

## SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS, OSHA 29CFR 1910.1200

## **Section 1: Chemical Product and Company Identification**

MANUFACTURER'S NAME EMERGENCY TELEPHONE

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Safety Data Sheet Competent Person: Eva Ho eva.ho@isola-group.com

REVISION DATE: July 19, 2020

PRODUCT NAME: PCL-FRP-370HR PREPREG

FORMULA: N/A (Product is an Article)

PRODUCT USE: Resin impregnated woven fiberglass used in the manufacture or copper-clad laminate for

printed circuit boards.

### **Section 2: Hazards Identification**

Regulation (EC) No 1907/2006 and 29 CFR 1910.1200

GHS Hazard Classification Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Hazard Pictogram(s):

Signal word:

Hazard Statement:

None

Precautionary Statement(s):

None

Other Hazards: No Data Available

# **Section 3: Composition, Information on Ingredients**

<b>Product Composition</b>	CAS No.	EC Inventory No.	Approx. %	Hazard Statements
Non-Respirable Woven Continuous Filament Glass Fiber	65997-17-3	266-046-0	30-70	None
Reacted Epoxy Resin Matrix	XXX-XX-XXX	-	25-60	None
Inorganic Filler	XXX-XX-XXX	XXX-XX-X	5-10	None

## **Section 4: First Aid Measures**

INHALATION: Remove to fresh air. If not breathing, provide artificial respiration. Get

medical attention if necessary and treat symptomatically.

SKIN CONTACT: Wash skin with soap and water. Get medical attention if irritation persists. EYE CONTACT: Flush eyes with plenty of water as a precaution. If persistent irritation

develops, seek medical attention.

INGESTION: Rinse mouth thoroughly with water. Never give anything to an

unconscious person. Get medical attention if symptoms occur.

### Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### Indication of any immediate medical attention and special treatment needed:

No Data Available. Treat symptomatically.



# **Section 5: Fire-fighting Measures**

FLASH POINT: Not applicable FLAMMABLE LIMITS IN AIR (% by vol): Not applicable

EXTINGUISHING MEDIA: Foam, Dry Chemical Powder, or Carbon Dioxide

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus for firefighting if necessary.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Thermal decomposition or combustion may give off toxic fumes, gases and vapors.

### Section 6: Accidental Release Measures

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Prevent dust formation. Ensure adequate ventilation and isolate area. Wear proper protective equipment as specified in Section 8. Do not breathe dust or fumes/vapor from heated product.

#### **ENVIRONMENTAL PRECAUTIONS:**

No special environmental precautions required.

#### METHODS AND MATERIAL FOR CONTAINMENT AND CLEANUP:

Wear proper protective equipment as specified in Section 8: Exposure Controls/Personal Protection.

If material is released or spilled, sweep, shovel or vacuum material and place in closed containers for subsequent reuse or disposal.

#### DISPOSAL METHOD:

Disposal should be made in accordance with federal, state and local regulations.

REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

# **Section 7: Handling and Storage**

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in a cool dry place. Avoid excessive heat and ignition sources. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

INFORMATION ON EMPTIED CONTAINER: Not applicable

SPECIFIC USES: Resin impregnated woven fiberglass used in the manufacture or copper-clad laminate for printed circuit boards.

# **Section 8: Exposure Controls/Personal Protection**

### **EXPOSURE CONTROLS:**

### **VENTILATION:**

Provide general ventilation and local exhaust ventilation to meet TLV requirements of individual ingredients and to control dusting conditions. If cutting or rimming with power equipment then dust collectors and local ventilation should be used. Avoid unnecessary exposure to dust and handle with care. Keep work area clean of dust and fibers by using an industrial vacuum cleaner with high efficiency filter or wetting down area with water. Never use compressed air and avoid dry sweeping.

### EYE PROTECTION:

Wear safety glasses with side shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### RESPIRATORY PROTECTION:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use a NIOSH/MSHA or European Standard (EN) approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the CEN European Standards (EU).



#### PROTECTIVE GLOVES:

Glove use is recommended. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with glove contamination. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### SKIN PROTECTION:

Suitable protective clothing to prevent skin contact is recommended.

#### WORK/HYGIENE PRACTICES:

Provide good personal hygiene after handling. Avoid contact with eyes. Wash hands after handling.

#### OTHER EQUIPMENT:

Make safety shower, eyewash stations, and hand washing equipment available in the work area.

#### **CONTROL PARAMETERS:**

Component	CAS No.	Value	Control Parameters	Basis		
Proprietary Filler	xxx-xx-xxx	TWA	20 Million particles per	USA. Occupational Exposure Limits		
			cubic foot	(OSHA) - Table Z-3 Mineral Dusts		
		Based on impinger samples counted by light-field techniques. Containing less than				
	remarks	1% quartz; if 1% quartz or more, use quartz limit. mppcf X 35.3 = million particles				
		per cubic meter = particles per c.c				
		TWA	2 mg/m3	USA. NIOSH Recommended		
		IVVA	2 mg/m3	Exposure Limits		
		TWA	2 mg/m3	USA. ACGIH Threshold Limit		
		IVVA	2 Hig/Hi3	Values (TLV)		
		Lower Respiratory Tract irritation				
		Pulmonary function				
		Pulmonary fibrosis				
		The value is for particulate matter containing no asbestos and < 1% crystalline				
		silica.				
		Not classifiable as a human carcinogen.				
				California permissible exposure		
		PEL	2 mg/m3	limits for chemical contaminants		
				(Title 8, Article 107)		
		See section 5208				

# **Section 9: Physical and Chemical Properties**

APPEARANCE - COLOR:

PHYSICAL STATE: Solid ODOR: N/A

### PRODUCT CRITERIA

	PRODUCT CRITERIA
ODOR THRESHOLD	Not Available for product
PH	Not Available for product
FLASH POINT:	Not Available for product
LOWER EXPLOSIVE LIMIT; UPPER EXPLOSIVE LIMIT	Not Available for product
FLAMMABILITY (Solid, gas)	Not Available for product
EXPLOSIVE PROPERTIES	Not Available for product
OXIDIZING PROPERTIES	Not Available for product
SPECIFIC GRAVITY (@25 °C):	Not Available for product
EVAPORATION RATE:	Not Available for product
% VOLATILE by VOLUME	Not Available for product
PARTITION COEFFICIENT	Not Available for product



AUTO IGNITION TEMPERATURE	Not Available for product
DECOMPOSITION TEMPERATURE	Not Available for product
BOILING POINT:	Not Available for product
MELTING POINT:	Not Available for product
VAPOR PRESSURE	Not Available for product
VAPOR DENSITY (AIR = 1)	Not Available for product
SOLUBILITY IN WATER:	Insoluble
WATER SOLUBILITY IN THE SOLVENT	Not Available for product
FREEZING POINT:	Not Available for product
VISCOSITY	Not Available for product
VOC CONTENT	Not Available for product

#### OTHER INFORMATION

None

# Section 10: Stability and Reactivity

REACTIVITY: Stable under normal storage conditions.

CHEMICAL STABILITY: Stable under recommended storage conditions

POSSIBILITY OF HAZARDOUS REACTIONS: No data available.

CONDITIONS TO AVOID: Exposure to excessive heat, flames, sparks and other ignition sources as well as moist air and water. Avoid incompatible materials. Avoid excessive dust generation.

INCOMPATIBLE MATERIALS: Avoid contact with strong oxidizing agents, strong acids, strong bases, mercaptans and amines.

HAZARDOUS DECOMPOSITION PRODUCTS: Dense smoke, acrid vapors and fumes, al iphat ic and aromat ic hydrocarbons of variable composition,  $CO_X$ ,  $NO_X$ . Decomposition products depend on temperature, air supply and other materials that may be present. Uncontrolled exothermic reactions of epoxy resins release phenolics, carbon monoxide and water.

# **Section 11: Toxicological Information**

There is no toxicological information available for the product (article) itself.

# **Section 12: Ecological Information**

There is no ecological information available for the product (article) itself.

# **Section 13: Disposal Considerations**

Dispose according to local, state, and national regulations.

## **Section 14: Transport Information**

DOT TRANSPORT:	Not Regulated
ADR = International Carriage of Dangerous Goods by Road	Not Regulated
RAIL TRANSPORT:	Not Regulated
SEA TRANSPORT: IMDG	Not Regulated
AIR TRANSPORT: IATA/ICAO	Not Regulated



## **Section 15: Regulatory Information**

#### OSHA HAZARD COMMUNICATION STANDARD

This product is a not "Hazardous Chemical" as defined by 29 CFR 1910.1200.

#### TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

This product is in compliance with all rules, regulations, and orders of TSCA.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III (EPCRA) SECTIONS 311 AND 312: None

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III (EPCRA) SECTION 313 SUPPLIER NOTIFICATION: None

#### **CALIFORNIA PROPOSITION 65:**

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None.

#### **CANADA**

This MSDS contains all of the information required by the Controlled Products Regulations (CPR).

#### WHMIS-INFORMATION:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), SOR/88-66. The classes of controlled products listed in the CPR, Section 32, Part IV, have been reviewed and based on Professional Judgment this product has been determined to not be WHMIS controlled.

### **EUROPEAN UNION:**

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling and packaging (CLP) of substances and mixtures.

## **Section 16: Other Information**

Revision Comments: Initial version (August 1, 2004)

Revision Number: 5 (July 19, 2020)

Previous Revisions: April 23, 2018 (4); March 16, 2015 (3); November 18, 2008 (2); December 6, 2005(1)

Information Sources: REACH, OSHA 29CFR 1910.1200, Manufacturer SDSs.

#### FOR INDUSTRIAL USE ONLY

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