of explosion:                 | Product does not present an explosion hazard. |

<table>
<thead>
<tr>
<th>Explosion limits:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>VOC Content (max):</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor pressure:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Density: (~) at 20°C (68 °F)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

| Solubility in / Miscibility with     |                  |
| Water:                               | Not miscible or difficult to mix. |

| Partition coefficient (n-octanol/water): | Not determined. |

| Viscosity:                             |                  |
| Dynamic:                               | Not applicable.  |
| Kinematic:                             | Not applicable.  |
| Molecular weight                       | Not applicable.  |

<table>
<thead>
<tr>
<th>Other information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

Reactivity Stable under normal conditions.

Chemical stability

Thermal decomposition: No decomposition if used according to specifications.

Possibility of hazardous reactions No further relevant information available.

Conditions to avoid No further relevant information available.
Trade name: Monokote Z-106 HY

Incompatible materials: No further relevant information available.

Hazardous decomposition products:
Carbon monoxide and carbon dioxide
Cutting or welding may generate Sulfur dioxide.

Additional information: See section 7 for information on handling, storage and conditions to be avoided.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:
on the skin: Causes severe skin burns and eye damage.
on the eye: Causes serious eye damage.
inhalation: Causes damage to organs.
Ingestion: May cause burns to mouth, throat, and stomach.
Sensitization: May cause an allergic skin reaction.

Additional toxicological information:
Cementitious grouts and mortars are known to cause both irritant and allergic contact dermatitis. Prolonged skin contact can result in chemical burns. Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

Carcinogenic categories

IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>1</td>
</tr>
<tr>
<td>9003-53-6</td>
<td>Expanded Polystyrene</td>
<td>3</td>
</tr>
</tbody>
</table>

NTP (National Toxicology Program)
K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>Quartz (SiO2)</td>
<td>K</td>
</tr>
</tbody>
</table>

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

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.

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.
Trade name: *Monokote Z-106 HY*

vPvB: Not applicable.

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

### 13 Disposal considerations

**Disposal methods:**
Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing product for disposal. Dispose of waste in accordance with all applicable regulations.

**Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packagings:**

**Recommendation:** Dispose of contents/container in accordance with local/regional/national/international regulations.

### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, IMDG, IATA</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT, IMDG, IATA</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Transport hazard class(es):**

<table>
<thead>
<tr>
<th>DOT, IMDG, IATA</th>
<th>Class</th>
<th>Not applicable.</th>
</tr>
</thead>
</table>

**Packaging group**

| DOT, IMDG, IATA | Not applicable. |

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
<th>Marine pollutant:</th>
<th>No</th>
</tr>
</thead>
</table>

**Special precautions for user**

Not applicable.

**Transport/Additional information:** Not classified as a dangerous good for transport by road, rail or air.

**DOT**

<table>
<thead>
<tr>
<th>Remarks:</th>
<th>Not Regulated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note:</td>
<td>Not Regulated for Canada TDG.</td>
</tr>
</tbody>
</table>

**UN "Model Regulation":** Not applicable.

### 15 Regulatory information

**SARA (Superfund Amendments and Reauthorization Act)**

**Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

None of the ingredients is listed.

**SARA Section 312/Tier I & II Hazard Categories:**

- Health Hazard - Carcinogenicity
- Health Hazard - Skin Corrosion or Irritation

(Cont. on page 8)
Trade name: Monokote Z-106 HY

Health Hazard - Respiratory or Skin Sensitization
Health Hazard - Serious eye damage or eye irritation
Health Hazard - Specific target organ toxicity (single or repeated exposure)

North America Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):
All ingredients are listed or exempt from listing unless otherwise noted below.

CEPA (Canadian DSL):
All ingredients are listed or exempt from listing unless otherwise noted below.

Right to Know Ingredient Disclosure:
<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Ingredient</th>
</tr>
</thead>
<tbody>
<tr>
<td>65996-61-4</td>
<td>Cellulosic Fiber</td>
</tr>
<tr>
<td>9003-53-6</td>
<td>Expanded Polystyrene</td>
</tr>
</tbody>
</table>

California Proposition 65: (Substances <0.1% unless noted in Section 3)

Chemicals known to cause cancer:
Quartz (SiO2)
Hexavalent Chromium

Chemicals known to cause reproductive toxicity for females:
18450-29-9 Hexavalent Chromium

Chemicals known to cause reproductive toxicity for males:
18450-29-9 Hexavalent Chromium

Chemicals known to cause developmental toxicity:
18450-29-9 Hexavalent Chromium

Carcinogenicity Categories

TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)
Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable
Quartz (SiO2) A2

NIOSH-Cancer (National Institute for Occupational Safety and Health)
14808-60-7 Quartz (SiO2)

Volatile Organic Compounds (VOC) reported per the Emission Standards. 0 g/L

*16 Other information*

The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection.

Date of preparation / last revision 09/07/2017 / 1.0
The first date of preparation 08/08/2016
Number of revision times and the latest revision date 1.2 - 10/18/2017