



PRODUCT SAFETY INFORMATION SHEET

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

TRADE NAME: ULTRALAM® 2000 Microwave Laminate

HMIS RATING: H 1 F 1 R 0

DATE ISSUED: February 19, 2018

COMPANY/UNDERTAKING IDENTIFICATION: Rogers Corporation
100 South Roosevelt Ave.
Chandler, AZ 85226
Phone: 001-480-961-1385
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2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE MATERIAL: NE

LABELING REQUIREMENTS: NE

EFFECTS OF OVEREXPOSURE: None anticipated with normal handling. However, machining may cause dusting. Processing material at temperatures exceeding decomposition temperatures may release toxic fumes.

INHALATION: Dusts may cause respiratory irritation. Exposure to copper fume or PTFE decomposition products may cause symptoms of metal or polymer fume fever. This is characterized by flu-like symptoms (fever, chills, muscle aches) that last about 24 hours.

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: None known.

CHRONIC: Glass filaments: IARC Group 3 (Unclassifiable as to carcinogenicity to humans).

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>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Fiber Glass	65997-17-3	<30	5 mg/m3 Respirable Dust	5 mg/m3 (Inhalable)
Copper	7440-50-8	Varies	1 mg/m3	1 mg/m3
Aluminum	7429-90-5	Varies	5 mg/m3 (Respirable)	1 mg/m3 (Respirable)

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:	NA

5. FIRE-FIGHTING MEASURES

FLASH POINT:	NE °C (°F)	Flammable Limits:	LEL	NA	UEL	NA
METHOD USED: Tag Closed Cup						
AUTOIGNITION TEMPERATURE:	NE °C (°F)					
EXTINGUISHING MEDIA:	X Water Spray X Dry Chemical	X Foam X Other –			X CO ₂	
SPECIAL FIRE FIGHTING PROCEDURES:	Decomposition in a fire may produce toxic fumes. Smoke from fluorocarbons should be avoided. Possibility of hydrogen fluoride in extreme fire situations. Firefighters should be equipped with self-contained breathing apparatus and turnout gear.					
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Hydrogen Fluoride and fluorocarbon olefins may be evolved above 230°C.					

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	None needed.
ENVIRONMENTAL PRECAUTIONS:	None needed.
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.
STORAGE:	Keep in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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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:

Required if processing material at temperatures reaching 450°F or if dusting is a problem.

Recommended for all industrial operations.

PERSONAL PROTECTION

HAND:

Gloves as necessary to avoid mechanical irritation and unnecessary skin contact.

EYE:

Safety glasses with side-shields are recommended in all industrial operations.

SKIN:

None required.

OTHER:

Avoid smoking in areas where material is machined or where excessive dusting occurs. Wash thoroughly before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

Woven Fiber Glass Fabric Clad with Copper or Aluminum

ODOR:

NA

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:

ND (Water = 1)

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:

Temperatures above 450°F.

MATERIALS TO AVOID:

Metallic Sodium

HAZARDOUS POLYMERIZATION:

May Occur Does Not Occur

HAZARDOUS DECOMPOSITION

CO, CO₂, Oxides of nitrogen, HCN, and traces of incompletely burned carbon compounds.

PRODUCTS:

11. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS:

Glass filaments: IARC Group 3 (Unclassifiable as to carcinogenicity to humans).

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

NA

13. DISPOSAL CONSIDERATION

PHYSICAL/CHEMICAL PROPERTIES None
AFFECTING DISPOSAL:
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 (IECSC) Article - exempt
EU Directive 2011/65/EC (RoHS): Does not contain any intentionally added substances mentioned by the RoHS directive.
TSCA
(*Toxic Substances Control Act*): All materials are listed or exempt from TSCA listing.
CERCLA
(*Comprehensive Emergency Response, Compensation, and Liability Act*): NA
SARA TITLE III
(*Superfund Amendments and Reauthorization Act*): NA
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>
7440-50-8	Copper	Depends on the cladding

16. OTHER INFORMATION

NA = Not Applicable

FILE: 99048-Ultralam 2000 PSIS-02192018

NE = Not Established

PREPARED BY: Michal Werbecki

NC = Not Classified

REVIEWED BY: EHS Department

Date Prepared: June 29, 2015

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