

SAFETY DATA SHEET

Issuing Date 24-May-2015

Revision Date 11-Jan-2023

Revision Number 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name CA-40 LDI (US)

Other means of identification

Product Code(s) 800014

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Solder mask part B

Uses advised against No information available

Supplier's details

Supplier Address

Taiyo America, Inc.
2675 Antler Drive
Carson City, NV 89701
TEL: 775-885-9959 (M-F 8-4 PDT)

Email SDSinfo@taiyo-america.com

Emergency telephone number

Emergency Telephone Number 1-800-255-3924 (USA) 1-813-248-0585 (International)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

| | |
|---|-------------|
| Acute Inhalation Toxicity - Dusts and Mists | Category 4 |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Skin Sensitization | Category 1 |
| Germ Cell Mutagenicity | Category 1B |
| Carcinogenicity | Category 2 |

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word Danger

Hazard Statements

- Harmful if inhaled
- Causes serious eye damage
- May cause an allergic skin reaction
- May cause genetic defects
- Suspected of causing cancer



Appearance Off-white **Physical State** Viscous liquid. **Odor** Mild Solvent

Precautionary Statements

Prevention

- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Contaminated work clothing should not be allowed out of the workplace.
- Wear protective gloves/protective clothing/eye protection/face protection.

General Advice

- If exposed or concerned: Get medical attention/advice
- Specific treatment (see supplemental first aid instructions on this label)

Eyes

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER or doctor/physician.

Skin

- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation or rash occurs: Get medical advice/attention.
- Wash contaminated clothing before reuse.

Inhalation

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage

- Store locked up.

Disposal

- Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % | Trade secret |
|---|------------|----------|--------------|
| Barium sulfate | 7727-43-7 | 30-60 | * |
| Dipentaerythritol Pentaacrylate | 60506-81-2 | 10-30 | * |
| Acrylic acid, hexa ester with dipentaerythritol | 29570-58-9 | 10-30 | * |
| 4,4'-Bis(2,3-epoxypropoxy)-3,3',5,5'-tetramethyl (1,1'-biphenyl) | 85954-11-6 | 5-10 | * |
| 1,3,5-tris-[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione | 59653-74-6 | 5-10 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary 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. |
| Inhalation | Move to fresh air. If symptoms persist, call a physician. If breathing is difficult, give oxygen. |
| Ingestion | Rinse mouth. Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. |
| Protection of First-aiders | Use personal protective equipment. |

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects May cause allergic skin reaction.

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

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

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry powder. Dry chemical.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

| | |
|---|-------|
| Sensitivity to Mechanical Impact | None. |
| Sensitivity to Static Discharge | None. |

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Environmental Precautions

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. Prevent entry into waterways, sewers, basements or confined areas. Avoid release to the environment. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

| | |
|--------------------------------|--|
| Methods for Containment | Prevent further leakage or spillage if safe to do so. |
| Methods for Cleaning Up | Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. |

7. HANDLING AND STORAGE**Precautions for safe handling**

| | |
|-----------------|--|
| Handling | Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not take internally. |
|-----------------|--|

Conditions for safe storage, including any incompatibilities

| | |
|------------------------------|--|
| Storage | Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. |
| Incompatible Products | Oxidizing agents. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------------|---|--|--|
| Barium sulfate 7727-43-7 | TWA: 5 mg/m ³ inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust |

Appropriate engineering controls

| | |
|-----------------------------|--|
| Engineering Measures | Showers Eyewash stations Ventilation systems |
|-----------------------------|--|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|---|
| Eye/Face Protection | Tightly fitting safety goggles. |
| Skin and Body Protection | Long sleeved clothing. Protective gloves. |
| Respiratory Protection | In case of insufficient ventilation wear suitable respiratory equipment. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|-----------------|-----------------------|---------------------------|
| Physical State | Viscous liquid. | Appearance | Off-white. |
| Odor | Mild Solvent. | Odor Threshold | No information available. |

| <u>Property</u> | <u>Values</u> | <u>Remarks/ - Method</u> |
|--|---|--------------------------|
| pH | No data available | None known |
| Melting Point/Range | No data available | None known |
| Boiling Point/Boiling Range | No data available | None known |
| Flash Point | 107 °C | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limits in Air | | |
| upper flammability limit | No data available | |
| lower flammability limit | No data available | |
| Vapor Pressure | No data available | None known |
| Vapor Density | No data available | None known |
| Specific Gravity | No data available | 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 | |

Other information

| | |
|-----------------|----|
| VOC Content (%) | 5 |
| VOC (g/l) | 87 |

10. STABILITY AND REACTIVITY**Reactivity**

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Incompatible products.

Incompatible materials

Oxidizing agents.

Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|--------------|--|
| Inhalation | Harmful by inhalation. |
| Eye Contact | Irritating to eyes. Causes serious eye damage. |
| Skin Contact | May cause irritation. |
| Ingestion | May be harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|----------|---------------------------|
| Symptoms | No information available. |
|----------|---------------------------|

Delayed and immediate effects and also chronic effects from short and long term exposure

| | |
|--------------------------|---|
| Sensitization | May cause an allergic skin reaction. |
| Mutagenic Effects | May cause genetic defects. |
| Carcinogenicity | May cause cancer. |
| Reproductive Toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Target Organ Effects | Respiratory system. Eyes. Central nervous system (CNS). |
| Aspiration Hazard | No information available. |

Numerical measures of toxicity - Product

The following values are calculated based on chapter 3.1 of the GHS document:

| | |
|-------------|-------------------------------------|
| LD50 Oral | 3026 mg/kg; Acute toxicity estimate |
| LD50 Dermal | 193050193 |
| Inhalation | |
| dust/mist | 5 mg/L; Acute toxicity estimate |
| Vapor | 25 mg/L; Acute toxicity estimate |

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| | |
|-------------------------------|---------------------------|
| Persistence and Degradability | No information available. |
|-------------------------------|---------------------------|

| | |
|-----------------|---------------------------|
| Bioaccumulation | No information available. |
|-----------------|---------------------------|

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

| | |
|------------------------|---|
| Waste Disposal Methods | Dispose of in accordance with federal, state, and local regulations |
|------------------------|---|

| | |
|------------------------|---------------------------------|
| Contaminated Packaging | Do not re-use empty containers. |
|------------------------|---------------------------------|

14. TRANSPORT INFORMATION

| | |
|------------|---------------|
| <u>DOT</u> | Not regulated |
|------------|---------------|

| | |
|-------------|---------------|
| <u>IATA</u> | Not regulated |
|-------------|---------------|

| | |
|-----------------|---------------|
| <u>IMDG/IMO</u> | Not regulated |
|-----------------|---------------|

15. REGULATORY INFORMATION

International Inventories

| | |
|--------|----------|
| TSCA | Complies |
| EINECS | Complies |
| ELINCS | Complies |

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

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|----------|----------|-------------------------------|
| Diethylene glycol monoethyl ether acetate | 112-15-2 | 5-10 | 1.0 |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|----------------|------------|---------------|--------------|----------|--------------|
| Barium sulfate | X | X | X | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

| | | | | |
|-------------|------------------|----------------|-------------------|---------------------------------|
| <u>NFPA</u> | Health Hazard 2 | Flammability 1 | Instability 0 | Physical and Chemical Hazards - |
| <u>HMIS</u> | Health Hazard 2* | Flammability 1 | Physical Hazard 0 | Personal Protection X |

*Indicates a chronic health hazard.

| | |
|----------------------|--|
| Prepared By | Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501 |
| Issuing Date | 24-May-2015 |
| Revision Date | 11-Jan-2023 |
| Revision Note | Updated Contact Information |

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