Material Safety Data Sheet - Vison Tech Products LLC

Product and Company Information:

Product Name: **VISON Epoxy Part A**

Manufacturer: Vison Tech Products LLC
6464 Cunningham
Houston, TX 77041, USA
Phone: 832 850-6085 Fax: 281 258-4114
Contact: www.visontechproducts.com
techsupport@visontechproducts.com

1. Ingredients

	CAS	
Reaction product of Epichlorohydrin and Bisphenol A Epoxy resin Mwt < 700	25068-38-6	70 - 85 %
Aliphatic Glycidyl Ether	120547-52-6	15 -25 %

This document is prepared pursuant to the OSHA Hazard Communication Standard (29CFR 1910.1200). In addition, other substances not Hazardous per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. Physical and Chemical Data:

BOILING POINT:	> 500 °F (260 °C)
VAP PRESSURE:	0.03 mbar at 170°F (77 °C)
VAP DENSITY (Air=1) :	Not applicable
SOL. IN WATER:	extremely low
SP. GRAVITY (H_20 = 1):	1.1 5
APPEARANCE:	Water white to straw colored resinous liquid
ODOR:	Faint epoxy odor

3. Fire and Explosion Hazard Data:

FLASH POINT:	485 °F, 252 °C
METHOD USED:	PMCC
FLAMMABLE LIMITS	
LFL:	Not applicable
UFL:	Not applicable
EXTINGUISHING MEDIA:	foam, CO_2, dry chemical.
FIRE & EXPLOSION HAZARDS:	None
FIRE-FIGHTING EQUIPMENT:	Wear positive pressure SCBA

4. Reactivity Data:

STABILITY: (CONDITIONS TO AVOID) Excess heating over long periods of time degrades the resin.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Base

HAZARDOUS POLYMERIZATION: Will not occur by itself but masses more than **1** pound of product plus aliphatic amine will cause irreversible polymerization with considerable heat buildup.

HAZARDOUS DECOMPOSITION PRODUCTS: The by-products expected . . in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriated precautions should be taken.

5. Environmental and Disposal Information:

ACTION TO TAKE FOR SPILLS/LEAKS: Soak up in absorbent material and collect in suitable containers. Residual may be removed using steam or hot soapy water.

DISPOSAL METHOD: Bum in adequate incinerator or bury in an approved landfill: in accordance with local, state, and federal regulations.

6. Health Hazard Data:

EYE: Minor transient irritation. No corneal injury likely.

SKIN CONTACT: May cause allergic reaction in susceptible individuals. Prolonged exposure not likely to cause significant skin irritation. Repeated exposure may cause skin irritation.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts. The LD50 for skin absorption in rabbits is >4,000 mg/kg.

INGESTION: Low acute oral toxicity; LD50 (rat) greater than 4000 mg/kg. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Vapors are unlikely due to physical properties. Not a problem unless heated to high temperature.

SYSTEMIC AND OTHER EFFECTS: Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects. A poorly characterized sample of low molecular weight epoxy resin of this type has been reported to produce skin cancer in a highly sensitive strain of mice. However, high levels of impurities compromise the validity of the findings. Epoxy resin that is representative of current manufacturing processes is not believed to be a cancer hazard to humans. Results of mutagenicity tests in animals have been negative. Has been shown to be negative in some in vitro mutagenicity tests and positive in others.

7. First Aid:

EYES: Irrigation of the eye immediately with water for at least 15 minutes is a good safety practice.

SKIN: Contact will probably cause no more than irritation. Wash off in flowing water or shower. Wash clothing before reuse.

INGESTION: Low in toxicity. No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effects occur. Consult medical personnel.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

9. Handling Precautions:

VENTILATION: Good room ventilation usually adequate for most operations.

RESPIRATORY PROTECTION: None normally needed.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. Use impervious gloves when prolonged or frequently repeated contact could occur.
EYE PROTECTION: Use chemical goggles.

9. Additional Information:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Practice good caution and personnel cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

10. Hazard Rating:

		NFPA	HMIS
4 = EXTREME	HEALTH	1	
3 = HIGH	FIRE	1	1
2 = MODERATE	REACTIVITY	0	1
I =SLIGHT	SPECIFIC	-	
0 = INSIGNIFICANT	PROTECTIVE EQUIPMENT	X	

11. Toxicology (please also see section 6)

25068-38-6	70 - 85 %	Epoxy resin Mwt < 700
Oral	LD50 rats	> 4000 mg/kg low toxicity
Inhalation entering	not determined - properties are such that inhalation unlikely to be a route for the body	
Dermal	LD50 rabbit	>4000 mg/kg low toxicity
IARC	not classified as a carcinogen by IARC	
Sensitization	May cause skin sensitization	

Alkyl Glycidyl Ether	120547-52-6	15 -25 %
Oral	LD50 rats	19200 mg/kg very low toxicity
Inhalation	no data available at this time	
Dermal	LD50 rabbit	>4500 mg/kg very low toxicity
IARC	not classified as a carcinogen	
EYE	mild Irritant.	
SKIN	moderate Irritant.	
SENSITIZATION	may cause sensitization	

Chronic Toxicity rabbits Skin 20 days No evidence of toxicity
Carcinogenicity : A recent 2 year study in both rats and mice showed no evidence of carcinogenic activity in the skin or other organs
Mutagenicity : Inactive by in vivo mutagenic assays. In vitro microbial screening have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to humans remains unknown.

12. Ecology

EC 50 1Omg/l daphnia magna
Not readily biodegradable. No data for bioaccumulation.

13. Disposal Information (please also refer to section 5)

This is not a RCRA hazardous waste under 40 CFR 261

14. Regulatory Information

STATUS ON SUBSTANCE LISTS:
The concentrations shown in this document are maximum or ceiling levels (weight %) to be used for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA:
COMPREHENSIVE ENVIROYMENTAL RESPONSE. COMPENSATION, and LIABILITY ACT of 1980 **(CERC1.A):** Requires notification of the National Response Center of release of quantities of Hazardous
Substances equal to or greater than the reportable quantities (RQzs) in **40 CFR 302.4.**
Components present in this product at level that could require reporting under the statute are:

Chemical Name	CAS Number	RQ
NONE		

SUPERFUND AMENDMENTS and REAUTHORIZATION ACT of 1986 (SARA) TITLE III:
Section 301-304 require emergency planning based on **Threshold Planning Quantities (TPQs)** and release reporting based on **Reportable Quantities (RQs) in 40 CFR 355.** Components present in this product at a level that could require reporting under this statute are:

Chemical Name	CAS Number	%By Weight
NONE		

Sections 311-312 require products be reviewed and applicable EPA Hazard Definitions be identified and made known.

EPA HAZARD CLASSIFICATIONS:

Acute Hazard	Chronic Hazard	Fire Hazard	Pressure Hazard	Reactive Hazard
No	*Yes*	*No*	*No*	*No*

Section 313 requires submission of annual reports of release of toxic chemicals that appear in **40 CFR 372 (for SARA 313).** This information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at the level that could require reporting under the statute are:

Chemical Name	CAS Number	%By Weight
NONE		

15. Other Regulatory Information:

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The components of this product are contained on the chemical substance inventory list

Canadian DSL	listed
EINECS	listed
JAPAN	listed
Australia	listed
South Korea	listed
China	listed

States CA Proposition 65 May contain, <3 ppm Phenyl Glycidyl ether
CAS 122-60-1 Carcinogenic

NJ RTK	25068-38-6	not listed	122-60-1	<3 ppm not listed
PA RTK	25068-38-6	not listed	122-60-1	<3 ppm not listed
MA RTK	25068-38-6	not listed	122-60-1	<3 ppm not listed

16. TRANSPORT INFORMATION:

D.O.T. Shipping Name:	Not Regulated by DOT	
IATA -C	Not regulated	Not Dangerous Goods
CFR Rail and Road	Not regulated	
IMDG	Not regulated	Not Dangerous Goods

Harmonized Tariff Number 3907.30.0000

The information herein is given in good faith, but no warranty expressed or implied is made.
The company urges suppliers and users of this product to evaluate its suitability and compliance with local regulations as the company cannot foresee the nature of the final application or the location of usage.

Material Safety Data Sheet - Vison Tech Products LLC

Product and Company Information:

Product Name: **VISON Epoxy Part B**
Manufacturer: Vison Tech Products LLC
6464 Cunningham
Houston, TX 77041, USA
Phone: 832 850-6085 Fax: 281 258-4114
Contact: www.visontechproducts.com
techsupport@visontechproducts.com

1. Ingredients

	CAS #	
Polyamido Amine	68605-86-7	100%
Alternative CAS number	68953-36-6	

Substances listed in the Ingredients Section are those identified as being present at a concentration of 1% or greater or 0.1% if the substance is on the list of potential carcinogens cited in OSHA Hazard Communication Standard. Where proprietary ingredient shows, the identity of this substance may be made available as provided in 29 CFR 1910.1200(1).

2. Physical and Chemical Data:

BOILING POINT: > 400 °F – 205 °C Decomposes
VAP PRESSURE: < 1 mm Hg @ 20 °C, 68 °F
VAP DENSITY (Air=1) : 6.53
SOL. IN WATER: Negligible to slightly soluble
SP. GRAVITY(H_20 = 1) 0.95
APPEARANCE: Amber colored liquid
ODOR: Amine odor

3. Fire and Explosion Hazard Data:

FLASH POINT: 220 °F, 93 °C
AUTO-IGNITION 572 °F, 300 °C.
METHOD USED: PMCC
FLAMMABLE LIMITS
LFL: Not Determined
UFL: Not Determined
EXTINGUISHING MEDIA: Water fog, alcohol foam, CO_2, dry chemical.
FIRE & EXPLOSION HAZARDS: None known. Treat as combustible.
FIRE-FIGHTING EQUIPMENT: Use a positive pressure, self-contained breathing apparatus and protective clothing.

4. Reactivity Data:

STABILITY: (CONDITIONS TO AVOID) Can auto ignite in air at approximately 572°F OF, 300 °C.
INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Epoxy resins under uncontrolled conditions
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen oxides when burned.

5. Environmental and Disposal Information: see also section 13

ACTION TO TAKE FOR SPILLSILEAKS: Large spill - dike up and pump into appropriate containers. Small spill - use non-combustible absorbent materials/sand and shovel into suitable containers.

DISPOSAL METHOD: Large quantities should be recovered. Collect small quantities in small metal drum and seal for removal to an approved landfill, or incinerate in accordance with local, state, and federal regulations.

6. Health Hazard Data: see also toxicology section 11

EYE: May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness. Vapors may irritate eyes.
SKIN CONTACT: May cause severe injury to skin following prolonged or repeated contact, and may cause skin sensitization or other allergic responses.
SKIN ABSORPTION: A single prolonged exposure may result in the material being absorbed in harmful amounts. The LD50 for skin absorption in rabbits is about 8000 mg/Kg.
INGESTION: Single dose oral toxicity is low. The oral LD50 for rats is 2140-3990 mg/Kg. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause bums of the mouth and throat.
INHALATION: May cause respiratory sensitization or asthma in susceptible individuals. Excessive exposure may cause irritation to upper respiratory tract.
1ARC: ACGIH: NTP No listed carcinogens

7. First Aid:

EYES: Immediate and continuous irrigation with flowing water for at least 30 minutes is required. Promptly seek medical attention.
SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing, preferably under a safety shower. Seek medical attention immediately. Avoid prolonged or repeated contact to skin. Wash thoroughly after handling.
INGESTION: Do not induce vomiting. Give large amounts of water or milk if available and transport to medical facility.
INHALATION: Remove to fresh air if effect occurs. Consult a physician.
NOTE TO PHYSICIAN: Corrosive. May cause stricture. If lavage is performed, suggest endotracheal and/or esophagoscopic control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. Handling Precautions:

EXPOSURE GUIDELINE(S): None established.
VENTILATION: Control airborne concentration below the exposure guideline. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.
RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator.
SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Contaminated leather items such as shoes, belts and watch bands, should be removed and destroyed.
EYE PROTECTION: Use chemical goggles. If vapor exposure causes eye irritation, use a full-face respirator. Eye wash fountain should be located in immediate work area.

9. Additional Information:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Good general housekeeping procedure should be followed. This material should not be allowed to come in contact with copper or copper bearing alloys such as brass. It may cause stress corrosion cracking of the alloy.

10. Hazard Rating:

		NFPA	HMIS
4 = EXTREME	HEALTH	2	2
3 = HIGH	FIRE	1	1
2 =MODERATE	REACTIVITY	0	0
I = SLIGHT	SPECIFIC	-	-
0 =INSIGNIFICANT	PROTECTIVE EQUIPMENT	X	

11. Toxicology (SEE ALSO SECTION 6)

Ingestion	LD50	Rat.	> 2,000 mg/lkg
Inhalation	No data		available on the product.
Skin.	LD50	Rabbit.	> 8,000 rnglkg

Eye irritation	irritant
Dermal irritation	Moderate skin irritant.
Sensitization	May cause sensitization by skin contact. Sensitization has occurred in repeated contact tests

12. Ecology

This section will be updated as more data becomes available

Aquatic toxicity	No data available
Toxicity to other organisms	No data available.
Persistence and degradability	No data available.
Bioaccumulation	No data is available

13. Disposal Consideration

This is not a RCRA hazardous waste. Dispose of in accordance with local, state and federal law.

14. Regulatory Information:

STATUS ON SUBSTANCE LISTS:

OSHA overview 29 CFR 1910.1200 Irritant, sensitizer

The concentrations shown in this document are maximum or ceiling levels (expressed in weight %. unless othenvise specified) to be used for regulations. Trade Secrets are indicated by "TS".

FEDERAL EPA:

COMPREHENSIVE ENVIRONMENTAL RESPONSE. COMPENSATION. and LIABILITY ACT of 1980 fCERCLA):

Requires notification of the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable quantities **(RQ's) in 40 CFR 302.4.**

Components present in this product at level that could require reporting under the statute are:

Chemical Name	CAS Number	RQ
NONE		

SUPERFUND AMENDMENTS and REAUTHORIZATION ACT of 1986 (SARA) TITLE III:

Section 301-304 require emergency planning based on **Threshold Planning Quantities (TPQs)** and release reporting based on **Reportable Quantities (RQs) in 40 CFR 355.** Components present in this product at a level that could require reporting under this statute are:

Chemical Name	CAS Number	% by Weight
NONE		

Sections 311-312 require products be reviewed and applicable EPA Hazard Definitions be identified and made known.

EPA HAZARD CLASSIFICATIONS:

Acute Hazard	Chronic Hazard	Fire Hazard	Pressure Hazard	Reactive Hazard
No	*Yes*	*No*	*No*	*No*

Section 313 requires submission of annual reports of release of toxic chemicals that appear in **40 CFR 372 (for SARA 313).** This information must be included in all MSDS's that are copied and distributed for this material. Components present in this product at the level that could require reporting under the statute are:

Chemical Name	CAS Number	% by Weight
NONE		

15. Other Regulatory Information

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The components of this product are contained on the chemical substance inventory list

NJ, PA, MA RTK	not listed
California 65	Does not contain any chemicals known to cause cancer, birth defects and is thus safe &o drinking water

Europe	EINECS LISTED	
Canada	DSL	LISTED
AUSTRALIA	AICS	LISTED
JAPAN	ENCSMITI	LISTED
CHINA	SEPA	LISTED
SOUTH KOREA	ECL	LISTED

HARMONIZED TARRIFF NUMBER 292 1.29.0010

16. Transport Information:

Not hazardous goods

D.O.T. Shipping Name:	Not Regulated by DOT	
IATA	Not regulated	Not Dangerous Goods
IMDG	Not regulated	Not Dangerous Goods
CFR Rail and Road	Not regulated	
TDG (Canada)	Not Dangerous Goods	

The information herein is given in good faith, but no warranty expressed or implied is made.
The company urges suppliers and users of this product to evaluate its suitability and compliance with local regulations as the company cannot foresee the nature of the final application or the location of usage.

Material Safety Data Sheet - Vison Tech Products LLC

1. Product and Company Information:

Product Name: **VISON Epoxy, Part C – Quartz/Silica Sand Filler**

Manufacturer: Vison Tech Products LLC
6464 Cunningham
Houston, TX 77041, USA
Phone: 832 850-6085 Fax: 281 258-4114
Contact: www.visontechproducts.com
techsupport@visontechproducts.com

2. Hazards Identification

Emergency Overview

Color: uniform color, (various color product)
Physical State: Fine Ganular, Powder
Odor: No Odor

Primary Routes of Entry: Inhalation, Skin Contact, Eye Contact, Ingestion

Eye Contact: Irritant, severe eye irritation. May cause eye injury. Effect may be delayed

Skin Contact: Contains Portland cement and exposure to dry Portland cement may cause drying of skin with consequent irritation. Prolonged contact with wet Portland cement may cause severe, potentially irreversible damage to the skin in the form of chemical (caustic) burns.

Skin Absorption: NA

Inhalation: Dust can cause inflammation of interior of nose and eyes. Prolonged exposure to dust over the TLV may cause scarring of the lungs and delayed lung injury (silicosis).

Ingestion: If accidentally ingested, mortar may set and cause bowel obstruction – consult physician.

Chronic/Carcinogenicity Effect: Contains silica sand, known Human Carcinogen (category 1). May contain traces of chemicals on California Proposition 65 list.

3. Composition Information

Component	CAS No.	Percent	ACGIH TLV	OSHA PEL	OTHER
Quartz/Silica Sand	14808-60-7	100-99%	0.1mg/m^3	0.1mg/m^3	NA

4. First-aid Measures

Eye Contact: Flush eyes with plenty of water; remove contact lenses after 1-2 minutes then continue flushing for several minutes. Irritant, severe eye irritation. May cause eye injury. Effect may be delayed. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: Wash exposed skin areas with soap and water

Inhalation: move person to fresh air, if effects occur, consult physician

Ingestion: If accidentally ingested, mortar may set and cause bowel obstruction – consult physician.

Notes to Physician: Signs and symptoms of exposure are shortness of breath, coughing, reddening of eyes

5. Fire Fighting Measures

Extinguishing Media: Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguisher.

Special Protective Equipment for Firefighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective clothing (includes fire fighting helmet, coat, trousers, boots and gloves) If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Special Fire Fighting Procedures: NA
Unusual Fire and Explosion Hazards: NA
Hazardous Combustion Products: NA

6. Accidental Release Measures

Released or Spilled: Collect spills using dustless method, material can be returned to container for later use, wear NIOSH/OSHA approved respirator for silica dust when cleaning area. Wear appropriate equipment to prevent skin and eye contact.

7. Handling and Storage

Store in covered, dry area.
Avoid creating dust. Avoid breathing dust.
Use only with adequate ventilation.

8. Exposure Controls / Personal Protection

Component	TYPE	Value
Silica Sand	TWA Total Dust	0.1mg/m^3

Personal Protection

Eye/Face Protection: Use safety glasses. If there is potential for exposure to particles which could cause eye discomfort, wear chemical goggles.
Skin Protection: Barrier cream, boots and clothing should protect skin from dust and wet mortar.
Hand Protection: impervious gloves, vinyl or rubber gloves recommended
Respiratory Protection: NIOSH/OSHA approved respirator for silica dust
Ingestion: Use good personal hygiene. Do not consume or store food in the work areas. Wash hands before smoking or eating.
Work/Hygienic Practices: Workers should shower with soap and water after working with mortar.

Engineering Controls

Ventilation: Use with adequate ventilation

9. Physical and Chemical Properties

Physical State: Powder
Color: various color grades, uniform solid
Odor: No Odor
Flash point: NA
Flammable limits in Air Lower (LEL): NA Upper (UEL): NA
Autoignition Temperature: NA
Vapor Pressure: NA
Boiling Point (760mmHg): NA
Vapor density (air=1): NA
Specific Gravity (H_2O =1): 2.0
Freezing point: NA
Melting point: NA
Solubility in water (by weight): <1%
pH: 7-8 in water
Kinematic Viscosity: NA

10. Stability and Reactivity

Stability/Instability: Stable
Conditions to Avoid: Keep dry until used
Incompatibility Materials: Stable
Hazardous Polymerization: Will not occur
Thermal Decomposition Products: NA

11. Toxicological Information

NA

12. Ecological Information

NA

13. Disposal Considerations

Waste Disposal method: Dispose materials as common waste, unrestricted sanitary landfill.

14. Transport Information

No special transportation or label placarding is required.

15. Regulatory Information

Listed ingredients are on the U.S. EPA TSCA inventory of chemical substances. W.H.M.I.S. Coed D.2
The product contains a chemical(s) known to the State of California to cause cancer or reproductive harm.

16. Other Information

Legend: NA – Not Available or Applicable ND – Not Determined

The information provided is without warranty, representation, inducement or license of any kind; except that it is accurate to the best of company knowledge, or obtained from sources believed by the company to be accurate.