Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product Code(s) 400430
Product Name CA-40 MP, PIHP-200 Part B

Contains 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended Use Solder mask part B
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet
Company Taiyo America, Inc.
2675 Antler Drive
Carson City, NV 89701
TEL: 775-885-9959

For further information, please contact
E-mail Address No information available.

1.4. Emergency telephone number
Emergency Telephone Number 775-885-9959

Europe 112

Section 2. Hazards identification

2.1. - Classification of the substance or mixture

| Physical Hazards | None |

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Symbol(s) T - Toxic
R-code(s) Muta. cat. 2; R46 - Xn; R48/22 - Xn; R20/22 - Xi; R41 - R43 - R53

For the full text of the R-phrases mentioned in this Section, see Section 16
2.2. Label Elements

Signal Word  Danger

Hazard Statements
H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H340 - May cause genetic defects
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
P270 - Do not eat, drink or smoke when using this product
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P201 - Obtain special instructions before use
P260 - Do not breathe dust/fume/gas/mist/vapors/spray

2.3. Other information

Section 3. Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC-No</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Classification</th>
<th>EU - GHS Substance Classification</th>
<th>REACH No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium sulfate</td>
<td>Present</td>
<td>7727-43-7</td>
<td>10-30</td>
<td>Xn; R20/22</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-</td>
<td>219-514-3</td>
<td>2451-62-9</td>
<td>10-30</td>
<td>T; R23/25 Xi: R41 R43 Muta.Cat.2; R46 Xn; R48/22 R52-53</td>
<td>Acute Tox. 3 (H301) STOT RE 2 (H373) Muta. 1B (H340) Acute Tox. 3 (H331) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Chronic 3 (H412)</td>
<td>No data available</td>
</tr>
<tr>
<td>Dipropylene glycol monomethyl ether</td>
<td>Present</td>
<td>34590-94-8</td>
<td>10-30</td>
<td>-</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Kaolin</td>
<td>310-194-1</td>
<td>1332-58-7</td>
<td>10-30</td>
<td>-</td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.
Section 4. First aid measures

4.1. Description of first-aid measures

General Advice
Immediate medical attention is required. If symptoms persist, call a physician.

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact
Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Ingestion
Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Inhalation
Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If not breathing, give artificial respiration. Immediate medical attention is required.

Protection of First-aiders
Use personal protective equipment. Avoid contact with skin, eyes and clothing.

4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects
No information available.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician
May cause sensitization of susceptible persons. Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media
Dry chemical, CO₂, water spray or regular foam. Dry powder.

Extinguishing media which must not be used for safety reasons
No information available.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
Combustible material. Vapors may travel to source of ignition and flash back. Burning produces obnoxious and toxic fumes. Carbon oxides. Sulfur oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.
Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Evacuate personnel to safe areas. Pay attention to flashback. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

6.2. Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up
Use personal protective equipment. Dam up. Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Clean contaminated surface thoroughly.

6.4. Reference to other sections
See Section 12 for additional information.

Section 7. Handling and storage

7.1. Precautions for Safe Handling
Handling
Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from heat, sparks and open flame. No smoking. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Do not take internally.

Hygiene Measures
When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Keep out of the reach of children. Keep away from heat and sources of ignition. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)
Exposure Scenario
No information available.

Other Guidelines
No information available.

Section 8. Exposure controls/personal protection

8.1. Control parameters
Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EU</th>
<th>The United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium sulfate 7727-43-7</td>
<td>STEL: 30 mg/m³</td>
<td>STEL: 12 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 4 mg/m³</td>
<td></td>
</tr>
<tr>
<td>1,3,5-Triazine-2,4,6(1H,3H,5H)-trione 1,3,5-tris(oxiranylmethyl)-2451-62-9</td>
<td>STEL: 0.3 mg/m³</td>
<td>TWA: 0.1 mg/m³</td>
<td>VLA-ED: 0.05 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 8.2. Exposure controls

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

- **Eye Protection**
  Safety glasses with side-shields.

- **Skin and Body Protection**
  Impervious clothing.

- **Hand Protection**
  Protective gloves.

- **Respiratory Protection**
  In case of insufficient ventilation wear suitable respiratory equipment.

**Environmental Exposure Controls**
No information available.

### Section 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks / Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Viscous liquid</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild Solvent</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>78 °C</td>
<td>None known</td>
</tr>
</tbody>
</table>
Evaporation rate | No data available | None known
Vapor Pressure | No data available | None known
Vapor Density | No data available | None known
Relative Density | 1.52 | None known
Water Solubility | No data available | None known
Solubility in other solvents | No data available | None known
Partition coefficient: n-octanol/water | No data available | None known
Autoignition Temperature | No data available | None known
Decomposition Temperature | No data available | None known
Viscosity | No data available | None known
Flammable Properties | Combustible material: may burn but does not ignite readily.
Explosive Properties | No data available
Oxidizing Properties | No data available

9.2. Other information

VOC Content (%) | 23
VOC (g/l) | 344
Flammability Limits in Air | No data available

**Section 10. Stability and reactivity**

10.1. Reactivity
No data available.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None under normal processing.

10.4. Conditions to avoid
Heat, flames and sparks. Incompatible products.

10.5. Incompatible materials

10.6. Hazardous decomposition products

**Section 11. Toxicological information**

11.1. Information on toxicological effects

Acute Toxicity

<table>
<thead>
<tr>
<th>Product Information</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal (Rat)</th>
<th>LC50 Inhalation (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>= 188 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Causes serious eye damage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Contact</td>
<td>May cause irritation. May cause allergic skin reaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal (Rat)</th>
<th>LC50 Inhalation (Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-</td>
<td>= 5230 mg/kg</td>
<td>= 9500 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Dipropylene glycol monomethyl ether</td>
<td>&gt; 5 g/kg (Rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sensitization
May cause sensitization of susceptible persons. May cause sensitization by skin contact.
Section 12. Ecological information

12.1. Toxicity

Ecotoxicity Effects
Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether</td>
<td></td>
<td>LC50 96 h: &gt; 10000 mg/L static (Pimephales promelas)</td>
<td></td>
<td>LC50 48 h: = 1919 mg/L (Daphnia magna)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol monomethyl ether</td>
<td>-0.064</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
Adsorbs on soil.

12.5. Results of PBT and vPvB assessment
No information available.

12.6. Other adverse effects

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EU - Endocrine Disrupters Candidate List</th>
<th>EU - Endocrine Disruptors - Evaluated Substances</th>
<th>Japan - Endocrine Disruptor Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-</td>
<td>Group III Chemical</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products
Dispose of in accordance with local regulations.

Contaminated Packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Section 14. Transport information

IMDG/IMO
14.1. UN-Number Not regulated.
14.2. Proper Shipping Name Not regulated.
14.3. Hazard Class Not regulated.
   Description Not applicable.
14.5. Marine Pollutant None.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
   No information available.

RID
14.1. UN-Number Not regulated.
14.2. Proper Shipping Name Not regulated.
14.3. Hazard Class Not regulated.
   Description Not applicable.
14.5. Environmental hazard None.

ADR
14.1. UN-Number Not regulated.
14.2. Proper Shipping Name Not regulated.
14.3. Hazard Class Not regulated.
   Description Not applicable.
14.5. Environmental hazard None.

ICAO
14.1. UN-Number Not regulated.
14.2. Proper shipping name Not regulated.
14.3. Hazard Class Not regulated.
   Description Not applicable.
14.5. Environmental hazard None.

IATA
14.1. UN-Number Not regulated.
14.2. Proper Shipping Name Not regulated.
14.3. Hazard Class Not regulated.
   Description Not applicable.
14.5. Environmental hazard None.

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

TSCA Complies
EINECS/ELINCS Complies
DSL/NDSL -
15.2. Chemical Safety Assessment

No information available

Section 16. Other information

Full text of R-phrases referred to under Sections 2 and 3
R46 - May cause heritable genetic damage
R43 - May cause sensitization by skin contact
R41 - Risk of serious damage to eyes
R53 - May cause long-term adverse effects in the aquatic environment
R23/25 - Toxic by inhalation and if swallowed
R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed
R20/22 - Harmful by inhalation and if swallowed
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3
H301 - Toxic if swallowed
H340 - May cause genetic defects if inhaled
H331 - Toxic if inhaled
H318 - Causes serious eye damage
H317 - May cause an allergic skin reaction
H412 - Harmful to aquatic life with long lasting effects
H373 - May cause damage to organs through prolonged or repeated exposure
H302 - Harmful if swallowed
H332 - Harmful if inhaled

Key literature references and sources for data
www.ChemADVISOR.com/

Issuing Date 24-May-2015
Revision Date 24-May-2015
Revision Note Initial Release.


General Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet