



Safety Data Sheet

Date Revised: 02/28/2023

Supersedes: 03/07/2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade Name Five Star® DP Epoxy Grout High Flow / Component B Hardener
formerly DP Epoxy Grout 201

Registration number -

Synonyms Epoxy hardener, Component B

Issue Date 03-07-2022

Version number C

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1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Grouting and repair

Uses advised against None known

1.3. Details of the supplier of the safety data sheet

Supplier Five Star Products, Inc.
2 Enterprise Drive
Suite 303
Shelton, CT 06484 U.S.A.
00-1-203-336-7900

1.4 Emergency telephone number: VelocityEHS
1-813-248-0585

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture: The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Skin corrosion/irritation	Category 1C	H314 - Causes severe skin burns and eye damage
Skin sensitisation	Category 1A	H317 - May cause an allergic skin reaction
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage

Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard	Category 1	H400 - Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term aquatic hazard	Category 1	H411 - Toxic to aquatic life with long lasting effects.

2.2 Label elements
Label according to Regulation (EC) No. 1272/2008 as amended

Contains: reaction products with Triethylenetetramine, Fatty acids C18 unsat, Benzyl alcohol

Hazard Pictograms

Signal Word

Warning

Hazard Statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements
Prevention

P260	Do not breathe mist/vapours.
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection

Response

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310	Immediately call a POISON CENTRE/doctor.
P391	Collect spillage

Storage

Not assigned

Disposal

Not assigned

Supplemental information on the label

None

2.3 Other hazards:

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation(EC) No 1907/2006, Annex XIII.



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SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information

Chemical Name	%	CAS-No./EC No.	REACH Registration No.	Index No.	Notes
Fatty acids C18 unsat, reaction products with Triethylenetetramine	≤ 100	1226892-44-9	-	-	-
Classification	Skin Corr. 1C;H314, Eye Dam. 1;H318, Skin Sens. 1A;H317, Aquatic Acute 1;H400(M=10), Aquatic Chronic 2;H411				
Benzyl alcohol	≤ 10	100-51-6 202-859-9	-	603-057-00-5	-
Classification	Acute Tox. 4;H302, Acute Tox. 4;H332, Skin Irrit. 2;H315, Eye Irrit 2;H319				

List of abbreviations and symbols that may be used above

M: M-factor

Composition Comments:

The full text for all H-statements is displayed in section 16. All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.

SECTION 4: First aid measures

General information:

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1 Description of first aid measures

Inhalation

For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist. Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician.

Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion

Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.



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4.2 Most important symptoms and effects, both acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash. Causes digestive tract burns.

4.3 Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards

Will burn if involved in a fire.

5.1 Extinguishing media

Suitable extinguishing media

Water fog. Foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture

During fire, hazardous combustion products are released that may include: Carbon oxides. Nitrogen Oxides.

5.3 Advice for firefighters

Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel

Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.

For emergency responders

Keep unnecessary personnel away. Avoid breathing mist/vapours. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up.

6.2 Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further



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leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

This product is miscible in water. Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Retain and dispose of contaminated wash water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.

6.4 Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS)

7.3 Specific end use(s)

Grouting and repair.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

Not available

Predicted no effect concentrations (PNECs)

Not available

8.2 Exposure controls

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment



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General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/Face Protection	Wear approved chemical safety goggles. Face shield is recommended. Eye protection should meet standard EN 166.
Skin Protection	
Hand protection	Wear suitable gloves tested to EN374. Nitrile or butyl rubber gloves are recommended. Use gloves with breakthrough time of 240 minutes. Minimum glove thickness > 0.4 mm. Other suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge and full facepiece. Use filter type AB P2 according to EN 14387. Check with respiratory protective equipment suppliers
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties	
9.1 Information on basic physical and chemical properties	
Appearance	
Physical state	Liquid
Form	Liquid
Colour	Light yellow to amber
Odour	Amine / slightly aromatic
Odour Threshold	Not available
pH	Not available
Melting Point / Freezing Point	Not available
Initial Boiling Point and Boiling Range	> 100 °C (> 212 °F)
Flash Point	> 93.4 °C (> 200.12 °F)



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Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits Explosive limit – lower (%) Explosive limit – upper (%)	Not available Not available
Vapour Pressure	1.33 mbar
Vapour Density	Not available
Relative Density	0.96 - 1.03 (Water=1)
Solubility (ies) Solubility (water)	Soluble in water. (10 - 99%)
Partition Coefficient (n-Octanol/Water)	Not applicable, product is a mixture
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Explosive Properties	Not explosive
Oxidising properties	Not oxidising

9.2 Other information

Kinematic viscosity 40 - 240 mm²/s (40 °C (104 °F))

SECTION 10: Stability and reactivity

10.1 Reactivity	The product is stable and non-reactive under normal conditions of use, storage, and transport.
10.2 Chemical stability	Material is stable under normal conditions.
10.3 Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid	Contact with incompatible materials.
10.5 Incompatible materials	Strong oxidising agents
10.6 Hazardous decomposition products	Decomposition is not expected under normal conditions of use and storage. For hazardous combustion products, see section 5.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
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Information on likely routes of exposure

- Inhalation** Prolonged inhalation may be harmful.
- Skin contact** Causes severe skin burns. May cause an allergic skin reaction.
- Eye contact** Causes serious eye damage.
- Ingestion** Causes digestive tract burns.

Symptoms Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash. Causes digestive tract burns.

11.1 Information on toxicological effects

Acute Toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Benzyl alcohol (CAS 100-51-6)		
Acute Dermal LD50	Rabbit	2000 mg/kg
Acute Inhalation Aerosol LC50	Rat	> 4.178 mg/l, 4 Hours
Acute Oral LD50	Rat	1610 mg/kg

- Skin corrosion/irritation** Causes severe skin burns.
- Serious eye damage/eye irritation** Causes serious eye damage.
- Respiratory sensitisation** Based on available data, the classification criteria are not met.
- Skin sensitisation** May cause an allergic skin reaction.
- Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- Carcinogenicity** Based on available data, the classification criteria are not met.
- Reproductive toxicity** Based on available data, the classification criteria are not met.
- Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.
- Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.
- Aspiration hazard** Based on available data, the classification criteria are not met.
- Mixture versus substance information** No information available.

SECTION 12: Ecological information

12.1 Toxicity Very toxic to aquatic life with long lasting effects.



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Components	Species	Test Results
Benzyl alcohol (CAS 100-51-6)		
Aquatic Acute Algae EC50	Algae	700 mg/l, 72 Hours
Aquatic Acute Crustacea EC50	Daphnia magna	202 mg/l, 48 Hours
Aquatic Acute Fish LC50	Fathead minnow (Pimephales promelas)	460 mg/l, 96 hours

12.2 Persistence and Degradability

No data is available on the degradability of this product.

12.3 Bio-accumulative Potential

Partition coefficient n-octanol/water (log Kow)

Not applicable, product is a mixture.

Benzyl alcohol (CAS 100-51-6)

1.1

Bioconcentration factor (BCF)

Not available.

12.4 Mobility in soil

Expected to be mobile in soil.

12.5 Results of PBT and vPvB assessment

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste Treatment Methods

Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods / information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special Precautions

Dispose in accordance with all applicable regulations.

SECTION 14: TRANSPORT INFORMATION

ADR

14.1. UN number

UN2735



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14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids C18 unsat, reaction products with Triethylenetetramine)
14.3. Transport hazard class(es)	
Class	8
Subsidiary Risk	-
Label(s)	8
Hazard No. (ADR)	80
Tunnel restriction code	E
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids C18 unsat, reaction products with Triethylenetetramine)
14.3. Transport hazard class(es)	
Class	8
Subsidiary Risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids C18 unsat, reaction products with Triethylenetetramine)
14.3. Transport hazard class(es)	
Class	8
Subsidiary Risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	Yes



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14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN2735

14.2. UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids C18 unsat, reaction products with Triethylenetetramine)

14.3. Transport hazard class(es)

Class	8
Subsidiary Risk	-
Label(s)	8

14.4. Packing group III

14.5. Environmental hazards Yes

ERG Code 8L

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

14.1. UN number UN2735

14.2. UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (Fatty acids C18 unsat, reaction products with Triethylenetetramine)

14.3. Transport hazard class(es)

Class	8
Subsidiary Risk	-

14.4. Packing group III

14.5. Environmental hazards

Marine pollutant Yes

EmS F-A, S-B

14.4. Packing group

14.5. Environmental hazards Read safety instructions, SDS and emergency procedures before handling.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**Retained direct EU regulations****Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended**

Not listed.

Restrictions on use**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

Other EU regulations**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

Other regulations

This product is classified and labelled in accordance with the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.



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This Safety Data Sheet is compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758.

Use of this product by young persons under the age of 18 is not allowed in accordance with the Management of Health and Safety at Work Regulations 1999 [SI 1999/3242], as amended.

Follow the requirements of the Control of Substances Hazardous to Health Regulations 2002 [SI 2002/2677], as amended, when using this material.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of Abbreviations

ADN	European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS	Chemical Abstract Service
CEN	European Committee for Standardization
IATA	International Air Transport Association
IBC Code	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemical
IMDG	International Maritime Dangerous Goods
MARPOL	International Convention for the Prevention of Pollution from Ships
PBT	Persistent, bioaccumulative and toxic
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very persistent and very bioaccumulative

References

ACGIH	Documentation of the Threshold Limit Values and Biological Exposure Indices
EPA	AQUIRE database
HSDB®	Hazardous Substances Data Bank

IARC Monographs Overall Evaluation of Carcinogenicity

NTP	National Toxicology Program Report on Carcinogens
NLM	Hazardous Substances Data Base

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.



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- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Training information

Follow training instructions when handling this material.

Disclaimer

Five Star Products, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.