



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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

Synonyms: Epoxy Resin, Component A

Product Use: For use with Five Star Epoxy Aggregate and Five Star Epoxy Hardener in nuclear safety application zones.

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

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: Causes skin irritation, H315
May cause an allergic skin reaction, H317
Causes serious eye irritation, H319
Toxic to aquatic life, H401
Toxic to aquatic life with long lasting effects, H411



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

Precautionary Statements/Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray, P261
Wash skin thoroughly after handling, P264
Contaminated work clothing should not be allowed out of the workplace, P272
Avoid release to the environment, P273
Wear protective gloves/eye protection/face protection, P280

Response:

If in eyes: Rinse cautiously with water for several minutes, P351. Remove contact lenses, if present and easy to do. Continue rinsing, P338, P305, P351 If eye irritation persists: Get medical attention/advice, P337, P313
If on skin (or hair): Wash with plenty of soap and water, P302, P352
If swallowed: Rinse mouth. Do NOT induce vomiting, P330, P331.
If skin irritation or rash occurs, P333: Get medical advice/attention, P313.
Take of contaminated clothing and wash before reuse, P362
Collect spillate, P391
Get medical advice/attention if you feel unwell, P314

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	n/a	25068-38-6	80-90
C8 and C10 Alkyl Glycidly Ethers	n/a	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.



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

- 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 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.



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

- 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.

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 (TLV)	OSHA (PEL)
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.
- General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices. Provide readily accessible eye wash stations and safety showers. Wash at end of shift and before eating, smoking, or using the toilet. Remove contaminated clothing and launder or discard.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

Appearance:	Clear light amber liquid
Color:	Light amber
Odor:	Semi Sweet
Odor Threshold:	N/A
Physical State:	Liquid
pH:	Not available
Melting Point / Freezing Point:	Not available
Initial Boiling Point:	Not available
Boiling Point:	Not available
Flash Point:	93.4 °C, 200 °F Setaflash Closed Cup ASTM D 3828
Evaporation Rate:	N/A
Flammability (solid, gas):	N/A
Lower Flammability Limit:	N/A
Upper Flammability Limit:	N/A
Vapor Pressure:	1.33 mbar
Vapor Density:	1 [Air = 1]
Relative Density:	1.10
Solubility:	Slightly
Partition Coefficient: n-Octanol/Water:	N/A
Auto-ignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	1000 cps
Percent Volatile, wt. %:	0%
VOC Content, wt. %:	0%
Density:	N/A
Coefficient of Water/Oil Distribution:	N/A

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions.
Hazardous decomposition byproducts:	CO, CO ₂ , smoke, toxic vapors
Conditions to Avoid:	Amine compounds under uncontrolled conditions.
Incompatible Materials:	Strong oxidizing agents.



Safety Data Sheet

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Supersedes: 2/15/2019

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Bisphenol A Diglycidyl Ether Resin Mixture	>5,000.00, Rat Category: N/A	20,000.00, Rabbit Category: N/A	No Data Available	No Data Available	No Data Available

Primary Irritant Effect On the Skin:

Irritant to skin and mucous membranes.

Primary Irritant Effect On the Eye:

Irritating effect.

Swallowing:

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

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

Ecotoxicological Effects

Remark:

Toxic for fish. Due to mechanical actions of the product damages may 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:

N/A



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

vPvB Assessment: N/A

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.

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.

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

INTERNATIONAL AIR

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

Class: 9



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

UN #: 3082
Packing Group: III

WATER TRANSPORTATION
Proper Shipping Name (IMO/IMDG): UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (BISPHENOL-A-EPOXY RESIN), 9, PG III

Class: 9
UN#: 3082
Packing Group: III
Marine Pollutant: Bisphenol-A Epichlorhydrin Resin

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: n/a

WHMIS Classification: n/a

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 Law (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
California Prop 65: 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%



Safety Data Sheet

Date Revised: 2/19/2019

Supersedes: 2/15/2019

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 (Hazardous Material Information System):

Health	Flammability	Physical Hazard	Personal Protection
2	1	0	X, B

Disclaimer:

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