

MATERIAL SAFETY DATA SHEET

Section 1: Identification

Product Name: Hunt Process HP-(Binder) Epoxy

Product Trade Names: HP-(Binder), HP-(Binder) Modified, HP-(Binder) GPA

Company: Hunt Process Corp.-Southern
Post Office Box 688
138 North Wheatley Street
Ridgeland, MS 39158
PHONE: (601) 856-8811 FAX: (601) 856-0723

Emergency Number: CHEMTREC
(800) 424-9300

Section 2: Hazard Identification

Health Hazards PEL/TVL: See Section 3 for Components.

Route(s) of Entry: Eyes, Skin, Inhalation, Ingestion

Health Hazards (acute and chronic):

EYES: Severely irritating to eyes, causing pain, redness, swelling and blurred vision. Vapors may be irritating. Contact with hot material can cause thermal burns which may result in permanent damage or blindness.

SKIN: Absorption may be toxic. Contact may cause skin irritation or sensitization. Contact with hot material can cause thermal burns which may result in permanent damage.

INHALATION: Under conditions when exposure to vapors or mists is possible, respiratory tract irritation can occur.

INGESTION: Not likely to be a relevant route of exposure. May be toxic if swallowed.

Flammability Hazard: See Section 5 for Flammability data.

Section 3: Composition/Information on Ingredients

Components	CAS Number	Weight %
Bisphenol-A-(epichlorhydrin)	25068-38-6	100%
Modified Polyethylenepolyamine Adducts	same as component	<81%
Diethylenetriamine	111-40-0	
4,4'-Isopropylidenebisphenol	80-05-7	<10%
Tetraethylenepentamine	112-57-2	<10%

There are no additional ingredients, within the current knowledge of the supplier and in the concentrations applicable, which are classified as hazardous to health or the environment and hence require reporting in this section. Although the precise composition of this product is proprietary information, a complete disclosure will be provided to medical personnel in the event of a medical emergency.

Section 4: First-Aid Measures

General Advice: Get medical attention immediately if symptoms occur.

Eye Contact: DO NOT DELAY. Flush eyes immediately with large amounts of water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION.

Skin Contact: DO NOT DELAY. Remove contaminated clothing. Wash skin with soap and water. Consult physician if irritation persists. In case of contact with hot product, immediately flood the affected area with cold water.

Inhalation: Remove victim from exposure source into fresh air. If rapid recovery does not occur, seek immediate medical attention.

Ingestion: DO NOT DELAY. DO NOT induce vomiting. Give nothing by mouth. Consult poison control center immediately. Seek IMMEDIATE MEDICAL ATTENTION.

If any adverse conditions persist: Consult physician.

Section 5: Fire Fighting Measures

Flash Point: >93 degrees C. (> 199 degrees F.)

Extinguishing Media: Foam, CO₂, dry chemical, water fog

Special Fire Fighting Procedures: Clear fire area of all non-emergency personnel. DO NOT use water in a jet. Product will float. Water or fog may cause frothing which can be violent, especially if sprayed into containers of hot or burning liquid. Cool fire exposed containers with water. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots). Should have a positive pressure NIOSH approved self-contained breathing apparatus.

Specific Hazards during Fire Fighting: Material will not burn unless preheated. Delayed lung damage (pulmonary edema) can be experienced after exposure to combustion products, sometimes hours after the exposure. Nitrogen oxides and other potentially hazardous nitrogen-containing compounds may be released upon combustion.

Section 6: Accidental Release Measures

If material is released or spilled, shut off and eliminate all ignition sources. Keep people away. Use foam on spills to minimize vapors. Using only non-sparking tools and explosion proof equipment, collect spill on absorbent material and place in approved container. Add sand, earth or other suitable absorbent to spill area. Minimize breathing vapors, skin contact and ventilate confined spaces. Open all windows and doors. Contain spill if it can be done with minimal risk. Keep product out of sewers and water courses by diking or impounding. Notify proper authorities. Advise authorities if product has entered or may enter sewers, water courses or extensive land areas. Assure conformity with applicable government regulations.

Section 7: Handling and Storage

General Handling: Avoid breathing vapor. Do not get in eyes, on skin, or on clothing. Do not swallow. Use with adequate ventilation. Wash thoroughly after handling. Vent container carefully before opening.

Work Practices/Engineering Controls: Keep containers closed when not in use and store in a cool, well-ventilated place. Keep container dry.

Section 8: Exposure Controls/Personal Protection

Respiratory Protection: Use the approved respirator (e.g. CEN, NIOSH/OSHA, AS) as required to prevent over-exposure. Use an air-supplied respirator where high concentrations are expected, or an air-purifying respirator for organic vapors (with combined particulate filter if mist is present). Note: an air-supplied respirator should always be used in confined spaces.

Ventilation: Adequate local or mechanical to reduce mist/vapor to <TLV.

Protective Gloves: Impervious, solvent resistant such as Butyl rubber gauntlet type for long term application (BBT>480 min) or nitrile gauntlet type for short term/splash application (10 min<BTT<480 min).

Eye Protection: Goggles or approved OSHA device; do not wear contact lens.

Clothing: Impervious apron and work safety boots (chemical resistant without lace holes) recommended where splashing may occur.

Section 9: Physical and Chemical Properties

Boiling Point:	>207 degrees C. (>405 degrees F.)
Vapor Pressure:	13.3 Pa at 20 degrees C. (68 degrees F.)
Density:	976 kg/m ³ at 25 degrees C. (77 degrees F.)
Specific Gravity:	0.8020
Melting Point:	Not applicable
Evaporation Rate:	<1(Butyl Acetate=1) :
Solubility in Water:	Partially soluble.
Physical State:	Liquid
Color:	Light Amber
Odor:	Aminic
Lower Explosion Limit:	1.4% (V)
Viscosity, dynamic	700 mPas at 25 degrees C (77 degrees F.) Brookfield

Section 10: Stability and Reactivity

Stability: Material is stable. Avoid heat, flames, sparks.

Incompatibility: Can react vigorously with strong oxidizing agents, strong mineral acid and strong mineral and organic bases, especially primary and secondary aliphatic amines. Reacts with considerable heat release with some curing agents.

Hazardous Decomposition or Byproducts: Nitrogen oxides, carbon monoxide and unidentified organic compounds may be formed during combustion.

Hazardous Polymerization: Hazardous polymerization will not occur.

Section 11: Toxicological Information

Acute Oral toxicity: LD50 – (Rat)
Expected to be of low toxicity, LD50.2000 mg/kg.

Acute dermal toxicity: LD50 – (Rabbit)
Expected to be of low toxicity, LS50>2000 mg/kg.

Chronic Health Hazard:

COMPONENT	CONCENTRATION
Modified Polyethylenepolyamine Adducts	<82%
Diethylenetriamine	Unavailable
4.4'-Isopropylidenebisphenol	>10%
Tetraethlenepentamine	Unavailable

None of the components in this product have not been classified by the International Agency for Research on Cancer (IARC).

Section 12: Ecological Information
Basis for Assessment:

Ecotoxicological data has not been determined specifically for this product. The following information is based on a knowledge of the components and the ecotoxicology of similar products.

Elimination Information (persistence and degradability):

Biodegradability: Expected to be not readily biodegradable

Bioaccumulation: Contains components with the potential to bioaccumulate

Ecotoxicity Effects:

Toxicity to fish or algae: Expected to be slightly toxic, 10,LC/EC/IC 50,=100 MG/L.

Acute toxicity-invertebrates: Expected to be slightly toxic, 10,LC/EC/IC 50,=100 MG/L.

Sewage treatment: Expected to be slightly toxic, 10,LC/EC/IC 50,=100 MG/L.

Section 13: Disposal Consideration

If this material becomes a waste, it would not be a hazardous waste by RCRA criteria (40 CFR 261). Dispose of in accordance with all applicable local, state and federal regulations. Dispose at permitted RCRA waste disposal facility as RCRA hazardous waste #D001.

Section 14: Transport Information

Product testing has determined that this product is not regulated for transport.

Section 15: Regulatory Information

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EINECS / TSCA / DSL: All Components listed or polymer exempt.

AICS / PICCS (PH) / ENCS (JP) / INV (CN) / KECI (KR) : Not all components listed.

US.EPA CERCLA Hazardous Substances (40 CR 302)

Modified Polyethylenepolyamine No RQ

Diethylenetriamine No RQ

4,4'-Isopropylidenebisphenol No RQ

Tetraethylenepentamine No RQ

SARA 311/312 Hazards

Acute Health Hazard

Chronic Health Hazard

US.EPA Emergency Planning and Community Right-to-Know Act (EPCRA)**SARA Title III Section 313 Toxic Chemicals(40 CFR 372.65)–Supplier Notification Required**

Modified Polyethylenepolyamine No De minimis Concentration

DIETHYLNTRIAMINE No De minimis Concentration

4,4'-Isopropylidenebisphenol De minimis Concentration: 1.0%

The mixture contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372.

Tetraethylenepentamine No De minimis Concentration

New Jersey Right-To-Know Chemical List

4.4 Isopropylidenebisphenol Environmental Hazard

Pennsylvania Right-To-Know Chemical List

4.4 Isopropylidenebisphenol Environmental Hazard

Massachusetts Right-To-Know Chemical List

Tetrethylene pentamine Listed

Section 16: Other Information

The information accumulated is based on data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data may become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. No warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Hunt Process Corp.-Southern assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material. This MSDS has been prepared by Hunt Process Corp.-Southern (601-856-8811). Revision Date: November 5, 2014.

Health – 2

Flammability – 1

Reactivity – 0