

AV-502-HV Injectable Bonding Epoxy HV Hardener™ (Part B)

SECTION 1. IDENTIFICATION

Product Identifier	AV-502-HV Injectable Bonding Epoxy HV Hardener (Part B)
Other Means of Identification	High viscosity epoxy bonding adhesive, hardener
Recommended Use	Industrial Use Only.
Restrictions on Use	Not applicable.
Manufacturer/Supplier Identifier	Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600, avantigrout.com
Emergency Phone No.	ChemTrec, 800.424.9300
Date of Preparation	June 14, 2019

SECTION 2. HAZARD IDENTIFICATION

Classification

Acute toxicity – Category 4 (Oral); Acute toxicity – Category 4 (Dermal); Skin Corrosion – Category 1B; Serious eye damage – Category 1; Skin sensitization – Category 1; Reproductive toxicity – Category 2; Specific target organ toxicity - Category 3 (single exposure); Aquatic hazard – Category 2 (acute); Aquatic hazard – Category 2 (long-term)



Label Elements

Signal Word:

Danger

Hazard Statement(s):

H302+H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:

P201	Obtain special instructions before use.
P260	Do not breath dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician

Product Identifier:	AV-502-HV Injectable Bonding Epoxy HV Hardener™ (Part B) - Ver. 1
Date of Preparation:	June 25, 2019
Date of Last Revision:	June 14, 2019

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed. Disposal:
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

This product contains a component that is toxic by inhalation when aerosolized or sprayed. Please refer to Sections 11 for toxicity information. If product is not being aerosolized or sprayed, the inhalation toxicity may not be applicable.

HMIS Rating: Health-3 Flammability-1 Physical Hazard-0

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Polyether amine	Trade Secret	60-90		
Diethylenetriamine	111-40-0	10-25		
Phenol, 4,4'-(1-methylethylidene)bis-	80-05-7	5-15		

SECTION 4. FIRST-AID MEASURES

First-aid Measures

General information

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately

Inhalation

Supply fresh air; consult doctor in case of complaints.

Skin Contact

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

Eye Contact

Rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, consult a doctor.

Ingestion

Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side. Do not induce vomiting; call for medical help immediately.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

Contains Phenol, 4,4'-(1-methylethylidene) bis-. May cause an allergic reaction.

Immediate Medical Attention and Special Treatment

Target Organs

Special Instructions

Medical Conditions Aggravated by Exposure

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry powder, carbon dioxide, foam.

Unsuitable Extinguishing Media

Specific Hazards Arising from the Product

May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special Protective Equipment and Precautions for Fire-fighters

Wear self-contained respiratory protective device. Wear fully protective suit.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary. Keep endangered receptacles cool with water fog or haze. Eliminate all ignition sources if safe to do so.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected person away. Ensure adequate ventilation. Keep away from ignition sources.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Absorb liquid components with liquid-binding material. Send for recovery or disposal in suitable receptacles. Dispose contaminate material as waste according to item 13. Ensure adequate ventilation.

Other Information

Contact supplier, local fire and emergency services for help. Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Handle and open container with care. Use only in area provided with appropriate exhaust ventilation. Avoid inhalation, ingestion and contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection. Wash thoroughly after handling. Use only in well-ventilated areas.

Conditions for Safe Storage

Store in an area that is: cool, dry, and ventilated, in tightly closed receptacles (60-80°F recommended). Keep away from heat and flame. Use only receptacles specifically permitted for this substance/product.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH THV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Diethylenetriamine	1 ppm	N/A	1 ppm	N/A	N/A	N/A

Appropriate Engineering Controls

Ensure that eyewash stations and safety showers are close to the workstation location. Provide ventilation adequate to ensure concentrations are minimized.

Individual Protection Measures

Product Identifier: AV-502-HV Injectable Bonding Epoxy HV Hardener™ (Part B) - Ver. 1
Date of Preparation: June 25, 2019
Date of Last Revision: June 14, 2019

General Protection

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/aerosols. Avoid contact with the eyes and skin.

Eye/Face Protection

Wear chemical safety goggles or safety glasses with side shields. Wear chemical safety goggles or safety glasses with side shields.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Suitable materials are: Chemical Resistant Gloves: butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride, Viton®/butyl rubber. Protective work clothing. Where potential exposure warrants, rubber or plastic boots and Chemical Resistant Suit: Tychem, Saranex®.

Respiratory Protection

Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. For spills, respiratory protection may be advisable. Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s). And wear a NIOSH approved air-purifying respirator with an organic vapor cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Amber liquid.
Odour	Amine-like
Odour Threshold	Not available
pH	>7 (Alkaline)
Melting Point/Freezing Point	Not available
Initial Boiling Point/Range	≥350°F/ ≥176.67°C
Flash Point	≥212°F/ ≥100°C
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1 g/cm ³)	0.99 @ 20°C
Solubility	Slightly soluble.
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	100 – 300 centipoises

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Reacts with strong alkali. Exothermic polymerization. Reacts with strong acids and oxidizing agents. Reacts with catalysts.

Conditions to Avoid

Avoid contact with strong oxidizing agents, excessive heats or flames.

Incompatible Materials

Strong acids, bases and oxidizing agents.

Hazardous Decomposition Products

Nitric acid, ammonia nitrogen oxides (NOx), nitrogen oxide can react with water vapors to form corrosive nitric acid, carbon monoxide, carbon dioxide, aldehydes, flammable hydrocarbon fragments.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure Inhalation; ingestion; skin contact; eye contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Polyether amine	No data available	550 mg/kg (rat)	>1000 mg/kg (rat)
Diethylenetriamine	No data available	1080 mg/kg (rat)	1090 mg/kg (rabbit)
Phenol, 4,4'-(1-methylethylidene)bis-	No data available	3250 mg/kg (rat)	3000 mg/kg (rabbit)

Skin Corrosion/Irritation

Harmful in contact with skin. Causes skin burns.

Serious Eye Damage/Irritation

Causes eye burns.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

This product contains a component that is toxic by inhalation when aerosolized or sprayed. If product is not being aerosolized or sprayed, the inhalation toxicity may not be applicable. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns.

Skin Absorption

No information was located.

Ingestion

Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Repeated and/or prolonged exposures to low concentrations of vapors or aerosols may cause: sore throat, asthma, eye disease, kidney disorders, liver disorders, skin disorders and allergies.

Respiratory and/or Skin Sensitization

May cause allergic skin reaction. This product may cause adverse reproductive effects. Asthma, Eye disease, Kidney disorders, Liver disorders, Skin disorders and Allergies.

Carcinogenicity

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Date of Last Revision: June 14, 2019

Chemical Name	IARC	ACGIH®	NTP	OSHA
Aliphatic polyamide amine	Not listed	Not listed	Not listed	Not listed
Triethylenetetraamine	Not listed	Not listed	Not listed	Not listed

No information was located.

Reproductive Toxicity Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available on the product itself.

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Polyetheramine	>100 mg/L (Fathead minnow) 96 hr	13 mg/L (Daphnia) 48 hr	No data available	4.4 mg/L (Algae) 72 hr

Persistence and Degradability

No information available.

Bioaccumulative Potential

No information available.

Mobility in Soil

No information available.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. This product should not be allowed to enter drains, water courses or the soil.

SECTION 14. TRANSPORT INFORMATION

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Date of Preparation: June 25, 2019
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Hazard**DOT**

UN number: UN2735
Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: Yes, Only in Bulk (Polyetheramine)

IATA

UN number: UN2735
Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: Yes (Polyetheramine)

IMDG

UN number: UN2735
Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: Yes (Polyetheramine)

TDG

UN number: UN2735
Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine)
Hazard Class: 8
Packing Group: II
Labels(s): 8
Marine Pollutant: Yes, Only in Bulk (Polyetheramine)

Special Precautions**SECTION 15. REGULATORY INFORMATION****Safety, Health and Environmental Regulations****USA****Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are listed on the TSCA Inventory.

EPCRA 311/312 (Hazard categories):

EPCRA 313: CAS Number	Chemical name
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CERCLA RQ	CAS Number	Chemical name
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SARA**Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

Component(s) above 'de minimus' level: Phenol, 4,4'-(1-methylethylidene)bis-

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SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 2** **Flammability - 1** **Instability - 0**
SDS Prepared By Avanti International
Date of Preparation June 14, 2019
Date of Last Revision June 25, 2019
Revision Indicators Not applicable.
Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists
IARC = International Agency for Research on Cancer
NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health
NTP = National Toxicology Program
OSHA = US Occupational Safety and Health Administration
RTECS® = Registry of Toxic Effects of Chemical Substances

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