



Safety Data Sheet

SDS No. 916B

Section 1 - Identification

1.1 Product Identifier: HT HIGH TEMPERATURE Hardener Part B

1.2 General Use: Epoxy Curing Resin **1.3 Manufacturer:** Smooth-On, Inc.,

5600 Lower Macungie Rd., Macungie, PA 18062 Phone (610) 252-5800, FAX (610) 252-6200

SDS@Smooth-On.com

1.4 Emergency Contact: Chem-Tel

Domestic: 800-255-3924 International: 813-248-0585

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture

Acute toxicity, oral – Category 4, H302 Acute toxicity, dermal – Category 4, H312 Acute toxicity, inhalation – Category 4, H332 Skin corrosion/irritation – Category 2, H315 Eye damage/irritation – Category 2A, H319

2.2 GHS Label elements, including precautionary statements



Hazard Pictogram(s): Signal Word: Warning

P304 + P340

for breathing.

Health Hazards:	H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled
	H315	Causes skin irritation
	H319	Causes serious eye irritation
General Precautions:	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P103	Read label before use.
Prevention	P264	Wash skin thoroughly after handling.
Precautions:		
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response Precautions:	P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove person to fresh air and keep comfortable

P305 + P35 + P338		IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P340	Remove person to fresh air and keep comfortable for breathing.
Disposal Precautions	P362 + P364 P501	Take off contaminated clothing and wash it before reuse. Dispose of contents/container according to local, state and federal laws.

Hazards not otherwise classified (HNOC) or not covered by GHS – this product may aggravate certain medical conditions such as eye disease, skin disorder and allergies, asthma, and liver disorders.

Section 3 - Composition / Information on Ingredients

3.1 Substances

The following ingredients are hazardous according to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR 1910.1200:

CAS	Component	Concentration
1761-71-3	Methylenebiscyclohexanamine, 4,4'-	40% - 85%
68479-98-1	Diethyltoluenediamine	<40%
111-40-0	Diethylenetriamine	10% - 20%

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician immediately.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water.

Ingestion: Do not induce vomiting unless instructed by a physician. Never give anything by mouth to an unconscious person.

- 4.2 Most important symptoms and effects, both acute and delayed: None known.
- 4.3 After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

- **5.1 Extinguishing Media:** Water Fog, Dry Chemical, and Carbon Dioxide Foam
- 5.2 Special hazards arising from the substance or mixture: None known.
- **5.3** Advice for firefighters: Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure demand or positive-pressure mode.

Section 6 - Accidental Release Measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Only properly protected personnel should remain in the spill area; dike and contain spill. Stop or reduce discharge if it can be done safely.
- **6.2** Environmental precautions: No special environmental precautions required.

- **6.3 Methods and material for containment and cleaning up:** absorb or scrape up excess into suitable container for disposal; wash area with dilute ammonia solution
- **6.4** Reference to other sections: if appropriate Sections 8 and 13 shall be referred to.

Section 7 - Handling and Storage

- **7.1 Precautions for safe handling:** Use good general housekeeping procedures. Wash hands after use.
- **7.2 Conditions for safe storage, including any incompatibilities:** Keep container(s) tightly closed and properly labeled. Store in cool, dry, well ventilated place away from heat, direct sunlight, strong oxidizers and any incompatibles. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous.
- **7.3 Specific end use(s):** These precautions are for room temperature handling. Other uses including elevated temperatures or aerosol/spray applications may require added precautions.

Section 8 - Exposure Controls / Personal Protection

- **8.1 Control parameters:** none defined
- 8.2 Exposure controls:

Respiratory Protection: Respiratory protection is not normally required when using this product with adequate ventilation. Should a respirator be needed, follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators equipped with organic vapor cartridges.

Hand Protection: Wear any liquid-tight gloves such as butyl rubber, neoprene or PVC. **Eye Protection:** Safety glasses with side shields per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Other Protective Clothing/Equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Wash thoroughly after handling.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance : amber liquid

Odor/Threshold: Mild ammonia odor

pH: NA (non-aqueous)

Melting Point/Freezing Point: N.A. Low/High Boiling Point: Not available

Flash Point: 347 °F

Evaporation Rate: Not available **Flammability:** f.p. at or above 200 °F

UEL/LEL: Not available

Vapor Pressure: < 1.0 mmHg @ 70 °F

Vapor Density (Air=1): >1

Specific Gravity (H2O=1, at 4 °C): 1.01

Water Solubility: Not available Partition coefficient: Not available

Auto-ignition temperature: Not available **Decomposition temperature:** Not available

Viscosity: Not available % Volatile: Not available

Section 10 - Stability and Reactivity

10.1 Reactivity: No hazardous reactions if stored and handled as prescribed/indicated., No corrosive effect on metal. Not fire propagating.

- **10.2 Chemical stability:** These products are stable at room temperature in closed containers under normal storage and handling conditions.
- 10.3 Possibility of hazardous reactions: Hazardous polymerization cannot occur.
- 10.4 Conditions to avoid: none known
- **10.5** Incompatible materials: strong bases and acids
- **10.6 Hazardous decomposition products:** Thermal oxidative decomposition can produce carbon oxides, gasses/vapors, and traces of incompletely burned carbon compounds.

Section 11- Toxicological Information

11.1 Information on toxicological effects:

Skin Corrosion/Irritation: no data Serious Eye Damage/Irritation: no data

Respiratory/Skin Sensitization: no data

Carcinogenicity: no data

Germ Cell Mutagenicity: no data

Reproductive Toxicity: no data

Specific Target Organ Toxicity – Single Exposure: no data Specific Target Organ Toxicity – Repeated Exposure: no data

Aspiration Hazard: no data

Acute Toxicity: no data

Chronic Exposure: no data

Potential Health Effects - Miscellaneous: no data

Section 12 - Ecological Information

- **12.1 Toxicity:** no data
- 12.2 Persistence and Degradability: no data
- 12.3 Bioaccumulative Potential: no data
- 12.4 Mobility in Soil: no data
- 12.5 Results of PBT and vPvB assessment: no data
- 12.6 Other Adverse Effects: no data

Section 13 - Disposal Considerations

13.1 Waste treatment methods: Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore to not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Section 14 - Transport Information

Classified as hazardous for shipment by DOT, IATA or IMDG (Limited Quantity is 1.0 L)

- 14.1 UN number: 2079
- 14.2 UN proper shipping name: Diethylenetriamine
- 14.3 Transport hazard class(es): 8
- 14.4 Packing group: II
- 14.5 Environmental hazards: none known
- 14.6 Special precautions for user: none known
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not

applicable (product not offered in bulk)

Section 15 - Regulatory Information

15.1 Safety health and environmental regulations/legislation specific for the substance or mixture:

In the United States (EPA Regulations):

TSCA Inventory Status (40 CFR710): All components of this formulation are listed in the TSCA Inventory.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards: none

<u>California Proposition 65</u>: This product does not intentionally contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

15.2 Chemical safety assessment: No chemical safety assessment has been carried out for this substance/mixture by the supplier.

16 - Other Information

HMIS			
Н	1		
F	0		
R	0		



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NFPA

Glossary: ACGIH-American Conference of Governmental Industrial Hygienists; ANSI-American National Standards Institute; Canadian TDG-Canadian Transportation of Dangerous Goods; CAS-Chemical Abstract Service; Chemtrec-Chemical Transportation Emergency Center (US); CHIP-Chemical Hazard Information and Packaging; DSL-Domestic Substances List; EC-Equivalent Concentration; EH40 (UK)-HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; GHS-Globally Harmonized System of Classification and Labelling of Chemicals; HMIS-Hazardous Material Information Service; IATA-International Air Transport Association: IMDG-International Maritime Dangerous Goods Code: LC-Lethal Concentration: LD-Lethal Dose; LEL-Lower Explosion Level; NFPA-National Fire Protection Association; OEL-Occupational Exposure Limit; OSHA-Occupational Safety and Health Administration, US Dept. of Labor; PEL-Permissible Exposure Limit; SARA (Title III)-Superfund Amendments and Reauthorization Act; SARA 313-Superfund Amendments and Reauthorization Act, Section 313; SCBA-Self-Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ-Texas Commission on Environmental Quality; TLV-Threshold Limit Value; TSCA-Toxic Substances Control Act Public Law 94-469; TWA-Time Weighted Value; UEL-Upper Explosion Level; US DOT-US Department of Transportation; WHMIS-Workplace Hazardous Materials Information System.

Disclaimer: The information contained in this Safety Data Sheet (SDS) is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use. This SDS is prepared to comply with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) as prescribed by the United States (US) Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 (REACH).

Classifications of the chemical in accordance with 29 CFR 1910.1200, signal word, hazard and precautionary statement(s), symbol(s) and other information are based on listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), WHMIS and EC No 1907/2006 and are considered trade secrets under US Federal Law (29 CFR and 40 CFR), Canadian Law (Health Canada Legislation), and European Union Directives.