



MATERIAL SAFETY DATA SHEET

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Product name: HILTI HFX Adhesive
Description: Methacrylate resin and hardener. Part A and Part B contained separately in one tube.
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)

For: A D & W
 P O Box 910
 WESTBROOK, ME 04098

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Part A: Quartz sand	14808-60-7	0.05 mg/m ³ (R)	0.1 mg/m ³ (R)	NE
Bonding agent	NJ TSRN: 19136100-5003	NE	NE	NE
Acrylic acid ester	NJ TSRN: 19136100-5004	NE	NE	NE
Methacrylate resin	NJ TSRN: 19136100-5020	NE	NE	NE
Ester of methacrylate acid	NJ TSRN: 19136100-5021	NE	NE	NE
Butyric acid ester	NJ TSRN: 19136100-5002	NE	NE	NE
Trimethacrylate	NJ TSRN: 19136100-5017	NE	NE	NE
Synthetic amorphous silica	67762-90-7	NE	NE	NE
Ethoxylated bismethacrylate	NJ TSRN: 19136100-5022	NE	NE	NE
Bismethacrylate	NJ TSRN: 19136100-5023	NE	NE	NE
Part B: Quartz sand	14808-60-7	0.05 mg/m ³ (R)	10 mg/mg ³ (R) %SiO ₂ + 2	NE
Water	07732-18-5	NE	NE	NE
Dibenzoyl peroxide	00094-36-0	5 mg/m ³	5 mg/m ³	NE
Dipropylene glycol	025265-71-8	NE	NE	NE
Amorphous Silica	007631-86-9	NE	20 mppcf	NE
Polyethylene	009002-88-4	NE	NE	NE

Abbreviations: NJ TSRN indicates New Jersey Trade Secret Registry Number. (R) indicates "as respirable dust". PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. STEL = Short Term Exposure Limit (15 minute time-weighted average). NE = None Established. mppcf = million particles per cubic foot.

PHYSICAL DATA

Appearance:	Gray paste	Odor:	Ester-like odor
Vapor Density: (air = 1)	Not determined	Vapor Pressure (@68 °F)	0 mm Hg
Boiling Point:	Not determined	VOC Content:	Not determined
Evaporation Rate:	Not determined	Solubility in Water:	Insoluble
Specific Gravity:	1.7	pH:	6

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	>212° F	Flammable Limits:	Not determined
Extinguishing Media:	CO ₂ , Dry Chemical, Foam, Water spray		
Special Fire Fighting Procedures:	Use a self-contained breathing apparatus when fighting fires involving chemicals.		
Unusual Fire and Explosion Hazards:	None known. Thermal decomposition products can be formed.		

REACTIVITY DATA

Stability:	Dibenzoyl peroxide decomposes (non-violently) at 150° F. Ignition does not occur due to the water content (> 5%).
Hazardous Polymerization:	Will not occur.
Incompatibility:	Strong acids and oxidizing agents. Do not store in direct sunlight.
Decomposition Products:	Thermal decomposition can yield CO, CO ₂ and NO _x .

Conditions to Avoid:

Avoid temperature extremes which could shorten the shelf-life of this product; i.e. below 50° F and above 77° F. (See handling and storage requirements).

HEALTH HAZARD DATA**Known Hazards:**

Eye and skin irritation. Possible sensitizer.

Signs and Symptoms of Exposure:

Eyes: can cause irritation. **Skin:** Prolonged and repeated contact can cause irritation. An allergic skin reaction (sensitization e.g. rash, itching, reddening) can occur with some individuals. **Inhalation:** Possible irritation. **Ingestion:** Not a likely route of exposure.

Routes of Exposure:

Contact. Inhalation.

Carcinogenicity:

IARC classifies crystalline silica (quartz sand) as a Gp. I carcinogen based upon evidence among workers in industries where there has been long-term and chronic exposure (via inhalation) to silica dust; e.g. mining, quarry, stone crushing, refractory brick and pottery workers. This product does not pose a dust hazard; therefore, this classification is not relevant.

Medical Conditions Aggravated by Exposure:

Eye, skin, and respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES**Eyes:**

Flush with plenty of water. Call a physician if symptoms occur.

Skin:

Wash with soap and water.

Inhalation:

Move victim to fresh air. Call a physician if symptoms persist.

Ingestion:

Seek medical attention. Do not induce vomiting unless directed by a physician. Never give anything by mouth to an unconscious person.

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:

Safety glasses.

Skin Protection:

Impermeable (nitrile, neoprene or rubber) gloves recommended.

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. If dusts are generated during demolition or removal, wear an appropriate dust mask or respirator.

PRECAUTIONS FOR SAFE HANDLING AND USE**Handling and Storing Precautions:**

Store in a cool, dry area preferably between 50° and 77° F. Do not store in direct sunlight. Keep away from open flames, heat sources and sparks. Avoid prolonged or repeated contact. Use with adequate ventilation. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children.

Spill Procedures:

Take up with an absorbent material and place in a container for proper disposal.

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 1, Flammability 1, Reactivity 0, PPE B

DOT Shipping Name:

Not regulated

IATA / ICAO Shipping Name:

Not regulated

TSCA Inventory Status:

Methacrylate resin - PMN has been filed for this material. All other chemical components listed on TSCA inventory.

SARA Title III, Section 313:

This product contains 5 - 10% Benzoyl peroxide (CAS #94-36-0) 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 safety, health and environmental regulations.

CONTACTS**Customer Service:**

1 800 879 8000

Technical Service:

1 800 879 8000

Health / Safety:

1 800 879 6000 Jerry Metcalf (x6704)

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1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

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