



PRODUCT SAFETY INFORMATION SHEET

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

TRADE NAME: COOLSPAN® Thermally & Electrically Conductive Adhesive (TECA)

HMIS RATING: H 1 F 1 R 0

USE OF ARTICLE: Used in Heat Transfer

DATE ISSUED: September 6, 2013

COMPANY/UNDERTAKING IDENTIFICATION: Rogers Corporation
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2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE MATERIAL: NE

LABELING REQUIREMENTS: NE

EFFECTS OF OVEREXPOSURE: None are expected with normal handling. Cutting and other finishing operations may create silver dust. Ventilation and personnel protection should be similar to all operations generating nuisance dust.

INHALATION: Dust may cause respiratory irritation. Remove to fresh air and seek medical attention if necessary.

EYE CONTACT: Dust may cause irritation. Flush eyes with water and seek medical attention if necessary.

SKIN CONTACT: Dust may cause irritation. Wash thoroughly with soap and water.

INGESTION: If ingested, seek medical attention. May cause indigestion.

CHRONIC: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is produced as an "article" as defined in 20 CFR 1910.1200 and REGULATION (EC) N° 1907/2006 is therefore exempt from the Hazard Communication Standard and REACH. Since this material does not release and will not result in exposure to a hazardous chemical under normal conditions of use, no Safety Data Sheet is required.

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>EINECS /ELINCS</u> | <u>%</u> | <u>OSHA PEL</u> | <u>ACGIH TLV</u> | <u>China OEL</u> | <u>EU Classification</u> |
|-------------------------|----------------|---------------------------|----------|------------------------|-----------------------|----------------------|---|
| Silver | 7440-22-4 | 231-131-3 | >60% | 0.01 mg/m ³ | 0.1 mg/m ³ | NE | Not Classified According to 67/548/EC |
| Proprietary Epoxy Resin | Proprietary | Proprietary | <40% | NA | NA | NE | Not Classified According to 67/548/EC |

4. FIRST-AID MEASURES

INHALATION: Remove to fresh air. Obtain medical attention if symptoms persist.

EYE CONTACT: Flush eyes with large amounts of water for 15 to 20 minutes. Obtain medical attention if symptoms persist.

SKIN CONTACT: Immediately take off all contaminated clothing and flush area with water for 15 to 20 minutes. Obtain medical attention if symptoms persist.

INGESTION: Do not induce vomiting. Rinse mouth with water. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

FLASH POINT: NE °C (°F) Flammable Limits: LEL NA UEL NA
AUTOIGNITION TEMPERATURE: NE °C (°F)

EXTINGUISHING MEDIA: X Water Spray X Foam X CO₂
X Dry Chemical X Other –

SPECIAL FIRE FIGHTING PROCEDURES: Decomposition in a fire may produce toxic fumes. Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Low, when exposed to heat or flames. Can react with oxidizers produced in fire and carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear suitable protective equipment. Do not breathe dust. Avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS: Prevent from entering sewer system, surface water or soil.

CLEANING METHODS: Sweep or shovel into appropriate container for disposal. Avoid creation of nuisance dust.

7. HANDLING AND STORAGE

HANDLING: Wear suitable protective equipment (refer to Section 8). Wash hands with soap and water after handling.

STORAGE: Keep in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: None needed under normal conditions. If material is heated and odors are noticeable and/or irritating a respirator meeting NIOSH requirements should be used. A qualified individual should evaluate each situation.

VENTILATION

LOCAL: Recommended for all industrial operations.
GENERAL: Recommended for all industrial operations.

PERSONAL PROTECTION

HAND: Gloves to avoid skin contact.
EYE: Safety glasses with side-shields are recommended in all industrial operations
SKIN: Apron, boots, and gloves as necessary to prevent skin contact.
OTHER: Safety shower/eyewash in the area.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------|------------------------|
| APPEARANCE: | Silver Roll or Sheet |
| ODOR: | Characteristic |
| PHYSICAL STATE: | Solid |
| BOILING POINT: | NA °C (°F) |
| MELTING POINT: | NE °C (°F) |
| FREEZING POINT: | NA °C (°F) |
| FLASH POINT: | NE °C (°F) |
| WATER SOLUBILITY: | In-Soluble |
| VAPOR DENSITY: | NA |
| VAPOR PRESSURE: | NA |
| SPECIFIC GRAVITY: | 4.63 g/cm ³ |
| PARTITION COEFFICIENT: | NA |
| EVAPORATION RATE: | NA |
| RELATIVE DENSITY: | NA |
| VISCOSITY: | NA |
| AUTO-IGNITION TEMPERATURE: | NA °C (°F) |
| DECOMPOSITION TEMPERATURE: | NA °C (°F) |
| PH: | NA |
| FLAMMABILITY: | NA |

10. STABILITY AND REACTIVITY

STABLE UNSTABLE

| | |
|-----------------------------------|---|
| CONDITIONS TO AVOID: | None known. |
| MATERIALS TO AVOID: | None known. |
| HAZARDOUS POLYMERIZATION: | <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Does Not Occur |
| HAZARDOUS DECOMPOSITION PRODUCTS: | CO, CO ₂ , Oxides of nitrogen, and traces of incompletely burned carbon compounds. |

11. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS: None known.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Not expected to be acutely toxic to aquatic organisms.

13. DISPOSAL CONSIDERATION

| | |
|--|--|
| PHYSICAL/CHEMICAL PROPERTIES AFFECTING DISPOSAL: | None |
| ENVIRONMENTAL TOXICITY DATA: | NA |
| WASTE DISPOSAL METHOD: | Dispose of in accordance with applicable federal, state, provincial, and local laws and regulations. |

14. TRANSPORT INFORMATION

| | |
|--------------------------|---------------|
| UN NUMBER: | Not Regulated |
| UN PROPER SHIPPING NAME: | Not Regulated |
| HAZARD CLASS (ES): | Not Regulated |
| PACKING GROUP: | Not Regulated |
| ENVIRONMENTAL HAZARDS: | NE |

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS:

Canadian (DSL/NDSL): Listed
Australian (ACIS): NE
Korea (KECI): NE
Japan (ENCS, MITI): NE
China (SEPA): Article – exempt.
EU Directive 2011/65/EC (RoHS): Does not contain any intentionally added substances mentioned by the RoHS directive.

European:
Symbol: Not classified according to directive 1999/45/EC & 2001/60/EC (dangerous preparations).

R-Phase(s): NA
S-Phase(s): NA
TSCA: All materials are listed or exempt from TSCA listing.

(Toxic Substances Control Act):
CERCLA: Silver CAS# 7440-22-4 RQ 1000 lbs.

(Comprehensive Emergency Response,
Compensation, and Liability Act):
SARA TITLE III: NA

(Superfund Amendments and
Reauthorization Act):
311/312 HAZARD CATEGORIES: None

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

| <u>CAS #</u> | <u>CHEMICAL NAME</u> | <u>PERCENT BY WEIGHT</u> |
|--------------|----------------------|--------------------------|
| 7440-22-4 | Silver | >60% |

16. OTHER INFORMATION

NA = Not Applicable
NE = Not Established
NC = Not Classified
Date Prepared: September 6, 2013

FILE: 99339-COOLSPAN TECA PSIS-09062013.doc
99339
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