



Safety Data Sheet

Date Revised: 11/09/2022

Supersedes: none

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): Five Star® XP 230 Epoxy Grout / Component B Hardener

Synonyms: XP 230 Epoxy Hardener

Product Use: High Performance machinery grouting. For use with Five Star® Epoxy Aggregate and XP 230 Resin.

Restrictions on Use: Should be used with Epoxy Aggregate and XP 230 Epoxy Resin

Manufacturer/Supplier: Five Star Products, Inc.
2 Enterprise Drive, Suite 303
Shelton, CT 06484 USA

Phone #: 203-336-7900

Emergency Phone #: VelocityEHS 1-800-255-3924
(Outside the U.S. 1-813-248-0585)

SECTION 2: HAZARD(S) IDENTIFICATION-GHS INFORMATION

Classification: Acute Toxicity – Oral Category 4
Acute Toxicity – Dermal, Category 4
Skin Corrosion, Category 1
Sensitization – Skin, Category 1
Eye Damage, Category 1
Sensitization – Respiratory, Category 3

Label Elements/Hazard Pictograms:



Signal Word: Danger

Hazard Statements: Harmful if swallowed H302.
Harmful in contact with skin H312.
Causes severe skin burns and eye damage H314.
May cause an allergic skin reaction H317.
Causes serious eye damage H318.
May cause respiratory irritation H335.

Precautionary Statements/Prevention: Do not breathe dust, fume, gas, mist, vapors, or spray, P260.
Wash thoroughly after handling, P264.
Do not eat, drink or smoke when using this product, P270.
Contaminated work clothing should not be allowed out of the workplace, P272.
Wear protective gloves, protective clothing, eye protection and face protection, P280.



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Wear respiratory protection, P284.

Response:

If swallowed: Rinse mouth. Do NOT induce vomiting, P330, P331.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower, P361, P353.

If inhaled: Remove person to fresh air and keep comfortable for breathing, P340.

If in eyes: Rinse cautiously with water for several minutes, P351. Remove contact lenses, if present and easy to do. Continue rinsing, P338.

Immediately call a poison center or doctor, P310.

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

If experiencing respiratory symptoms, P342: Call a poison center or doctor, P310. Wash contaminated clothing before reuse, P363.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national, and local laws and regulations.

Hazards Not Otherwise Classified:

N/A

Ingredients with Unknown Toxicity:

Some of this product mixture may contain ingredients of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS			
Hazardous Ingredient(s)	Common Name/Synonyms	CAS No.	% wt/wt
Aliphatic Amines	Not available	Trade Secret	50-70
Tertiary Amines	Not available	Trade Secret	5-10
Aromatic Amines	Not Available	Trade Secret	10-20

SECTION 4: FIRST AID MEASURES

Inhalation:

If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms call poison center or doctor.

Eye Contact:

If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

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.



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Ingestion: If swallowed: Rinse mouth. 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).

Note to Physicians: Symptoms may not appear immediately.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability and Explosion Information: Not flammable or combustible by OSHA/WHMIS criteria

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is sensitive to static discharge at temperatures at or above the flash point.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO₂, or water spray.
Large Fire: Dry chemical, CO₂, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal; do not scatter the material.

Unsuitable Extinguishing Media: N/A

Product of Combustion: Carbon monoxide. Oxides of nitrogen.

Protection of Firefighters: TOXIC: inhalation, ingestion or skin contact with material may cause severe injury or death. Contact with molten substance may cause severe burns to skin and eyes. Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150ft). Stay upwind. Keep out of low areas. Ventilate enclosed areas. ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area).

Personal Precautions: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8.



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- Environmental Precautions:** Prevent entry into waterway, sewers, basements, or confined areas.
- Methods for Containment:** Stop leak if you can do it without risk.
- Methods for Cleanup:** Absorb or cover with dry earth, sand, or other non-combustible material and transfer to containers.
- Other Information:** See Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

- Handling:** Do not swallow. Do not breathe mist, vapors, or spray. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Contaminated work clothing should not be allowed out of workplace. See Section 8 for information on Personal Protective Equipment.
- Storage:** Store locked up. Store away from incompatible materials. See Section 10 for information on incompatible materials. Keep out of reach of children.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	CAS No.	ACGIH	OSHA
Aliphatic Amines	Trade Secret	No TLV established.	No PEL established.
Tertiary Amines	Trade Secret	No TLV established.	No PEL established.
Aromatic Amines	Trade Secret	No TLV established	No PEL established

PEL: Permissible Exposure Limit TLV: Threshold Limit Value.

Engineering Controls: Not normally required.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Eye/Face Protection:** Wear chemical safety goggles and full face shield. Ensure that Eyewash Stations and safety showers are close to the workstation location. 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.



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Respiratory Protection:

Wear respiratory protection. If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

General Hygiene Considerations:

Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	Liquid or Gel
Color:	Yellow or White
Odor:	Fishy, Ammoniacal
Odor Threshold:	Not Available
Physical State:	Liquid
pH:	Not Available
Melting Point / Freezing Point:	Liquid
Initial Boiling Point:	> 100°C (212°F)
Boiling Point:	> 204°C(400°F)
Flash Point:	Not Available
Evaporation Rate:	Not Available
Flammability (solid, gas):	Not Available
Lower Flammability Limit:	Not Available
Upper Flammability Limit:	Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Available
Relative Density:	1.02-1.03
Solubility:	Partial
Partition Coefficient: n-Octanol/Water:	Not Available
Auto-ignition Temperature:	Can auto ignite in air at approximately 358°C (676°F)
Decomposition Temperature:	Not Available
Viscosity:	100-240
Percent Volatile, wt. %:	0%
VOC Content, wt. %:	0%



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Density:	1.02-1.03 g/cc
Coefficient of Water/Oil Distribution:	Not Available

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable
Possibility of Hazardous Reactions:	CO ₂ , smoke, toxic vapors.
Conditions to Avoid:	Avoid peroxides and acids.
Incompatible Materials:	Epoxy resins under uncontrolled conditions, acid, oxidizing material, halogenated, organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

Primary Irritant Effect On the Skin: Irritant to skin and mucous membranes.

Primary Irritant Effect On the Eye: Irritating effect.

Sensitization: Sensitization possible through skin contact.
Sensitizing effect through inhalation is possible by prolonged exposure.

Additional Toxicological Information: The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

Danger through skin absorption.

Toxic and/or corrosive effects may be delayed up to 24 hours.

Sensitization: Sensitization possible by inhalation and/or dermal contact.

Repeated Dose Toxicity: Repeated exposures may result in skin and/or respiratory sensitivity.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic Toxicity: The material is harmful to the environment.

Persistence and Degradability: The product is partly biodegradable. Significant residuals remain.

Bio-accumulative Potential: Does not accumulate in organisms.

Mobility in Soil: No further relevant information available.



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Ecotoxicological Effects

Remark: Toxic for fish.

Additional Ecological Information

General Notes: This statement was deduced from products with a similar structure or composition.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment cannot be excluded.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.

PBT Assessment: PBT: Not applicable.

vPvB Assessment: vPvB: Not applicable.

Other Adverse Effects: No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Uncleaned Packaging

Recommendation: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

US DEPARTMENT of TRANSPORTATION (DOT) Proper Shipping Name:

UN2735, Amines, Liquid, Corrosive, NOS (Aliphatic amines/ Aromatic amines) 8, PG III

Class: 8

UN #: UN2735

Packing Group: III

Air Transport: ICAO-IATA/DGR (Cargo) Proper Shipping Name:

UN2735, AMINES, LIQUID, CORROSIVE, NOS (ALIPHATIC AMINES/AROMATIC AMINES) 8, PG III

Class: 8

UN#: UN2735



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Packing Group:	III
Sea Transport: (IMDG-Code/GGVSee):	UN2735, AMINES, LIQUID, CORROSIVE, NOS (ALIPHATIC AMINES/AROMATIC AMINES) 8, PG III
Class:	8
UN #:	UN2735
Packing Group:	III
CANADA Transportation of Dangerous Goods (TDG) Proper Shipping Name:	UN2735, Amines, Liquid, Corrosive, NOS (Aliphatic amines/Aromatic amines) 8, PG III
Class:	8
UN #:	UN2735
Packing Group:	III

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 the 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 the MSDS contains all the information required by the Controlled Products Regulations.
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WHMIS Classification:	Class D1B - Toxic Material. Class D2A - Respiratory sensitization. Class D2B - Skin sensitization. Class E - Corrosive Material.
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UNITED STATES:	This SDS had been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200
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SARA Title III:	No components are listed.
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STATE REGULATIONS

Massachusetts	US Massachusetts Commonwealth's Right-to-Know Las (Appendix A to 105 Code of Massachusetts Regulations Section 670.000).
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Component:	CAS No.	RTK List:
Aliphatic amine	TS	Listed

New Jersey	US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5).
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Component:
Aliphatic amine

CAS No.
TS

RTK List:
Listed

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323).

Component
Aliphatic amine

CAS No.
TS

RTK List:
Listed

California
California Prop 65:

This product does not contain chemicals known to the State of California to be Carcinogenic.

SECTION 16: OTHER INFORMATION

HMIS (Hazardous Material Information System):

Health	Flammability	Physical Hazard	Personal Protection
3	1	1	E

Disclaimer:

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