SAFETY DATA SHEET

Date of issue: 12 March 2022
Version: 2.01

Section 1. Identification

**Chemical name**: HI-TEMP 1027HD CURE

**GHS product identifier**: HI-TEMP 1027HD CURE

**Code**: 00436788

**Supplier's details**: PPG Industries International Inc. Taiwan Branch.
No.209, Hong Tzuenn Rd Ping Chen City, Taoyuan County, Taiwan
Tel: 886 3 3663922
886 3 3751639 (Automotive OEM Coatings Products).
Fax: 886 3 2182667

**Emergency telephone number**: North: +886-3-3663922
North: +886-911998320
South: +886-7-8718105
South: +886-932793707

Section 2. Hazards identification

**Classification of the substance or mixture**:
- FLAMMABLE LIQUIDS - Category 2
- ACUTE TOXICITY (oral) - Category 5
- ACUTE TOXICITY (dermal) - Category 5
- ACUTE TOXICITY (inhalation) - Category 4
- SKIN CORROSION/IRRITATION - Category 3
- SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
- REPRODUCTIVE TOXICITY - Category 1B
- SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
- AQUATIC TOXICITY (ACUTE) - Category 2
- AQUATIC TOXICITY (CHRONIC) - Category 2

**Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity**: 30.6%
**Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity**: 50%
**Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity**: 30.6%
**Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment**: 52.7%

**GHS label elements**
Section 2. Hazards identification

**Hazard pictograms**

- Flammable
- Poison
- Corrosive
- Biohazard

**Signal word**

: Danger

**Hazard statements**

: Highly flammable liquid and vapour. May be harmful if swallowed or in contact with skin. Causes mild skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after handling.

**Response**

: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

**Storage**


**Disposal**

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other hazards which do not result in classification**

: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

**Substance/mixture**

: Mixture

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>Concentration %</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>barium diboron tetraoxide</td>
<td>10 - &lt;20</td>
<td>13701-59-2</td>
</tr>
<tr>
<td>dimethyl carbonate</td>
<td>10 - &lt;20</td>
<td>616-38-6</td>
</tr>
<tr>
<td>trizinc bis(orthophosphate)</td>
<td>10 - &lt;20</td>
<td>7779-90-0</td>
</tr>
<tr>
<td>xylene</td>
<td>5 - &lt;10</td>
<td>1330-20-7</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom.</td>
<td>5 - &lt;10</td>
<td>64742-94-5</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>5 - &lt;10</td>
<td>1314-13-2</td>
</tr>
<tr>
<td>strontium hydrogen phosphate</td>
<td>1 - &lt;3</td>
<td>13450-99-2</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>1 - &lt;3</td>
<td>100-41-4</td>
</tr>
</tbody>
</table>
Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>chemical</th>
<th>concentration</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>butan-1-ol</td>
<td>1 - &lt;3</td>
<td>71-36-3</td>
</tr>
<tr>
<td>naphthalene</td>
<td>0.3 - &lt;1</td>
<td>91-20-3</td>
</tr>
<tr>
<td>barium diboron tetraoxide</td>
<td>10 - &lt;20</td>
<td>13701-59-2</td>
</tr>
<tr>
<td>naphthalene</td>
<td>0.3 - &lt;1</td>
<td>91-20-3</td>
</tr>
<tr>
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<td>naphthalene</td>
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</tr>
<tr>
<td>naphthalene</td>
<td>0.3 - &lt;1</td>
<td>91-20-3</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Ingestion: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye irritation.

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Skin contact: May be harmful in contact with skin. Causes mild skin irritation. Defatting to the skin.

Ingestion: May be harmful if swallowed.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness.
Section 4. First aid measures

Inhalation: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Skin contact: Adverse symptoms may include the following:
- irritation
- redness
- dryness
- cracking
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Ingestion: Adverse symptoms may include the following:
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Specific treatments: No specific treatment.

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Indication of immediate medical attention and special treatment needed, if necessary

Section 5. Firefighting measures

Extinguishing media

Suitable: Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable: Do not use water jet.

Specific hazards arising from the chemical: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
- carbon oxides
- phosphorus oxides
- metal oxide/oxides
- Formaldehyde.
Section 5. Firefighting measures

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and material for containment and cleaning up

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>barium diboron tetraoxide</td>
<td>TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).</td>
</tr>
<tr>
<td></td>
<td>STEL: 1.5 mg/m³, (as Ba) 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 0.5 mg/m³, (as Ba) 8 hours.</td>
</tr>
<tr>
<td>xylene</td>
<td>TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).</td>
</tr>
<tr>
<td></td>
<td>STEL: 542.5 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 125 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 434 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 8 hours.</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).</td>
</tr>
<tr>
<td></td>
<td>STEL: 10 mg/m³ 15 minutes. Form: Fume</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).</td>
</tr>
<tr>
<td></td>
<td>STEL: 542.5 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 125 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 434 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 8 hours.</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).</td>
</tr>
<tr>
<td></td>
<td>STEL: 378.75 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 125 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 303 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 8 hours.</td>
</tr>
<tr>
<td>naphthalene</td>
<td>TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).</td>
</tr>
<tr>
<td></td>
<td>STEL: 78 mg/m³ 15 minutes.</td>
</tr>
</tbody>
</table>
Section 8. Exposure controls/personal protection

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Respiratory protection: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves: For prolonged or repeated handling, use the following type of gloves:

- May be used: nitrile rubber
- Recommended: Chloroprene, butyl rubber, neoprene, polyvinyl alcohol (PVA), Viton®

Skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Eye protection: Chemical splash goggles.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and chemical properties

Appearance
Physical state: Liquid.
Colour: Colourless.
Odour: Characteristic.
Odour threshold: Not available.
pH: Not applicable.
Melting point: Not available.
Section 9. Physical and chemical properties

- **Boiling point**: >37.78°C (>100°F)
- **Flash point**: Closed cup: 17.22°C (63°F)
- **Flammability (solid, gas)**: Not available.
- **Burning time**: Not applicable.
- **Burning rate**: Not applicable.
- **Decomposition temperature**: Not available.
- **Evaporation rate**: Not available.
- **Lower and upper explosive (flammable) limits**: Not available.
- **Vapour pressure**: Not available.
- **Vapour density**: Not available.
- **Relative density**: 1.65
- **Solubility**: Insoluble in the following materials: cold water.
- **Partition coefficient: n-octanol/water**: Not applicable.
- **Auto-ignition temperature**: Not available.
- **Viscosity**: Kinematic (40°C): >21 mm²/s

Section 10. Stability and reactivity

- **Chemical stability**: The product is stable.
- **Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid**: When exposed to high temperatures may produce hazardous decomposition products.
- **Incompatible materials**: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- **Hazardous decomposition products**: Depending on conditions, decomposition products may include the following materials: carbon oxides, phosphorus oxides, Formaldehyde, metal oxide/oxides.
- **Hazardous polymerisation**: Under normal conditions of storage and use, hazardous polymerisation will not occur.

Section 11. Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**
## Section 11. Toxicological information

### Information on toxicological effects

#### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium diboron tetraoxide</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>&gt;3540 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>0.85 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>dimethyl carbonate</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>140000 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2.5 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12.9 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>trizinc bis(orthophosphate)</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>&gt;5.7 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1.7 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4.3 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom.</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>&gt;5.2 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1.7 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4.3 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>&gt;5700 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>17.8 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>17.8 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3.5 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>24000 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>8000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>3400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>790 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>naphthalene</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;20 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>490 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Sensitisation

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

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Taiwan GHS
Section 11. Toxicological information

Inhalation:
- Harmful if inhaled. May cause respiratory irritation.

Ingestion: May be harmful if swallowed.

Skin contact: May be harmful in contact with skin. Causes mild skin irritation. Defatting to the skin.

Eye contact: Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eyes**: Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

**Inhalation**: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

### Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl carbonate</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>xylene</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom. butan-1-ol</td>
<td>Category 3</td>
<td>-</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Category 2</td>
<td>-</td>
<td>hearing organs</td>
</tr>
</tbody>
</table>

**Aspiration hazard**

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom.</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

**Information on likely routes of exposure**: Not available.

**Potential acute health effects**

**Inhalation**
- Harmful if inhaled. May cause respiratory irritation.

**Skin contact**
- May be harmful in contact with skin. Causes mild skin irritation. Defatting to the skin.

**Eye contact**
- Causes serious eye irritation.
Section 11. Toxicological information

Skin : Adverse symptoms may include the following:
- irritation
- redness
- dryness
- cracking
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Ingestion : Adverse symptoms may include the following:
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure**

**Potential immediate effects**
- Not available.

**Potential delayed effects**
- Not available.

**Long term exposure**

**Potential immediate effects**
- Not available.

**Potential delayed effects**
- Not available.

**Potential chronic health effects**
- Not available.

**General**
- Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity**
- No known significant effects or critical hazards.

**Mutagenicity**
- No known significant effects or critical hazards.

**Reproductive toxicity**
- May damage fertility or the unborn child.

**Inhalation**
- No known significant effects or critical hazards.

**Ingestion**
- No known significant effects or critical hazards.

**Skin contact**
- No known significant effects or critical hazards.

**Eye contact**
- No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI-TEMP 1027HD CURE</td>
<td>2912.7</td>
<td>2556.4</td>
<td>N/A</td>
<td>87.6</td>
<td>3.9</td>
</tr>
<tr>
<td>barium diboron tetraoxide</td>
<td>850</td>
<td>2500</td>
<td>N/A</td>
<td>N/A</td>
<td>1.5</td>
</tr>
<tr>
<td>dimethyl carbonate</td>
<td>12900</td>
<td>2500</td>
<td>N/A</td>
<td>140</td>
<td>N/A</td>
</tr>
<tr>
<td>xylene</td>
<td>4300</td>
<td>1700</td>
<td>N/A</td>
<td>11</td>
<td>1.5</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>N/A</td>
<td>2500</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3500</td>
<td>17800</td>
<td>N/A</td>
<td>17.8</td>
<td>1.5</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>790</td>
<td>3400</td>
<td>N/A</td>
<td>24</td>
<td>N/A</td>
</tr>
<tr>
<td>naphthalene</td>
<td>490</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Other information:
Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Contains a substance that may emit formaldehyde if stored beyond its shelf life and/or during cure at curing temperatures greater than 60°C/140°F. Avoid contact with skin and clothing.

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl carbonate</td>
<td>Acute LC50 &gt;100 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>trizinc bis(orthophosphate)</td>
<td>Acute LC50 0.112 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), heavy arom.</td>
<td>Chronic NOEC 0.026 mg/l Fresh water</td>
<td>Fish</td>
<td>30 days</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>Acute EC50 0.17 mg/l</td>
<td>Daphnia</td>
<td>21 days</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Acute EC50 0.481 mg/l Fresh water</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>Chronic NOEC 0.017 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 1.8 mg/l Fresh water</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 1 mg/l Fresh water</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1376 mg/l</td>
<td>Daphnia - Ceriodaphnia dubia</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>-</td>
<td>79 % - Readily - 10 days</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Bioaccumulative potential

Taiwan GHS
Section 12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl carbonate</td>
<td>0.354</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>xylene</td>
<td>3.12</td>
<td>7.4 to 18.5</td>
<td>low</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum),</td>
<td>2.8 to 6.5</td>
<td>-</td>
<td>high</td>
</tr>
<tr>
<td>heavy arom.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3.6</td>
<td>79.43</td>
<td>low</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>1</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>naphthalene</td>
<td>3.4</td>
<td>85.11</td>
<td>low</td>
</tr>
</tbody>
</table>

**Mobility in soil**

**Soil/water partition coefficient (K_{oc}):** Not available.

**Other adverse effects:** No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods:** The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>UN number</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1263</td>
<td>UN1263</td>
<td>UN1263</td>
</tr>
</tbody>
</table>

**UN proper shipping name:** PAINT

**Transport hazard class(es):** 3

**Packing group:** II

**Environmental hazards:** Yes. The environmentally hazardous substance mark is not required.
Section 14. Transport information

Marine pollutant substances | Not applicable. | (trizinc bis(orthophosphate), Solvent naphtha (petroleum), heavy aromatic) | Not applicable.

Additional information

UN : None identified.
IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

Not applicable.

TCCSCA List of concerned chemicals

Not applicable.

List of chemicals for which manufacturing or handling is defined as "work specially hazardous to health"

This product contains substances "Specially hazardous to health": xylene, butan-1-ol, methanol, toluene, 2-methylpropan-1-ol, isopropyl alcohol, n-butyl acetate.

Regulations Applicable:
1. Rules for Occupational Safety and Health Facilities
2. Regulations for the Labeling and Hazard Communication of Hazardous Chemicals
3. Prevention Rules for Organic Solvent Intoxication/Poisoning.
4. Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace
5. Traffic Safety Regulation of Road.

Section 16. Other information

References
Not available.

Organisation that prepared the SDS
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North : +886-911998320
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South : +886-932793707

Taiwan GHS
Section 16. Other information

<table>
<thead>
<tr>
<th>Person who prepared the SDS</th>
<th>Title:</th>
<th>Name: (Signature):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Technical manager</td>
<td>Tony Cheng</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Daniel Wu</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of issue</th>
<th>12 March 2022</th>
</tr>
</thead>
</table>

Remarks:
New SDS layout incorporating TW Table 2017

Key to abbreviations:
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
UN = United Nations

Disclaimer
The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.