Section 1: Chemical product and company identification

Product name: UNITIKA UNILATE PC(A)
Manufacturer: UNITIKA LTD.
Address: Osaka Center Bldg., 4-1-3 Kyutaro-machi, Chuo-ku, Osaka, 541-8566 Japan
Tel: +81-6- 6281-5354
Fax: +81-6- 6281-5849
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Resins Division, Development and Production Department
Tel: +81-774- 25-2335  Fax: +81-774- 25-2357

Section 2: Hazards identification

GHS Classification

<table>
<thead>
<tr>
<th>Physical hazards:</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosives</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Flammable gases</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Flammable aerosols</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Oxidizing gases</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Gases under pressure</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Flammable solids</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Self-reactive substances and mixtures</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Pyrophoric liquids</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Pyrophoric solids</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Self-heating substances and mixtures</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Substances and mixtures which, in contact with water, emit flammable gases</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Oxidizing liquids</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Oxidizing solids</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Organic peroxides</td>
<td>Classification not applicable</td>
</tr>
<tr>
<td>Corrosive to metals</td>
<td>Classification not possible</td>
</tr>
<tr>
<td>Health hazards:</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Acute toxicity (oral)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity (inhalation-gases)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity (inhalation-vapors)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity (inhalation-dust)</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity (inhalation-mist)</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td></td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity (Single exposure)</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity (Repeated exposure)</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td></td>
</tr>
<tr>
<td>Environmental Hazards:</td>
<td>Hazardous to the aquatic environment-acute</td>
</tr>
<tr>
<td></td>
<td>Hazardous to the aquatic environment-Chronic</td>
</tr>
</tbody>
</table>

**GHS label elements**

- **Pictogram or symbol**: —
- **Signal word**: —
- **Hazard statement**: —
- **Precautionary statement**:
  - **Safety measures**:
    - In order to prevent spill of the product, care should be made so that breaking packaging/container will not occur.
    - Do not inhale generated gases when processing.
  - **First aid measures**: When any symptoms persist, receive medical advice and attention.
  - **Storage**: Keep away from heat and ignition sources.
    - Flat placement is recommended. A back board is necessary to prevent warpage and torsion during the storage for the stand placement.
  - **Disposal consideration**: General incineration or landfill.
Section 3: Composition/information on ingredients

Discrimination of single substance or mixture: Mixture

Information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Class reference No. in the JPN Gazetted list</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester</td>
<td>25038-59-9</td>
<td>7-1022</td>
<td>&lt; 70%</td>
</tr>
<tr>
<td>Glass fiber</td>
<td>65997-17-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mica</td>
<td>12001-26-2</td>
<td></td>
<td>&gt; 30%</td>
</tr>
</tbody>
</table>

Section 4: First aid measures

IF IN EYES: The same treatment if foreign material in the eyes. Immediately rinse well with water. Get medical advice/attention if any symptoms (e.g. irritation) persist. Remove contact lenses, if present. Immediately cool in clean water for more than 15 minutes, and rinse with water. Get medical advice/attention.

IF ON SKIN: No special procedures needed at normal temperature. In case of molten material, immediately cool in clean water. Do not force to remove the solidified molten material on the skin. Get medical advice/attention if any symptoms (e.g. burn) occur.

IF INHALED: If inhaled a volume of vapors or gases of the molten material, remove victim to fresh air and keep at rest. Get medical advice/attention if any symptoms persist.

IF SWALLOWED: If swallowed small amounts leave to excrete as a waste product. If swallowed large volume of this product by mistake, allow to vomit with plenty of water and get medical advice/attention.

Section 5: Firefighting measures

Procedures for extinction

Use water for extinction as an accepted way of extinction.

Extinguishing media:

Water, carbon dioxide, powder

Protective equipment

It is advisable to wear self-contained breathing apparatus, because hazardous gases (e.g. acetaldehyde, carbon monoxide, etc.) may be contained in case of fire.
Section 6: Accidental release measures

Personal precautions

No information

Protective equipment and emergency procedures

Wear appropriate protective equipment.

Environmental precautions

No information

Methods and material for containment and cleaning up

No information

Section 7: Handling and storage

Precautions for safe handling

Do not fall down, prevent the collapse of cargo piles, carry out the cautions on general product handling. Sudden impact should be avoid.

Conditions for safe storage, including any incompatibilities

Keep away from heat and ignition sources. Flat placement is recommended. A back board is necessary to prevent warpage and torsion during the storage for the stand placement.

Section 8: Exposure controls/ personal protection

Control/ administrative exposure standards

Not established.

Threshold values (occupational exposure limits or biological exposure index)

Japan SOH (-): Not established.
ACGIH (-): Not established.

Engineering control

It is advisable to install exhaust ventilation needed when usual processing.

Protective equipment

Respiratory protection: No respiratory protective equipment required in the normal state. Take necessary measures described in “Section 5 Firefighting measures”.

It is advisable to wear protective glasses, protective gloves and protective clothing as appropriate.
## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance (physical state, shape and color, etc):**
- Board form

**pH:**
- No information available

**Melting/freezing point:**
- 253°C

**Boiling point, initial boiling point/boiling range:**
- No information available

**Flash point:**
- No information available

**Softening point:**
- No information available

**Upper/lower flammability or explosive limits:**
- No information available

**Vapor pressure:**
- No information available

**Relative vapor density:**
- No information available

**Specific gravity** *(H₂O=1)*
- ca. 1.6 ~ 1.7

**Solubility:**
- Insoluble in water

**Auto-ignition temperature:**
- No information available

**Decomposition temperature:**
- No information available

**Other properties:**
- Soluble in strong acids

## Section 10: Stability and reactivity

**Flammability:**
- This product will ignite if there are any ignition sources.

**Ignition temperature:**
- ≥ 460°C

**Oxidizing property:**
- Not applicable

**Self-reactivity/explosibility:**
- No applicable

**Dust explosibility:**
- No applicable

**Stability and reactivity:**
- Stable

**Conditions to avoid:**
- No applicable

**Incompatible materials:**
- No applicable

## Section 11: Toxicological information (including human case and epidemiological information)

### Information on the product

The following description is based on general rule used under normal temperature condition.

**Acute toxicity (including 50% lethal concentration):**
- No data available

**Skin corrosion/irritation:**
- No data

**Serious eye damage/eye irritation:**
- No data available

**Respiratory sensitization:**
- No data available

**Germ cell mutagenicity:**
- No data available

**Carcinogenicity:**
- No data available

**Reproductive toxicity:**
- No data available
Specific target organ toxicity (Single exposure): No data available
Specific target organ toxicity (Repeated exposure): No data available
Aspiration hazard: No data available

Section 12: Ecological information

Ecotoxicity: No data available
Persistence/degradability: No data available
Bioaccumulation potential: No data available
Mobility in soil: No data available
Hazard to ozon layer: No data available

Section 13: Disposal consideration

General incineration or landfill
Incineration: Incinerate with Incineration facilities which meet requirements for Air Pollution Control Act.
Landfill disposal: Waste traders who are certified by the local/regional officer deal with in accordance with Wastes Disposal and Public Cleansing Act.

Section 14: Transport information

International transport information
UN number: Not applicable
UN classification: Not applicable
Marine pollutant: Not applicable

Specific measures for safe transport
Ensure appropriate measures to prevent loading damage due to heavy load of packaging materials.

Section 15: Regulatory information

Enforcement Order of the Industrial Safety and Health Law:
Not applicable (Dangerous substances, Organic solvents, Specific Chemical Substances, Mutagenic substances etc.)
The Law of Pollutant Release and Transfer Register (abbreviated):
Not applicable
Fire Service Law:
Non-dangerous substances
Poisonous and Deleterious Substances Control Act:
Non poisonous and deleterious dangerous substances
Ship Safety Act:
Not applicable
Wastes Disposal and Public Cleansing Act:
Waste plastics
Section 16: Other information

Emergency contact point

UNITIKA LTD.
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Tel: +81-774-25-2335 Fax: +81-774-25-2357

Disclaimer
This MSDS has been prepared according to the available information however, been no guarantee of safety of this product. Precautionary measures in this MSDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.

References
JIS Z 7250 : 2010 Safety data sheet for chemical products-Content and order of sections