



MSDS No.: 306  
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## MATERIAL SAFETY DATA SHEET

**Product name:** HIT- HY150 MAX  
**Description:** Methacrylate resin and hardener. Part A is in the large tube; Part B is in the small 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)

### INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	TLV:	PEL:	STEL:
Part A: Urethane methacrylate resin	NJ TSRN: 19136100-5001	NE	NE	NE
	Bonding agent	NJ TSRN: 19136100-5003	NE	NE
	Acrylic acid ester	NJ TSRN: 19136100-5004	NE	NE
	Methacrylate ester	NJ TSRN: 19136100-5005	NE	NE
	Butyric acid ester	NJ TSRN: 19136100-5002	NE	NE
	Quartz sand	14808-60-7	0.05 mg/m <sup>3</sup> (R)	0.1 mg/m <sup>3</sup> (R)
	Synthetic amorphous silica	67762-90-7	NE	NE
	Trimethacrylate	NJ TSRN: 19136100-5017	NE	NE
	Dimethacrylate	NJ TSRN: 19136100-5019	NE	NE
	Part B: Quartz sand	14808-60-7	0.05 mg/m <sup>3</sup> (R)	$\frac{10 \text{ mg/m}^3(\text{R})}{\% \text{SiO}_2 + 2}$
Water	07732-18-5	NE	NE	NE
Aluminum oxide	001344-28-1	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup> (R)	NE
Dibenzoyl peroxide	00094-36-0	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	NE
Amorphous silica	07631-86-9	10 mg/m <sup>3</sup>	20 mppcf	NE
1,2,3-Propanetriol	000056-81-5	10 mg/m <sup>3</sup> (M)	5 mg/m <sup>3</sup> (R)(M)	NE

**Abbreviations:** NJ TSRN indicates New Jersey Trade Secret Registry Number. (R) indicates "as respirable dust". (N) indicates "as nuisance 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. (M) = Mist

### PHYSICAL DATA

<b>Appearance and Odor:</b>	Gray paste. Ester-like odor.	<b>VOC Content:</b>	39.6 g/l
<b>Boiling Point:</b>	Not determined	<b>Vapor Pressure (@68 ° F)</b>	0 mm Hg
<b>Vapor Density: (air = 1)</b>	Not determined	<b>Odor Threshold</b>	Not determined
<b>Evaporation Rate:</b>	Not determined	<b>Solubility in Water:</b>	Insoluble
<b>Specific Gravity:</b>	1.8	<b>pH:</b>	6-7

### FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point:</b>	228° F	<b>Flammable Limits:</b>	Not determined
<b>Extinguishing Media:</b>	CO <sub>2</sub> , Dry Chemical, Foam, Water spray		
<b>Special Fire Fighting Procedures:</b>	Use a self-contained breathing apparatus when fighting fires involving chemicals.		
<b>Unusual Fire and Explosion Hazards:</b>	None known. Thermal decomposition products can be formed.		

### REACTIVITY DATA

<b>Stability:</b>	Dibenzoyl peroxide decomposes (non-violently) at 150° F. Ignition does not occur due to the water content (> 5%).
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibility:</b>	Strong acids and oxidizing agents. Do not store in direct sunlight.
<b>Decomposition Products:</b>	Thermal decomposition can yield CO, CO <sub>2</sub> and NO <sub>x</sub> .
<b>Conditions to Avoid:</b>	Avoid temperature extremes which could shorten the shelf-life of this product; i.e. below 41° F freezing and above 77° F. (See handling and storage requirements).

### HEALTH HAZARD DATA

<b>Known Hazards:</b>	Eye and skin irritation. Possible sensitizer.
<b>Signs and Symptoms of</b>	<b>Eyes:</b> can cause irritation. <b>Skin:</b> Prolonged and repeated contact can cause irritation. An

<b>Exposure:</b>	allergic skin reaction (sensitization e.g. rash, itching, reddening) can occur with some individuals.
<b>Routes of Exposure:</b>	<b>Inhalation:</b> Possible irritation. <b>Ingestion:</b> Not a likely route of exposure.
<b>Carcinogenicity:</b>	Contact. Inhalation.
<b>Medical Conditions Aggravated by Exposure:</b>	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.
<b>Eye, skin, and respiratory conditions.</b>	

#### EMERGENCY AND FIRST AID PROCEDURES

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

#### CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

<b>Ventilation:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye Protection:</b>	Safety glasses.
<b>Skin Protection:</b>	Impermeable gloves recommended.
<b>Respiratory Protection:</b>	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

<b>Handling and Storing Precautions:</b>	Store in a cool, dry area preferably between 41° 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.
<b>Spill Procedures:</b>	Take up with an absorbent material and place in a container for proper disposal.

#### REGULATORY INFORMATION

<b>Hazard Communication:</b>	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard. 29 CFR 1910.1200.
<b>HMIS Codes:</b>	Health 1, Flammability 1, Reactivity 0, PPE B
<b>DOT Shipping Name:</b>	Not regulated
<b>IATA / ICAO Shipping Name:</b>	Not regulated
<b>TSCA Inventory Status:</b>	Urethane methacrylate resin – USEPA Accession Number 238392. All other chemical components listed on TSCA inventory.
<b>SARA Title III, Section 313:</b>	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).
<b>EPA Waste Code(s):</b>	Not regulated by EPA as a hazardous waste
<b>Waste Disposal Methods:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

#### CONTACTS

<b>Customer Service:</b>	1 800 879 8000	<b>Technical Service:</b>	1 800 879 8000
<b>Health / Safety:</b>	1 800 879 6000	Jerry Metcalf	(x6704)
<b>Emergency # (Chem-Trec):</b>	<b>1 800 424 9300</b> (USA, PR, Virgin Islands, Canada); <b>001 703 527 3887</b> (other countries)		

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