

PRODUCT SAFETY INFORMATION SHEET

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

TRADE NAME: Cured Flexible Heater Substrate

PRODUCT NUMBERS COVERED:

USE OF ARTICLE: Flexible Heater Substrate

DATE ISSUED: 11/12/2015

COMPANY/UNDERTAKING Rogers Corporation

IDENTIFICATION: 1100 Governor Lead Rd Bear, DE 19701 USA

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2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE NE

MATERIAL:

LABELING REQUIREMENTS: NE

EFFECTS OF OVEREXPOSURE: None are expected with normal handling. However, machining or

grinding may cause dusting. Processing material at temperatures

exceeding decomposition temperatures may release toxic fumes.

INHALATION: Dust generated during machining or grinding may cause respiratory

irritation.

EYE CONTACT:

SKIN CONTACT:

Dust may cause irritation.

Dust may cause irritation.

INGESTION: None known.

CHRONIC: NE

3. COMPOSITION/INFORMATION ON INGREDIENTS

The materials are 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.

Chemical Name
NACAS No.
NA%
NAOSHA PEL
NAACGIH TLV
NA

FIRST-AID MEASURES 4. INHALATION: Inhalation is unlikely in the supplied form. In the event move 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: Get medical attention FIRE-FIGHTING MEASURES 5. FLASH POINT: NE °C (°F) **LEL UEL** Flammable NA NA Limits: NE °C (°F) **AUTOIGNITION TEMPERATURE: EXTINGUISHING MEDIA:** CO_2 X Water Spray Foam Χ X Dry Chemical Other SPECIAL FIRE FIGHTING Decomposition in a fire may produce toxic fumes. Firefighters should be PROCEDURES: equipped with self-contained breathing apparatus and turnout gear. UNUSUAL FIRE AND EXPLOSION Carbon monoxide, formaldehyde, silicon dioxide, metal oxides, and HAZARDS: incompletely burned carbon compounds. **ACCIDENTAL RELEASE MEASURES** 6. PERSONAL PRECAUTIONS: Use personal protective equipment recommended in Section 8. **ENVIRONMENTAL PRECAUTIONS:** The material is not biodegradable. **CLEANING METHODS:** Sweep or shovel into appropriate container for disposal. 7. HANDLING AND STORAGE HANDLING: Wear suitable protective equipment, refer to Section 8. STORAGE: Keep in a cool, well-ventilated area. **EXPOSURE CONTROLS/PERSONAL PROTECTION** 8.

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: Wear suitable disposable gloves.

EYE: Safety glasses with side-shields are recommended in all industrial

operations.

SKIN: None required.

OTHER: Safety shower/eyewash in the area.

9. PHYSICAL AND CHEMICAL PROPERTIES APPEARANCE: Silicone Rubber Sheet (Various Colors) ODOR: Characteristic Silicone PHYSICAL STATE: Solid **BOILING POINT:** NA °C (°F) **MELTING POINT:** NE °C (°F) NA °C (°F) FREEZING POINT: NE °C (°F) FLASH POINT: In-Soluble WATER SOLUBILITY: VAPOR DENSITY: NA **VAPOR PRESSURE:** NA 1.0-2.0 (Rubber Only) SPECIFIC GRAVITY: PARTITION COEFFICIENT: NA **EVAPORATION RATE:** NA **RELATIVE DENSITY:** NA VISCOSITY: NA **AUTO-IGNITION TEMPERATURE:** NA °C (°F) NA °C (°F) **DECOMPOSITION TEMPERATURE:** NA FLAMMABILITY: NA 10. STABILITY AND REACTIVITY STABLE X **UNSTABLE** CONDITIONS TO AVOID: NE MATERIALS TO AVOID: NE HAZARDOUS POLYMERIZATION: May Occur Does Not Occur HAZARDOUS DECOMPOSITION CO, CO₂, formaldehyde, silicon dioxide, metal oxides, and traces of PRODUCTS: incompletely burned carbon compounds. 11. TOXICOLOGICAL INFORMATION **CARCINOGENIC STATUS:** NA 12. ECOLOGICAL INFORMATION ECOTOXICITY: NA 13. **DISPOSAL CONSIDERATION** PHYSICAL/CHEMICAL PROPERTIES None AFFECTING DISPOSAL: NA **ENVIRONMENTAL TOXICITY DATA:** WASTE DISPOSAL METHOD: Dispose of in accordance with applicable federal, state, provincial, and local laws and regulations.

14. TRANSPORT INFORMATION

UN NUMBER:
UN PROPER SHIPPING NAME:
HAZARD CLASS (ES):
PACKING GROUP:
Not Regulated
Not Regulated
Not Regulated

ENVIRONMENTAL HAZARDS: NE

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS:

Canadian (DSL/NDSL):

Australian (ACIS):

Korea (KECI):

Japan (ENCS, MITI):

China (IECSC):

Article – exempt.

EU Directive 2011/65/EC (RoHS): Product is in compliance with the European Directive 2011/65/EC on

Restriction on Hazardous Substances and the Chinese Administration Measure on the Control of Pollution Caused by

Electronic Information.

EU REACH SVHC: Product is considered compliant with Regulation EC 1907/2006 or

Registration, Evaluation, Authorization and restriction of Chemicals

(REACH) legislation.

TSCA All materials are listed or exempt from TSCA listing.

(Toxic Substances Control Act):

CERCLA NA

(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 a:

 CAS #
 CHEMICAL NAME
 PERCENT BY WEIGHT

 7440-02-0
 Nickel
 >72 wt.%

 7440-47-3
 Chromium
 14-17 wt.%

 7439-96-5
 Manganese
 <1 wt.%</td>

a: Nickel, chromium, and manganese only exist in products with part number of I51576R, I39C28N, and I40C28N. The weight percentage only measures Inconel foil used in the products

16. OTHER INFORMATION

NA = Not Applicable FILE: 99397-Cured Flexible Heater Substrate PSIS-

11122015

NE = Not Established

NC = Not Classified PREPARED BY: Jianhua Zou

REVIEWED BY: Michal Werbecki

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