



MSDS No.: 823
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MATERIAL SAFETY DATA SHEET

Product name: CI 070 EP Crack Sealing Compound (Part A)
Description: Epoxy Resin
Supplier: Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121
Emergency # (Chem-Trec.): 1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Epoxy Resin	025068-38-6	NE	NE	NE
Pigment	013463-67-7	10 mg/m ³	10 mg/m ³ (T)	NA
Fumed Silica	112945-52-5	10 mg/m ³ (R)	NE	NE

Abbreviations: PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. NE = None Established. NA = Not Applicable. T = Total Dust. R = Respirable Dust.

PHYSICAL DATA

Appearance:	White gel	Odor:	Negligible odor
Vapor Density: (air = 1)	Not applicable	Vapor Pressure:	Not applicable
Boiling Point:	200° F	VOC Content:	None
Evaporation Rate:	Not determined	Solubility in Water:	Negligible
Specific Gravity:	1.3	pH:	Not determined

FIRE AND EXPLOSION HAZARD DATA

Flash Point / Method:	> 200 F / Seta flash	Flammable Limits:	Not applicable
Extinguishing Media:	Water Fog, CO ₂ , Dry Chemical, Foam		
Special Fire Fighting Procedures:	Wear full protective clothing. A NIOSH-approved self-contained breathing apparatus (SCBA) should be worn when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be produced under fire conditions. See below.		

REACTIVITY DATA

Stability:	Stable.	Hazardous Polymerization:	Will not occur.
Incompatibility:	Strong acids, peroxides and other oxidizing agents		
Decomposition Products:	Thermal decomposition can yield carbon dioxide, carbon monoxide, aldehydes and acids.		
Conditions to Avoid:	Avoid temperature extremes that could shorten the shelf-life of this product; i.e. below freezing and above 100° F. (See handling and storage requirements).		

HEALTH HAZARD DATA

Known Hazards:	Acute: Eye and skin irritation. Chronic: Sensitization is possible.
Signs and Symptoms of Exposure:	Eyes: Can cause irritation but injury is unlikely. Skin: Can cause irritation. An allergic skin reaction (e.g. rash, itching, reddening) can occur with some individuals. Inhalation: No effects expected. Exposure to heated vapors can cause irritation. Ingestion: Not considered to be a route of exposure. Effects of ingestion have not been determined. Considered to have a low acute oral toxicity.
Routes of Exposure:	Dermal. Inhalation.
Carcinogenicity:	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.
Medical Conditions Aggravated by Exposure:	Eye, skin, and respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Immediately flush with plenty of water. Contact a physician if symptoms occur.
Skin:	Wash with soap and water. Contact a physician if symptoms occur.
Inhalation:	Move victim to fresh air. Contact a physician if symptoms occur.
Ingestion:	Do not induce vomiting unless directed by a physician. Contact a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Chemical goggles recommended while mixing sealing compound and while injecting epoxy (i.e. CI 060).
Skin Protection:	Impermeable gloves recommended. Other protective clothing as required to prevent skin contact.
Respiratory Protection:	None normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges. Never enter a confined space without an appropriate air-supplied respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool dry area. Keep from freezing. Store between 40° and 100° F. For industrial use only. Keep out of reach of children. Use with adequate ventilation. Do not get into the eyes. Avoid contact with the skin. Practice good hygiene; i.e. wash after using and before eating or smoking.
Spill Procedures:	Take up with an absorbent material and place in a container for proper disposal in accordance with all applicable local, state, or federal requirements.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
HMIS Codes:	Health 2, Flammability 1, Reactivity 0, PPE B (Goggles, Gloves)
DOT Shipping Name:	Part A is not regulated. Part B is regulated; see Page 4.
IATA / ICAO Shipping Name:	Part A is not regulated. Part B is regulated; see Page 4.
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product does not contain any ingredients which are subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste.
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CI 070 EP Crack Sealing Compound (Part B)

DESCRIPTION: Amine Hardener for CI 070 EP Epoxy Resin

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Tall oil, fatty acids reaction product	068953-36-6	NE	NE	NE
Amine reaction product	057214-10-5	NE	NE	NE
Fumed silica	112945-52-5	NE	NE	NE
Phenol	000108-95-2	5 ppm (S)	5 ppm (S)	NE
m-Xylene diamine	001477-55-0	C: 0.1 mg/m ³ (S)	NE	NE
Tetraethylene pentamine	000112-57-2	NE	NE	NE
Benzyl alcohol	000100-51-6	NE	NE	NE
Carbon black	001333-86-4	NE	NE	NE

Abbreviations: PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit. NE = None Established. NA = Not Applicable. (S) indicates exposure should be controlled for the cutaneous routes including the mucous membranes, eyes, and skin. Airborne exposures as well as direct contact must be considered.

PHYSICAL DATA

Appearance:	Dark gray to black gel	Odor:	Amine odor
Boiling Point:	401° F	Vapor Pressure:	Not applicable
Vapor Density:	Not applicable	VOC Content:	Not determined
Evaporation Rate:	Not applicable	Solubility in Water:	Negligible
Specific Gravity:	1.1	pH:	Not determined

FIRE AND EXPLOSION HAZARD DATA

Flash Point / Method:	> 200° F / Seta flash	Flammable Limits:	Not applicable
Extinguishing Media:	Water Fog, CO ₂ , Dry Chemical, Foam		
Special Fire Fighting Procedures:	Wear full protective clothing. A NIOSH-approved self-contained breathing apparatus (SCBA) should be worn when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be formed. See below.		

REACTIVITY DATA

Stability:	Stable.
Hazardous Polymerization:	Will not occur
Incompatibility:	Strong acids, peroxides, oxidizing agents and epoxy resins in uncontrolled amounts
Hazardous Decomposition Products:	Thermal decomposition can yield CO, CO ₂ and NO _x .
Conditions to Avoid:	Avoid temperature extremes that could shorten the shelf-life of this product; i.e. below freezing and above 100° F. (See handling and storage requirements).

HEALTH HAZARD DATA

Known Hazards:	Acute: Corrosive. Chronic: Sensitization is possible.
Signs and Symptoms of Exposure:	Eyes - Will cause eye burns. Skin - Will cause skin burns. An allergic skin reaction (e.g. rash, itching, reddening) can occur with some individuals. Inhalation - No effects expected. High vapor concentrations can cause irritation. Ingestion - Can cause severe damage (burns) if swallowed.
Routes of Exposure:	Dermal. Inhalation.
Medical Conditions Aggravated by Exposure:	Eye, skin, and respiratory conditions.
Carcinogenicity:	Carbon black has been rated by IARC as a Group 2B carcinogen based upon inhalation of respirable (< 10 µm) carbon black in the production, rubber, paint and printing industries. The overall rating of 2B indicates that there was inadequate evidence for carcinogenicity in humans and adequate evidence in lab animals. This product does not pose a dust hazard; therefore, the risk of cancer due to inhalation of carbon black is not relevant.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Flush immediately with clean water for at least 15 minutes. Contact a physician.
Skin:	Wash immediately with soap and water. Contact a physician if symptoms persist.
Inhalation:	Move victim to fresh air. Contact a physician if symptoms persist.
Ingestion:	Do not induce vomiting unless directed by a physician. Contact a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Wear chemical goggles while mixing CI 070 and while injecting epoxy (i.e. CI 060).
Skin Protection:	Impermeable gloves recommended. Other protective clothing as required to prevent skin contact.
Respiratory Protection:	Not normally required. Where ventilation is inadequate to control vapors, use a NIOSH-approved respirator with organic vapor cartridges.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Store in a cool, dry area out of direct rays of the sun. Keep from freezing. Store between 40° and 100° F. For industrial use only. Keep out of reach of children. Wear appropriate personal protective equipment. Use with adequate ventilation. Do not get into the eyes. Avoid contact with the skin. Practice good hygiene; i.e. wash after using and before eating or smoking.
Spill Procedures:	Take up with an absorbent material and place in a container for proper disposal in accordance with all applicable local, state, or federal requirements.

REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200.
HMIS Codes:	Health 3, Flammability 0, Reactivity 0, PPE B, Goggles
DOT Shipping Name:	Limited Quantity - LQ
IATA / ICAO Shipping Name:	Corrosive liquid n.o.s. (contains phenol solutions, m-xylenediamine), Class 8, UN 1760, PG III
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains < 7% Phenol (CAS No. 108-95-2) which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372).
EPA Waste Code(s):	Not regulated by EPA as a hazardous waste.
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal regulations.

CONTACTS

Customer Service:	1 800 879 8000	Technical Service:	1 800 879 8000
Health / Safety:	1 800 879 6000	Jerry Metcalf	(x1003704)
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.