



MATERIAL SAFETY DATA SHEET

Product name: HS-200-15 High Strength Epoxy
Description: Epoxy resin (Part A) and amine hardener (Part B)
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:	PEL:	TLV:	STEL:
Epoxy resin	25085-99-8	NE	NE	NE
Processed silica	14808-60-7	NA	NA	NA
Ethylene glycol	00107-21-1	C: 50 ppm	C: 100 ppm	NE
Fumed silica	07631-86-9	NA	NA	NE
Titanium dioxide	13463-67-7	NA	NA	NE
Diluent	NJ TSRN: 19136100-5007	NE	NE	NE
Rheological agent	NJ TSRN: 19136100-5008	NA	NA	NE

Abbreviations: NJ TSRN = New Jersey Trade Secret Registry Number. PEL = OSHA Permissible Exposure Limit. TLV = ACGIH Threshold Limit Value. C = Ceiling. STEL = Short Term Exposure Limit. NE = None Established. NA = Not Applicable.

PHYSICAL DATA

Appearance and Odor:	White paste. Slight odor	Vapor Density:	Not applicable
Boiling Point:	> 212 F	Vapor Pressure:	Not applicable
Melting Point:	Not determined	VOC Content:	11.02 g/l (when mixed)
Evaporation Rate:	Not applicable	Solubility in Water:	Insoluble
Specific Gravity:	1.6	pH:	Not determined

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	> 200 F	Flammable Limits:	Not applicable
Extinguishing Media:	Carbon Dioxide, Dry Chemical, Foam, Water		
Special Fire Fighting Procedures:	Soak cartons to help prevent the spread of fire. 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:	Stable.	Hazardous Polymerization:	Will not occur
Incompatibility:	Strong acids, peroxides, and other oxidizing agents.		
Hazardous Decomposition Products:	Thermal decomposition can yield CO and CO ₂ .		
Conditions to Avoid:	Exposure to excessive heat and storage above 95° F will shorten product shelf life.		

HEALTH HAZARD DATA

Known Hazards:	Causes skin and eye irritation. Sensitizer.		
Signs and Symptoms of Exposure:	Eyes: Irritation. Corneal injury is not expected. Skin: Irritation. Can cause allergic skin reactions in susceptible individuals; e.g. itching, redness, swelling, etc. Inhalation: No ill effects expected. Heated vapors can cause irritation.		
Routes of Exposure:	Dermal.		
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. Call a physician if symptoms persist.
Skin:	Wash with soap and water. Launder contaminated clothing before reuse.
Inhalation:	Move victim to fresh air. Give oxygen and/or artificial respiration if needed. Call a physician if symptoms persist.
Ingestion:	If conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to by a physician. Call a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Chemical goggles recommended. Safety glasses with side shields as a minimum.
Skin Protection:	Cloth or impermeable (neoprene or rubber) gloves.
Respiratory Protection:	None normally required. Use a NIOSH-approved organic vapor cartridge respirator when air movement is inadequate to control vapor build-up. Never enter a confined space without an appropriate air-supplied respirator (e.g. SCBA or airline with escape pack).

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Avoid contact with eyes, skin and clothing. Avoid prolonged inhalation of vapors. Use with adequate ventilation. Wash thoroughly after handling. Store in a cool dry place out of direct rays of the sun. Keep from freezing. Recommended storage temperature range is between 40° and 95° F.
Spill Procedures:	Cover with an absorbent material and place in a salvage container for proper disposal. If possible, mix parts A and B and allow product to cure (harden).

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
DOT Shipping Name:	Part A is not regulated. Part B is regulated (refer to page 4).
IATA / ICAO Shipping Name:	Part A is not regulated. Part B is regulated (refer to page 4).
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains 0 – 2% ethylene glycol (CAS 107-21-1) 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.

DESCRIPTION: Part B (Amine hardener).

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	PEL:	TLV:	STEL:
n-aminoethylpiperazine	00140-31-8	NE	NE	NE
Nonyl phenol	25154-52-3	NE	NE	NE
Fumed silica	07631-86-9	NA	NA	NE
Processed silica	14808-60-7	NA	NA	NE
Ethylene glycol	00107-21-1	C: 50 ppm	C: 100 ppm	NE
Iron oxide	01317-61-9	NA	NA	NE
Rheological agent	NJ TSRN: 19136100-5008	NA	NA	NE

Abbreviations: **NJ TSRN** = New Jersey Trade Secret Registry Number. **PEL** = OSHA Permissible Exposure Limit. **TLV** = ACGIH Threshold Limit Value. **C** = Ceiling. **STEL** = Short Term Exposure Limit. **NE** = None Established. **NA** = Not Applicable.

PHYSICAL DATA

Appearance and Odor:	Dark paste. Amine odor	Vapor Density:	Not applicable
Boiling Point:	> 212 F	Vapor Pressure:	Not applicable
Melting Point:	Not determined	VOC Content:	11.02 g/l (when mixed)
Evaporation Rate:	Not applicable	Solubility in Water:	Very low
Specific Gravity:	1.4	pH:	Not determined

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	> 200 F	Flammable Limits:	Not applicable
Extinguishing Media:	Carbon Dioxide, Dry Chemical, Foam, Water		
Special Fire Fighting Procedures:	Soak cartons to help prevent the spread of fire. 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:	Stable.
Hazardous Polymerization:	Will not occur
Incompatibility:	Strong acids, peroxides, and other oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition can yield CO and CO ₂ .
Conditions to Avoid:	Exposure to excessive heat and storage above 95°F will shorten product shelf life.

HEALTH HAZARD DATA

Known Hazards:	Corrosive
Routes of Exposure:	Dermal. Inhalation.
Signs and Symptoms of Exposure:	Eyes: Irritation. Possible eye burns. Skin: Can cause irritation and skin burns. Inhalation: No ill effects expected. Heated vapors can cause irritation.
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 for at least 15 minutes. Call a physician.
Skin:	Wash immediately with soap and water. Launder contaminated clothing.
Inhalation:	Move victim to fresh air. Give oxygen and/or artificial respiration if needed. Call a physician if

Ingestion:	symptoms persist. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to by a physician. Call a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury or exposure.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Chemical goggles recommended. Safety glasses with side shields as a minimum.
Skin Protection:	Cloth or impermeable (neoprene or rubber) gloves.
Respiratory Protection:	None normally required. Use a NIOSH-approved organic vapor cartridge respirator when air movement is inadequate to control vapor build-up. Never enter a confined space without an appropriate air-supplied respirator (e.g. SCBA or airline with escape pack).

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Avoid contact with eyes, skin and clothing. Avoid prolonged inhalation of vapors. Use with adequate ventilation. Wash thoroughly after handling. Store in a cool dry place out of direct rays of the sun. Keep from freezing. Recommended storage temperature range is between 40° and 95° F.
Spill Procedures:	Cover with an absorbent material and place in a salvage container for proper disposal. If possible, mix parts A and B and allow product to cure (harden).

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 1, Reactivity 0, PPE B
DOT Shipping Information:	Corrosive liquid, n.o.s., (contains n-aminoethylpiperazine, nonyl phenol), Class 8, UN 1760, PG III
IATA / ICAO Shipping Name:	Corrosive liquid, n.o.s., (contains n-aminoethylpiperazine, nonyl phenol), Class 8, UN 1760, PG III
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains 0 – 2% ethylene glycol (CAS 107-21-1) 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)
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.