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

1.1. Product identifier
Product Code(s) 400432
Product Name CA-90 FXT
Contains Formaldehyde, polymer with (chloromethyl) oxirane and phenol, Biphenyl, 4,4’-bis-3,3,5,5-tetramethyl-, Bisphenol A - Epichlorohydrin polymer

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 775-885-9959
Number

Europe 112

Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin Sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Chronic Aquatic Toxicity</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Physical Hazards
None

Classification according to EU Directives 67/548/EEC or 1999/45/EC
The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

Symbol(s) Xn - Harmful
R-code(s) Carc. cat. 3; R40 - Xi; R36/38 - R43 - R52-53

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

Signal Word     Warning

Hazard Statements
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H351 - Suspected of causing cancer
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
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
P273 - Avoid release to the environment
P391 - Collect spillage

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>Formaldehyde, polymer with (chloromethyl) oxirane and phenol</td>
<td></td>
<td>9003-36-5</td>
<td>20-30</td>
<td>-</td>
<td>Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)</td>
<td>No data available</td>
</tr>
<tr>
<td>Barium sulfate</td>
<td>Present</td>
<td>7727-43-7</td>
<td>20-30</td>
<td>Xn; R20/22</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Biphenyl, 4,4'-bis-3,3,5,5-tetramethyl</td>
<td>413-900-7</td>
<td>85954-11-6</td>
<td>10-20</td>
<td>Carc. Cat.3; R40 R43</td>
<td>Carc. 2 (H351) Skin Sens. 1 (H317)</td>
<td>No data available</td>
</tr>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>500-033-5</td>
<td>25068-38-6</td>
<td>7-13</td>
<td>Xi; R36/38 R43 N; R51-53</td>
<td>Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)</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
If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye Contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. 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
Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Inhalation
Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.

Protection of First-aiders
Use personal protective equipment.

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
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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
None in particular.

5.3. Advice for firefighters

Special protective equipment for fire-fighters
As in any fire, wear self-contained breathing apparatus and full protective gear.
Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes and clothing. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2. Environmental precautions
Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and materials for containment and cleaning up
Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation.

Hygiene Measures
When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

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

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</td>
<td></td>
<td>STEL: 30 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 4 mg/m³</td>
<td></td>
</tr>
<tr>
<td>7727-43-7</td>
<td></td>
<td>STEL: 12 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 4 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling / Peak: 4 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Italy</th>
<th>Portugal</th>
<th>The Netherlands</th>
<th>Finland</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium sulfate</td>
<td></td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7727-43-7 ( 20-30 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Austria</th>
<th>Switzerland</th>
<th>Poland</th>
<th>Norway</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium sulfate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7727-43-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Derived No Effect Level
No information available

Predicted No Effect Concentration (PNEC)
No information available.
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
Lightweight protective clothing.

Hand Protection
Impervious gloves.

Respiratory Protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls
Do not allow material to contaminate ground water system.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Appearance</th>
<th>Cream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Liquid</td>
<td>Mild Solvent</td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks/ - Method</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>100 °C</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.39</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammable Properties</td>
<td>Combustible material: may burn but does not ignite readily.</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ - Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC Content (%)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>VOC (g/l)</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

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
Incompatible products.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Carbon oxides. Nitrogen oxides (NOx).

### Section 11. Toxicological information

#### 11.1. Information on toxicological effects

**Acute Toxicity**

**Product Information**

**Inhalation**
There is no data available for this product.

**Eye Contact**
Causes serious eye irritation.

**Skin Contact**
Causes skin irritation. May cause allergic skin reaction

**Ingestion**
There is no data available for this product.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal (Rat)</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde, polymer with (chloromethyl) oxirane and phenol</td>
<td>&gt; 2 g/kg</td>
<td>&gt; 400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Bisphenol A - Epichlorohydrin polymer</td>
<td>11400 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitization**
May cause sensitization of susceptible persons. May cause sensitization by skin contact.

**Mutagenic Effects**
No information available.

**Carcinogenic Effects**
Contains a known or suspected carcinogen. May cause cancer.

**Reproductive Toxicity**
No information available.

**Developmental Toxicity**
No information available.

**STOT - single exposure**
No information available.

**STOT - repeated exposure**
No information available.

**Target Organ Effects**
Eyes. Respiratory system.

**Aspiration Hazard**
No information available.

### Section 12. Ecological information

#### 12.1. Toxicity

**Ecotoxicity Effects**
Toxic to aquatic life with long lasting effects

#### 12.2. Persistence and degradability

No information available.

#### 12.3. Bioaccumulative potential

No information available.

#### 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>Bisphenol A - Epichlorohydrin polymer</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.

**Other Information**

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14. Transport information**

**Note:** Not regulated in quantities less than 5 liter per individual container. See IATA SP A197, IMDG 2.10.2.7 and ADR SP 375.

**IMDG/IMO**

14.1. UN-Number UN3082
14.2. Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class 9
14.4. Packing Group III
14.5. Marine Pollutant Yes
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**RID**

14.1. UN-Number UN3082
14.2. Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class 9
14.4. Packing Group III
14.5. Environmental hazard Yes

**ADR**

14.1. UN-Number UN3082
14.2. Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.
14.3. Hazard Class 9
14.4. Packing Group III
### 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**: -
  - **PICCS**: -
  - **ENCS**: -
  - **IECSC**: -
  - **AICS**: -
  - **KECL**: -

**Legend**
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- AICS - Australian Inventory of Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances

#### 15.2. Chemical Safety Assessment

No information available

---

### Section 16. Other information
Full text of R-phrases referred to under Sections 2 and 3
R40 - Limited evidence of a carcinogenic effect
R43 - May cause sensitization by skin contact
R36/38 - Irritating to eyes and skin
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R20/22 - Harmful by inhalation and if swallowed

Full text of H-Statements referred to under sections 2 and 3
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H317 - May cause an allergic skin reaction
H411 - Toxic to aquatic life with long lasting effects
H351 - Suspected of causing cancer

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