



PRODUCT SAFETY INFORMATION SHEET

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

TRADE NAME: Uncured Flexible Heater Substrate

PRODUCT NUMBERS COVERED:

USE OF ARTICLE: Flexible heater substrate

DATE ISSUED: 09/27/2018

COMPANY/UNDERTAKING IDENTIFICATION: Rogers Corporation
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Bear, DE 19701 USA
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2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE MATERIAL: NE

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: Dust may cause irritation.

SKIN CONTACT: 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.

<u>Chemical Name</u>	<u>CAS No.</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
2,4-Dichlorobenzoyl peroxide ^a	133-14-2	0.1-5.0	NA	NA
Benzoyl peroxide ^a	94-36-0	0.1-5.0	5.0 mg/m ³	5.0 mg/m ³
2,5-dimethyl-2,5-di-(t-butylperoxy) hexane ^a	78-63-7	0.1-5.0	NA	NA
Octamethylcyclotetrasiloxane ^b	556-67-2	0.1-1.0	NA	NA

- a. Uncured flexible heater substrates are supplied with one of three peroxides as curing agent.
- b. Octamethylcyclotetrasiloxane presents as an impurity in the silicone compound used for the product.

4. FIRST-AID MEASURES

INHALATION:	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.

5. FIRE-FIGHTING MEASURES

FLASH POINT:	NE °C (°F)	Flammable Limits:	LEL	NA	UEL	NA
AUTOIGNITION TEMPERATURE:	NE °C (°F)					
EXTINGUISHING MEDIA:	<u>X</u> Water Spray <u>X</u> Dry Chemical	<u>X</u> Foam <u> </u> Other	<u>X</u>	CO ₂		
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:	Carbon monoxide, formaldehyde, silicon dioxide, metal oxides, and incompletely burned carbon compounds.					

6. ACCIDENTAL RELEASE MEASURES

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. Use absorbent to remove any residues.

7. HANDLING AND STORAGE

HANDLING:	Wear suitable protective equipment, refer to Section 8. Cure the product only in ventilated areas. Avoid processes that liberate small particles, such as machining or grinding.
STORAGE:	Store material in original packaging away from excess heat. Store away from strong acids, strong bases and strong oxidizers, sulfur and amines.

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.
<u>VENTILATION</u>	
LOCAL:	Recommended for all industrial operations.
GENERAL:	Recommended for all industrial operations.
<u>PERSONAL PROTECTION</u>	
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:	Supported silicone gum sheet (Various Colors)
ODOR:	Characteristic silicone
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:	1.0-2.0 (rubber only)
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 X UNSTABLE

CONDITIONS TO AVOID:	Excess exposure to heat may cause premature polymerization of gum to rubber.
MATERIALS TO AVOID:	Exposure to sulfur and/or amines may inhibit the formation of crosslinks.
HAZARDOUS POLYMERIZATION:	<u> </u> May Occur <u> X </u> Does Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:	CO, CO ₂ , formaldehyde, silicon dioxide, metal oxides, and traces of incompletely burned carbon compounds.

11. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS: NA

12. ECOLOGICAL INFORMATION

ECOTOXICITY: NA

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/NDL): Article - exempt
Australian (ACIS): Article - exempt
Korea (KECI): Article - exempt
Japan (ENCS, MITI): Article - exempt
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 : SVHC octamethylcyclotetrasiloxane (D4) presents as impurity in the silicone compounds used for the products.
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:

<u>CAS #</u>	<u>CHEMICAL NAME</u>	<u>PERCENT BY WEIGHT</u>
94-36-0	Benzoyl Peroxide	0.1-5.0

16. OTHER INFORMATION

NA = Not Applicable

FILE: 99405 Uncured Flexible Heater Substrate
PSIS 09272018

NE = Not Established

NC = Not Classified

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