

Date Revised: 02/22/2019

Supersedes: 02/15/2019

#### **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product Name(s): Five Star® HP Epoxy Grout Resin - Nuclear/Component A

Synonyms: Epoxy Resin, Component A

Product Use: For use with Five Star® Epoxy Aggregate and Five Star® HP Epoxy

Hardener in nuclear safety application zones.

To be used with specific Five Star® systems. Restrictions on Use:

Manufacturer/Supplier Five Star Products, Inc.

60 Parrott Drive

Shelton, CT 06484 USA

Phone #: 203-336-7900

**Emergency Phone #:** CHEM-TEL 1-800-255-3924

(Outside the U.S. 1-813-248-0585)

### **SECTION 2: HAZARD(S) IDENTIFICATION-GHS INFORMATION**

**Classification:** Skin Irritation, Category 2

> Eye Irritation, Category 2A Skin sensitization, Category 1 Acute aquatic toxicity, Category 2 Chronic aquatic toxicity, Category 2

Label Elements/Hazard

**Pictograms:** 





Signal Word: Warning

**Hazard Statements:** H315 Causes skin irritation

> H317 May cause an allergic skin reaction H319 Caused serious eye irritation

H401 Toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

**Precautionary** P261 Avoid breathing dust/fume/gas/mist/vapors/spray **Statements/Prevention:** 

P264 Wash skin thoroughly after handling

P272 Contaminated work clothing should not be allowed out of the

workplace

P273 Avoid release to the environment

P280 Wear protective gloves/eye protection/face protection

Response: P351 If in eyes: Rinse cautiously with water for several minutes.



Date Revised: 02/22/2019

Supersedes: 02/15/2019

P338, P305, P351, P337, P313 Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.

P302, P352 If on skin (or hair): Wash with plenty of soap and water. P330, P331If swallowed: Rinse mouth. Do NOT induce vomiting.

P333, P313 If skin irritation or rash occurs. Get medical

advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillate.

P314 Get medical advice/attention if you feel unwell.

**Storage:** Keep container tightly closed and in a dry well-ventilated space.

**Disposal:** Dispose of contents/container in accordance with applicable regional,

national, and local laws and regulations.

**Hazards Not Otherwise** 

Classified: Not Applicable

Ingredients with Unknown

**Toxicity:** Not Applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS				
Hazardous Ingredient(s)	Common Name/Synonyms	CAS No.	% wt/wt	
Bisphenol A Diglycidyl Ether Resin Mixture	Not Applicable	25068-38-6	80-90	
C8 and C10 Alkyl Glycidly Ethers	Not Applicable	68609-96-1	10-20	

#### **SECTION 4: FIRST AID MEASURES**

Inhalation: If inhaled: Remove person to fresh air and keep comfortable for

breathing. If not breathing, give artificial respiration.

Consult a physician.

**Eye Contact:** If in eyes: Rinse cautiously with water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Consult a

physician.

**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower for at least 15 minutes. Immediately call a poison center or doctor if irritation develops. Wash contaminated clothing

before reuse.

Ingestion: If swallowed: Rinse mouth. Call POISON CENTER for most current

information. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to



Date Revised: 02/22/2019

Supersedes: 02/15/2019

reduce the risk of aspiration. Never give anything by mouth to an

unconscious person.

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately

(show the label or SDS where possible). First Aid responders should pay attention to self-protection and use recommended protective clothing

(chemical resistant gloves, splash protection).

**Note to Physicians:** Symptoms may not appear immediately. Treat symptomatically.

### **SECTION 5: FIRE-FIGHTING MEASURES**

**Flammability and Explosion** 

**Information:** Not Available

**Sensitivity to Mechanical** 

Impact: Not Available

**MEANS OF EXTINCTION** 

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

**Unsuitable Extinguishing** 

Media: Not Available

**Protection of Firefighters:** Wear self-contained breathing apparatus for fire-fighting if necessary.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Emergency Procedures:** Uncontrolled releases should be responded to by trained personnel using

pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond

with trained personnel. Eliminate all ignition sources.

**Personal Precautions:** Use personal protective equipment. Avoid breathing vapors, mist, or gas.

Ensure adequate ventilation. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI

recommendations.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product

enter drains. Discharge into the environment must be avoided.

**Methods for Containment:** Soak up with inert absorbent material and dispose of as hazardous

waste. Keep in suitable, closed containers for disposal.

**Other Information:** See Section 13 for disposal considerations.



Date Revised: 02/22/2019

Supersedes: 02/15/2019

### **SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

**Storage:** Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept

upright to prevent leakage.

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## **Exposure Guidelines**

Component	CAS No.	ACGIH	OSHA
Bisphenol A Diglycidyl Ether Resin Mixture	25068-38-6	Not Established	Not Established
C8 and C10 Alkyl Glycidil Ethers	68609-96-1	Not Established	Not Established

PEL: Permissible Exposure Limit TLV: Threshold Limit Value

**Engineering Controls:** Not normally required.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Eye/Face Protection:** Face shield and safety glasses. Use equipment for eye protection that

meets the standards referenced for OSHA regulations in 29 CFR

1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Rubber or polyethylene material is

recommended. Consult manufacturer specifications for further

information.

**Skin and Body Protection:** Wear protective clothing. Clothing with full length sleeves and pants

should be worn.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		
Appearance:	Clear light amber liquid.	
Color:	Light amber.	
Odor:	Semi Sweet	
Odor Threshold:	Not Available	
Physical State:	Liquid	
pH:	Not Available	
Melting Point / Freezing Point:	Not Available	
Initial Boiling Point:	Not Available	



Date Revised: 02/22/2019

Supersedes: 02/15/2019

Dailing Daints	Nat Ausilahla
Boiling Point:	Not Available
Flash Point:	93.4 °C, 200 °F Setaflash Closed Cup ASTM D 3828
Evaporation Rate:	Not Available
Flammability (solid, gas):	Not Available
Lower Flammability Limit:	Not Available
Upper Flammability Limit:	Not Available
Vapor Pressure:	1.33 mbar
Vapor Density:	1 [Air = 1]
Relative Density:	1.10
Solubility:	Slightly
Partition Coefficient: n-Octanol/Water:	Not Available
Auto-ignition Temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	1000 cps
Percent Volatile, wt.%:	0%
VOC Content, wt.%:	0%
Density:	1.10 g/cc
Coefficient of Water/Oil Distribution:	Not Available

## **SECTION 10: STABILITY AND REACTIVITY**

Stable under normal conditions. **Chemical Stability: Hazardous decomposition** 

byproducts:

CO, CO<sub>2</sub>, smoke, toxic vapors

**Conditions to Avoid:** Amine compounds under uncontrolled conditions.

**Incompatible Materials:** Strong oxidizing agents.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** 

**Primary Irritant Effect** 

Irritant to skin and mucous membranes. On the Skin:

**Primary Irritant Effect** 

Irritating effect. On the Eye:

Swallowing: Can cause abdominal irritation, nausea, vomiting, and diarrhea.



Date Revised: 02/22/2019

Supersedes: 02/15/2019

Additional Toxicological

Information:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA, or

ACGIH as of this date, greater or equal to 0.1%

#### **SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity:** All work practices must be aimed at eliminating environmental

contamination.

**Aquatic Toxicity:** This material is harmful to the environment.

Persistence and

**Degradability:** The product is partially biodegradable. Significant residue remains.

**Bio-accumulative Potential:** Does not accumulate in organisms.

**Mobility in Soil:** No further relevant information available

**Ecotoxical Effects**Toxic for fish. Due to mechanical actions of the product damages may

**Remark:** occur. The declared action may be partly caused by lack of oxygen.

**Additional Ecological** 

Information: No further relevant information available

General Notes: No further relevant information available

PBT Assessment: Not Available

vPvB Assessment: Not Available

Other Adverse Effects: No further relevant information available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### **Waste Treatment Methods**

**Recommendation:**The generation of waste should be avoided or minimized wherever

possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of authorities with jurisdiction. Waste packaging should be recycled. Incineration or

landfill should only be considered when recycling is not feasible.

Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned

to licensed hazardous waste haulers for disposal.



Date Revised: 02/22/2019

Supersedes: 02/15/2019

ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT

PROPER AGENCIES.

**Uncleaned Packaging:** Empty containers may contain residue and may be dangerous. Do not

attempt to refill or clean without proper instructions. Empty drums should be drained and stored safely for reconditioning or recycling.

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS

Recommendation: Disposal must be made according to official regulations.

## **SECTION 14: TRANSPORT INFORMATION**

**US DEPARTMENT of TRANSPORTATION (DOT)** 

**Proper Shipping Name:** Not Regulated

Class: None UN #: None

**Packing Group:** None

**CANADA Transportation of Dangerous Goods (TDG)** 

**Proper Shipping Name:** Not Regulated

Class: None UN #: None

**Packing Group:** None

**INTERNATIONAL AIR** 

**TRANSPORTATION Proper** UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS Shipping Name (ICAO/IATA): (BISPHENOL-A EPICHLORHYDRIN RESIN), 9, PG III

Class: 9

UN #: 3082

**Packing Group:** TTT

WATER TRANSPORTATION

**Proper Shipping Name** 

(IMO/IMDG):

(BISPHENOL-A-EPOXY RESIN), 9, PG III

9 Class: UN#: 3082 **Packing Group:** III

**Marine Pollutant:** Bisphenol-A Epichlorhydrin Resin



Date Revised: 02/22/2019

Supersedes: 02/15/2019

### **SECTION 15: REGULATORY INFORMATION**

**CHEMICAL INVENTORIES** 

**US (TSCA):** The components of this product are in compliance with the chemical

notification requirements of TSCA.

**CANADA (DSL):** The components of this product are in compliance with the chemical

notification requirements of NSN Regulations under CEPA, 1999.

**FEDERAL REGULATIONS** 

**CANADA:** This product has been classified in accordance with the hazard criteria of

the Controlled Products Regulations and this Safety Data Sheet contains all the information required by the Controlled Products Regulations.

WHMIS Classification: Class D1B – Toxic material

Class D2B - Skin Sensitization

**UNITED STATES:** This SDS has been prepared to meet the US OSHA Hazard

Communication Standard, 29 CFR 1910.1200

**SARA Title III:** No components are listed.

**STATE REGULATIONS** 

Massachusetts US Massachusetts Commonwealth's Right-to-Know Las (Appendix A to

105 Code of Massachusetts Regulations Section 670.000)

**New Jersey**US New Jersey Worker and Community Right-to-Know Act (New Jersey

Statute Annotated Section 34:5A-5)

Pennsylvania US Pennsylvania Worker and Community Right-to-Know Law (34 Pa.

Code Chap. 301-323)

**California** This product contains the following Proposition 65 chemicals:

Chemical Name: Epichlorohydrin, CAS No. 106-89-8, CA Prop 65:

Carcinogen, May contain trace amounts (<0.1%)

Chemical Name: Bisphenol A, CAS No. 80-05-7, CA Prop 65: Birth

defects or other reproductive harm – female, contains <1%

Chemical Name: Epichlorohydrin, CAS No. 106-89-8, CA Prop 65: Birth

defects or other reproductive harm - male, contains < 0.1%

### **SECTION 16: OTHER INFORMATION**

HMIS Rating:

Health Flammability Physical Hazard

2 1 0 1. X

**Disclaimer:** This information is furnished without warranty of any kind, expressed or

implied. Five Star Products, Inc. bases the information and recommendations in this document on data believed to be current and

accurate.