

Date Revised: 08/24/2022

Supersedes: 04/14/2021

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): Five Star® Epoxy Novolac Coating / Component A Resin

Synonyms: Not Applicable

Product Use: For use with associated product hardener, Five Star® Novolac Coating

Component B

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

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: Skin corrosion/irritation, Category 2

Serious eye damage/eye irritation, Category 2B

Skin sensitization, Category 1B Carcinogenicity, Category 2

Hazardous to aquatic environment long term, chronic, 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 Suspected of causing cancer, H351

Toxic to aquatic life with long-lasting effects, H411

Precautionary Avoid breathing dust/fume/gas/mist/vapors/spray, P261.

Statements/Prevention: Wash skin thoroughly after handling, P264.

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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.

Obtain special instructions before use.



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Response: For specific treatment see Section 4 of this SDS. Wash contaminated

clothing before reuse. IF exposed or concerned: Get medical

advice/attention. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation

persists: Get medical advice/attention.

Storage: Store in accordance with local/regional/national regulations.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards Not Otherwise

Classified: None known.

Supplemental Information: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS					
Chemical Name Common CAS No. % wt/w					
PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER	Not Available	28064-14-4	30-50		
TALC (Mg3Si4O10(OH)2)	Not Available	14807-96-6	20-40		
QUARTZ	Not Available	14808-60-7	5-15		
TITANIUM DIOXIDE	Not Available	13463-67-7	5-15		
1,3-DIGLYCIDYLOXYBENZENE	Not Available	101-90-6	4		
OTHER COMPONENTS BELOW REPORTABLE LEVELS	Not Available	Not Applicable	20-40		

Composition Comments:

Other components in this product are considered nonhazardous under the criteria specified in 29 CFR 1910.1200

(Hazard Communication Standard).

SECTION 4: FIRST AID MEASURES

Inhalation:

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention, if needed.



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Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. If

a contact lens is present, DO NOT delay irrigation or attempt to remove

the lens. Continue rinsing. Get medical attention immediately.

Skin Contact: Remove contaminated clothing immediately and wash skin with soap

and water. Call a POISON CENTER or doctor/physician if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. For minor skin contact, avoid spreading material on unaffected skin. Take off contaminated

clothing and wash before reuse.

Ingestion: Call a physician or poison control center immediately. Rinse mouth

thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-

mouth method if victim ingested the substance.

Induce artificial respiration with the aid of a pocket mask equipped with

a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and

delayed:

Skin irritation. May cause an allergic skin reaction. Dermatitis. Rash. Irritant effects. May cause redness and pain. Prolonged exposure may

cause chronic effects.

Indication of immediate medical attention and special treatment needed:

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep

reatment needed: victim under observation. Symptoms may be delayed.

General Advice: Take off contaminated clothing and shoes immediately. In case of

shortness of breath, give oxygen IF exposed or concerned: Get medical

advice/attention. Show this safety data sheet to the doctor in

attendance. Wash contaminated clothing before reuse.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability and Explosion

Information: Not available

Sensitivity to Mechanical

Impact: Not available

MEANS OF EXTINCTION

Suitable Extinguishing Media: Water fog. Foam. Dry chemical powder. Alcohol foam. Carbon dioxide

(CO2).

Unsuitable Extinguishing

Media:

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

Specific hazards arising from

the chemical:

Fire may produce irritating, corrosive and/or toxic gases.

Special protective

equipment and precautions

for firefighters:

Wear suitable protective equipment. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand

breathing apparatus, protective clothing and face mask.



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Firefighting equipment/instructions:

Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. Water runoff can cause environmental damage.

Specific methods:

In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid skin contact and inhalation of vapors during disposal of spills. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Extinguish all flames in the vicinity.

Methods and materials for containment and cleaning up:

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with 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.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with skin. Avoid prolonged exposure. Avoid contact with clothing. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash thoroughly after handling. Avoid release to the environment. Do not empty into drains.



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Conditions for safe storage, including any incompatibilities:

CAUTION Store locked up. Keep away from heat, sparks and open flame. Store in a closed container away from incompatible materials. Store in a well-ventilated place. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children. Store in accordance with local/regional/national/international regulation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
QUARTZ (CAS 14808-60-7)	PEL	0.05 mg/m ³	Respirable dust.
TITANIUM DIOXIDE (CAS 13463-67-7)	PEL	15 mg/m ³	Total dust.
US. OSHA Table Z-3 (29 CFR 1910.1000) Components	Туре	Value	Form
OHARTZ (CAC 14809 CO 7)	T\\/ \	0.1 mg/m ³	Respirable.
QUARTZ (CAS 14808-60-7)	TWA	2.4 mppcf	Respirable.
	TWA	0.1 mg/m ³	Respirable.
TALC (Mg3Si4O10(OH)2) (CAS 14807-96-6)		20 mppcf	
		2.4 mppcf	Respirable.
	TWA	5 mg/m ³	Respirable fraction.
TITANIUM DIOXIDE (CAS 13463-67-7)		15 mg/m ³	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m^3	Respirable fraction.
TALC (Mg3Si4O10(OH)2) (CAS 14807-96-6)	TWA	2 mg/m³	Respirable fraction.
TITANIUM DIOXIDE (CAS 13463-67-7)	TWA	10 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	Form
QUARTZ (CAS 14808-60-7)	TWA	0.05 mg/m^3	Respirable dust.
TALC (Mg3Si4O10(OH)2) (CAS 14807-96-6)	TWA	2 mg/m³	Respirable.

Biological Limit Values: No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



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Eye/Face Protection: Safety glasses. If risk of splashing, wear safety goggles or face shield.

Skin/Hand Protection: Chemical resistant gloves are recommended. If contact with forearms

is likely wear gauntlet style gloves.

Body Protection: Wear appropriate clothing to prevent any possibility of skin contact.

Thermal Hazards: Wear appropriate thermal protective clothing, when necessary.

General Hygiene Always observe good personal hygiene measures, such as washing **Considerations:** after handling the material and before eating, drinking, and/or

after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Appearance:	Liquid, paste		
Color:	Gray		
Odor:	Not Available		
Odor Threshold:	Not Available		
Physical State:	Liquid		
pH:	Not Applicable		
Melting Point / Freezing Point:	Not Available		
Initial Boiling Point and Range:	> 392 °F (> 200 °C)		
Flash Point:	> 302.0 °F (> 150.0 °C)		
Evaporation Rate:	Not Available		
Flammability (solid, gas):	Not Available		
Upper/Lower Flammability or Explosive Limits			
Flammability Limit – Lower (%)	Not Available		
Flammability Limit – Upper (%)	Not Available		
Explosive Limit – Lower (%)	Not Available		
Explosive Limit – Upper (%)	Not Available		
Vapor Pressure:	82 Pa at 20°C		
Vapor Density:	Not Available		
Relative Density:	1.17		
Solubility (Water):	Not Available		



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Partition Coefficient: n-Octanol/Water:	> 3
Auto-ignition Temperature:	572°F (300°C)
Decomposition Temperature:	Not Available
Viscosity:	Not Available
Density:	1.17 g/cm³ at 25°C

SECTION 10: STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use,

storage and transport.

Chemical Stability: Stable.

Possibility of Hazardous

Reactions: No dangerous reaction known under conditions of normal use.

Conditions to Avoid: Heat, flames and sparks. Avoid temperatures exceeding the flash

point. Contact with incompatible materials.

Incompatible Materials: Peroxides. Chlorine. Strong acids, alkalies and oxidizing agents.

Hazardous Decomposition

Products

If product is burned hazardous gases such as oxides of carbon and

nitrogen and various hydrocarbons may be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure:

Inhalation: Prolonged inhalation may be harmful.

Skin Contact: Causes skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: Suspected of causing cancer by ingestion. However, ingestion is not

likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics:

Direct contact with eyes may cause temporary irritation.

Information on Toxicological

Effects:

Acute Toxicity: Not available.

Skin Corrosion/Irritation: Corrosive to skin and eyes.

Serious Eye Damage/Eye

Irritation:

Direct contact with eyes may cause temporary irritation.



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Respiratory or Skin Sensitization:

Respiratory sensitization: Not available.

Skin Sensitization: May cause sensitization by skin contact.

Germ Cell Mutagenicity: No data available to indicate product or any components present at

greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: Possible cancer hazard based on tests with laboratory animals. This

> product contains crystalline silica. Silica is a known carcinogen; however, in this encapsulated form the normal routes of exposure are

unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity

1,3-DIGLYCIDYLOXYBENZENE

(CAS 101-90-6)

2B Possibly carcinogenic to humans.

1 Carcinogenic to humans. QUARTZ (CAS 14808-60-7)

TALC (Mg3Si4O10(OH)2) (CAS

2B Possibly carcinogenic to humans.

3 Not classifiable as to carcinogenicity to humans.

TITANIUM DIOXIDE (CAS

13463-67-7)

14807-96-6)

2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

QUARTZ (CAS 14808-60-7) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

1,3-DIGLYCIDYLOXYBENZENE

(CAS 101-90-6)

Reasonably anticipated to be a human carcinogen.

QUARTZ (CAS 14808-60-7) Known to be a human carcinogen.

Reproductive Toxicity: Contains trace amount of an ingredient known to cause reproductive or

developmental effects.

Specific target organ toxicity

- single exposure:

Not classified.

Specific target organ toxicity

- repeated exposure:

Not classified.

Not available. **Aspiration Hazard:**

Chronic Effects: Prolonged inhalation may be harmful.



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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: All work practices must be aimed at eliminating environmental contamination. This material is harmful to the environment.

Product		Species	Test Results		
Epoxy Novolac Coating Co	Epoxy Novolac Coating Component A Resin				
Aquatic					
Crustacea	EC50	Daphnia	10.8 g/l, 48 hours estimated		
Fish	LC50	Fish	10.8 g/l, 96 hours estimated		
Components		Species	Test Results		
PHENOL-FORMALDEHYDE	POLYMER GLYCID	YL ETHER (CAS 2806	4-14-4)		
Aquatic, Acute					
Fish	LC50	Fish	1 – 10 mg/l		

Persistence and

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

Bio-accumulative Potential: Does not accumulate in organisms.

Partition Coefficient n-octanol/water (log Kow)

PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER

> 3

Mobility in Soil: No data available.

Other Adverse Effects: No other adverse environmental effects (e.g. ozone depletion,

photochemical ozone creation potential, endocrine disruption, global

warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Dispose in accordance with all applicable regulations. When this

product as supplied is to be discarded as waste, it does not meet the

definition of a RCRA waste under 40 CFR 261.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the

producer and the waste disposal company.

Waste from residues / unused

products:

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 (see: Disposal

instructions).

Contaminated packaging: Empty containers should be taken to an approved waste handling site

for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Offer

rinsed packaging material to local recycling facilities.



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SECTION 14: TRANSPORT INFORMATION

US DEPARTMENT of TRANSPORTATION (DOT)

Proper Shipping Name: Not Regulated

Class: None
UN #: None

INTERNATIONAL AIR

Packing Group:

TRANSPORTATION ProperUN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. **Shipping Name (ICAO/IATA):**(EPOXY RESIN), 9, PG, III

Class: 9

UN #: 3082

Packing Group: III

WATER TRANSPORTATION

Proper Shipping Name
UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(IMO/IMDG): (EPOXY RESIN), 9, PG, III

None

Class: 9

UN#: 3082

Packing Group: III

Marine Pollutant: Epoxy Resin

CANADA Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated

Class: None
UN #: None
Packing Group: None

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code: Not available.



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SECTION 15: REGULATORY INFORMATION

US Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707,

Subpt. D): Not regulated.

CERCLA Hazardous Substance List (40 CFR

302.4): Not listed.

SARA 304 Emergency release

notification: Not regulated.

OSHA Specifically Regulated Substances (29 CFR

1910.1001-1052): Not applicable.

NIARTZ (CAS 14808-60-7) Cancer

QUARTZ (CAS 14808-60-7) Cancer Lung Effects

Immune System Effects

Kidney Effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely

Hazardous Substance: Not listed.

SARA 311/312

Hazardous Chemical: Yes

Classified Hazard Categories: Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

Carcinogenicity

SARA 313 (TRI reporting)			
Chemical name CAS Number % by wt.			
1,3-DIGLYCIDYLOXYBENZENE	101-90-6	4	

Other Federal Regulations:

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants

(HAPs) List: Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release

Prevention (40 CFR 68.130): Not regulated.



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Safe Drinking Water Act

(SDWA):

Not regulated.

US STATE REGULATIONS

California Proposition 65



WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient Name	Cancer	Reproductive	No Significant Risk Level	Maximum Acceptable Dosage Level
Oxirane, 2- (chloromethyl)-	Yes	Yes	9 μg/day	No

California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,3-DIGLYCIDYLOXYBENZENE

(CAS 101-90-6)

Listed: July 1, 1989

QUARTZ (CAS 14808-60-7) Listed: October 1, 1988

TITANIUM DIOXIDE (CAS

13463-67-7)

Listed: September 2, 2011

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

1,3-DIGLYCIDYLOXYBENZENE (CAS 101-90-6)

QUARTZ (CAS 14808-60-7)

TALC (Mg3Si4O10(OH)2) (CAS 14807-96-6)

TITANIUM DIOXIDE (CAS 13463-67-7)

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 Commun Statute Annotated Section 34:5A-5)	US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)			
Pennsylvania	US Pennsylvania Worker and Commu Code Chap. 301-323)	US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)			
International Inventories					
Country(s) or Region:	Inventory Name On Inventory (Yes/No) *				
Australia	Australian Inventory of Chemical Substances (AICS)	Yes			
Canada	Domestic Substances List (DSL) Yes				



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Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16: OTHER INFORMATION					
HMIS (Hazardous Material	Health	Flammability	Physical Hazard	Personal Protection	
Identification System)	2	1	0	Х, В	
References:	EPA: AQUIRE database US. IARC Monographs on Occupational Exposures to Chemical Agents HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices				
Disclaimer:				ation and	