

AV-502-HV Injectable Bonding Epoxy HV Resin™ (Part A)

SECTION 1. IDENTIFICATION

Product Identifier	AV-502-HV Injectable Bonding Epoxy HV Resin (Part A)
Other Means of Identification	High viscosity epoxy bonding adhesive
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

Skin irritation - Category 2; Eye irritation - Category 2; Skin sensitization - Category 1

Label Elements



Signal Word:

Warning

Hazard Statement(s):

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

Precautionary Statement(s):

Prevention:

- P210 Keep away from heat/sparks/open flames/hot surfaces.
- P264 Wash hands and skin thoroughly after handling.
- P261 Avoid breathing mist/vapours/spray.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/eye protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

Other Hazards

Not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight <700)	25068-38-6	20 – 30		
Epoxy resin	Trade Secret	15 – 30		
Diglycidyl ether	Trade Secret	<5		

In conformity with 29CFT 1910.1200 (i) the specific chemical identity may be withheld as Trade Secret, while all health/safety properties and effects are included in the SDS

SECTION 4. FIRST-AID MEASURES

First-aid Measures

General Information: Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours: therefore medical observation for at least 48 hours after the accident.

Inhalation

Move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. Get medical advice or attention if you feel unwell.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation or a rash occurs, get medical advice or attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

Eye Contact

Avoid direct contact. Wear chemical protective glasses if necessary. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water and then drink plenty of water. 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

Allergic reactions, nausea, coughing, gastric or intestinal disorders, irritant to skin and mucous membranes, irritant to eyes.

Immediate Medical Attention and Special Treatment

Target Organs

Skin, lungs, respiratory system.

Special Instructions

Monitor cardiovascular function. Monitor lung function.

Medical Conditions Aggravated by Exposure

Asthma, dermatitis, respiratory conditions, skin allergies.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water haze or fog, foam, fire-extinguishing powder, carbon dioxide.

Unsuitable Extinguishing Media

Water with full jet, water spray.

Specific Hazards Arising from the Product

Formation of toxic gases is possible during heating or in case of fire.

Special Protective Equipment and Precautions for Fire-fighters

Approach fire from upwind to avoid hazardous vapors or gases. Cool endangered receptacles and knock down vapors or gases with water fog or haze. Eliminate all ignition sources if safe to do so.

Fully chemical protective suit (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway. Inform respective authorities in case of seepage into water course or sewage system. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas (e.g. by damming-in or oil barriers).

Methods and Materials for Containment and Cleaning Up

Absorb liquid components with liquid-binding material. Send for recovery or disposal in suitable receptacles. Dispose contaminated 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

Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles (60-80°F recommended).

Conditions for Safe Storage

Use only receptacles specifically permitted for this substance/product. Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly sealed. Store in an area with adequate ventilation.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Date of Last Revision: June 25, 2019

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight <700)	n/a	n/a	n/a	n/a	n/a	n/a

Ingredients with limit values that require monitoring at the workplace

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures Hygienic measures

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 when contact is possible.

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. Chemical Resistant Suit: Tychem®.

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. Use respiratory protection when grinding or cutting material. Wear a NIOSH approved air-purifying respirator with P100 filter(s) and an organic vapor cartridge. Either full-face piece or half-face piece with splash goggles or safety glasses with side shields.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Blue viscous liquid.
Odour	Sweet
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available
Initial Boiling Point/Range	>392°F/>200°C
Flash Point	≥302°F / ≥150°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)	1.60 @ 20°C
Solubility in water	Not miscible or difficult to mix.
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available

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Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); 25,000 – 45,000 centipoises (dynamic)

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 heat or flames.

Incompatible Materials

Polymerizes on contact with: amines (e.g. triethylamine). Strong Acids, bases and oxidizing agents. Not corrosive to metals.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Bisphenol – A – (epichlorohydrin) epoxy resin	No data	> 2000 mg/kg (rat)	> 2000 mg/kg (rat)

Skin Corrosion/Irritation

Test material was slightly irritating to skin in key studies. For the skin, mean erythema and edema scores were 0.8 and 0.5 respectively.

Serious Eye Damage/Irritation

Test material was slightly irritating to the eye in key studies. The mean eye score was 0.4

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Based on calculations, inhalation of concentrated vapors will lead to anesthesia-like condition and headache, dizziness, etc.

Skin Absorption

May cause skin irritation.

Ingestion

Based on calculations, oral intake will lead to anesthesia-like conditions and headache, dizziness, etc.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No data available.

Respiratory Sensitization

No data available

Skin Sensitization

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In a local lymph node assay, the concentration that would cause a 3-fold increase in proliferation (EC-3) was calculated to be 5.7% which is consistent with moderate dermal sensitization potential.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Bisphenol – A – (epichlorohydrin) epoxy resin	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

(Bisphenol – A – (epichlorohydrin) epoxy resin)

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Bisphenol – A – (epichlorohydrin) epoxy resin	3.6 mg/L (Oncorhynchus mykiss) 96hr direct application, nominal (OECD Guideline 203) 1.41 mg/L (oryzias latipes) 96hr	2.8 mg/L (Daphnia magna (water flea)) 48hr direct application, nominal, based on: mobility (OECD Guideline 202)	>11 mg/L (Scenedsmus capricornutum) 72hr water soluble fraction (measured arithm. Mean) based on: growth rate (EPA-660/3-75-009)	No data available

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

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

SECTION 14. TRANSPORT INFORMATION

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Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	Not regulated			
Canadian TDG	Not regulated			
IATA	Not regulated			
IMDG	Not regulated			

Environmental Hazards

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All the ingredients are listed.

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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