Epoxy Paste
Safety Data Sheet

SDS Revision Date: 3/19/2024

1. Product and Company Identification

Product Name	Epoxy Paste
Product Codes	Epoxy Paste
Manufacturer	Concrete Floor Solutions, Inc.
Street Address	6801 Tilghman Street #113
City, State, Zip	Allentown, PA 18106
Information Phone	610-366-0208
Emergency Phone	Chemtrec 800-424-9300
Prepared By	Jason Kehnel
Date Revised	3/19/2024
Chemical Name or Class	Epoxy mixture

2. Hazards Identification

GHS Classification: Skin corrosion/irritation category 2, serious eye damage/irritation category 2B, sensitization skin category 1B, acute toxicity oral category 4, acute toxicity inhalation category 4

H315 - Causes skin irritation
H320 - Causes eye irritation
H317 - May cause an allergic skin reaction
H302 - Harmful if swallowed
H332 - Harmful if inhaled

Signal Word: Warning

Precautionary Statements:
P102 Keep out of reach of children.
P103 Read label before use.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P270 Do not eat, drink or smoke while using this product.
P271 Use only outdoors or in a well-ventilated area.

Response:
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 IF eye irritation persists: Get medical advice/attention.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330 Rinse mouth
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Disposal:
P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws

3. Composition/Information on Ingredients

Ingredient	Cas No.	Weight %
Modified Diglycidyl Ether of Bisphenol A	25068-38-6	30-60
Alkyl Quaternary Ammonium Bentonite	68953-58-2	1-10
*Crystalline Silica (as a component of Alkyl Quaternary Ammonium Bentonite)	14808-60-7	<0.5%
Talc	14807-96-6	25-45
*Crystalline Silica (as a component of Talc)	14808-60-7	<1%
Limestone	1317-65-3	5-15
Benzyl Alcohol	100-51-6	5-15

*Indicates toxic chemical(s) subject to the reporting requirements of section 313 Title III and of 40 CFR 372.***
Note: Ingredients listed without percentages, the percentages are considered a trade secret.

4. First Aid Measures

Eyes: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in the work area.

Skin: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts, and watchbands.

Ingestion: Rinse mouth with water if the victim is conscious. Remove dentures if present. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept lower than the waist so that vomit does not enter the lungs. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. If the victim is unconscious, place in the recovery position and get immediate medical attention. Immediately contact a poison control center or doctor. Seek medical attention if the victim feels unwell or if a large quantity of material has been ingested.

Inhalation: If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Seek immediate medical attention.

Notes to physicians or first aid providers: If burn is present, treat as any thermal burn after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. First aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). See section 8 got specific personal protective equipment.

5. Fire Fighting Measures

Flammable Limits In Air (% By Volume)

Upper: Not Available

Lower: Not Available

Flash Point: 200+F

Method Used: Seta Flash

Suitable Extinguishing Media:

Water Fog Or Fine Spray, Dry Chemical Fire Extinguishers, Carbon Dioxide Fire Extinguishers, Foam, Alcohol Resistant Foam (Atc Type Best).
Unsuitable Extinguishing Media:
Do Not Use Direct Water Stream As It May Spread The Fire.
Specific Hazards During Fire Fighting:
Container May Rupture From Gas Generation In A Fire Situation. Violent Steam Generation Or Eruption May Occur Upon Application Of Direct Water Stream To Hot Liquids. Dense Smoke Is Emitted When Durned Without Sufficient Oxygen.
Hazardous Combustion Products:
During A Fire, Smoke May Contain The Original Material In Addition To Combustion Products Of Varying Composition Which May Be Toxic And/Or Irritating. Combustion Products May Include And Are Not Limited To: Phenolics, Carbon Monoxide And Carbon Dioxide.
Further Information:
Keep People Away. Isolate Fire And Deny Unnecessary Entry. Use Water Spray To Cool Fire Exposed Containers And Fire Affected Zone Until Fire Is Out And Danger Of Reignition Has Passed. Fight Fire From A Protected Location Or Safe Distance. Consider The Use Of Unmanned Hose Holders Or Monitor Nozzles. Immediately Withdraw All Personnel From The Area In Case Of Rising Sound From Venting Safety Device Or Discoloration Of The Container. Do Not Use Direct Water Stream As It May Spread The Fire. Move Container From Fire Area If This Is Possible Without Hazard. Burning Liquids May Be Moved By Flushing With Water To Protect Personnel And Minimize Property Damage. Water Fog, Applied Gently May Be Used As A Blanket For Fire Extinguishment. Contain Fire Run Off If Possible. Fire Run Off, If Not Contained, May Cause Environmental Damage.
Special Protective Equipment For FireFighters:
Wear Positive Pressure Self Contained Breathing Apparatus (Scba) And Protective Fire Fighting Clothing (Include Fire Fighting Helmet, Coat, Trousers, Boots And Gloves). Avoid Contact With This Material During Fire Fighting Operations. If Contact Is Likely, Change To Full Chemical Resistant Fire Fighting Clothing With Self Contained Breathing Apparatus. If This Is Not Available, Wear Full Chemical Resistant Clothing With Self Contained Breathing Apparatus And Fight Fire From A Remote Location.

6. Release Measures

Steps to be taken in case material is released or spilled - Isolate The Area. Keep Unnecessary And Unprotected Personnel From Entering The Area. Use Appropriate Safety Equipment. Contain Spilled Material If Possible. Prevent From Entering Into Soil, Ditches, Sewars, Waterways And/Or Groundwater. Absorb With Materials Such As: Sand, Polypropylene Fiber Products Or Polyethylene Fiber Products. Remove Residual With Soap And Hot Water. Collect In Suitable And Properly Labeled Containers. Residual Can Be Removed With Solvent As Long As Exposure Guidelines And Safe Handling Measures Are Followed.

7. Handling and Storage

Precautions to be taken in handling and storage: Store In Cool Dry Place. Seal All Partially Used Containers. Wash With Soap And Water Before Eating, Drinking, Smoking, Or Using Toilet Facilities. Mixed Materials Contain The Hazards Of All The Components, Therefore, Read The Sds Of All The Components Prior To Using Material. Properly Label All Containers.
Other precautions: Avoid All Skin Contact. Avoid Breathing Vapors Generated From The Material. Observe Conditions Of Good General Hygiene And Safe Working Practices. Contaminated Leather Articles Cannot Be Cleaned And Must Be Discarded If Contaminated With This Product. Wash All Contaminated Clothing Prior To The Reuse Thereof.

8. Exposure Controls/Personal Protection

Ingredient	Type	Exposure Limits Value	Source
Crystalline Silica CAS #14808-60-7	PEL	0.05 mg/m3 TWA (respirable dust)	OSHA
	TLV	0.025 mg/m3 TWA (respirable dust)	ACGIH
	REL	0.05 mg/m3 TWA (respirable dust)	NIOSH
Talc CAS #14807-96-6	TWA	2 mg/m3 (respirable dust)	ACGIH
	PEL	20 mppcf	OSHA
Limestone CAS #1317-65-3	PEL	5 mg/m3 (respirable dust)	OSHA
	TLV	5 mg/m3 (respirable dust)	ACGIH
Alkyl Quaternary Ammonium Bentonite CAS #68953-58-2	TWA	5 mg/m3 (respirable dust)	OSHA

Respiratory Protection: Use A Niosh Approved Respirator As Required To Prevent Over-Exposure To Vapor In Accordance With 29 Cfr 1910.134. General Exhaust Is Usually Sufficient In Lieu Of Niosh Respirator.
Ventilation: General Exhaust Is Usually Sufficient To Control Vapors And Exposure Hazards.
Protective Gloves: Impervious Gloves, Neoprene Or Rubber.
Eye Protection: Splash Proof Goggles Or Safety Glasses With Side Shields
Other Protective Clothing Or Equipment: Wear Body Covering Clothing And Other Coverings As Necessary Such As Apron And Appropriate Footwear To Avoid Contact With Material.
Work Hygienic Practices: Observe Good General Hygienic Practices.

9. Physical and Chemical Properties

Appearance and Odor - Viscous paste - negligible odor
Boiling Point or Range - 200 to 401 degrees F

Vapor Density (Air = 1) - N/A
Specific Gravity (H2O = 1) - 1.6
Evaporation Rate - N/A
Solubility in Water - Negligible

Odor Threshold - N/A
pH - N/A
Melting Point/Freezing Point - N/A
Vapor Pressure - N/A
Auto Ignition Temperature - N/A
Partition Coefficient: n-octanol/water - N/A
Decomposition Temperature- N/A

10.Stability and Reactivity

Stability - stable
Conditions to Avoid (Stability) - avoid excessive heat or open flames.
Incompatibility (material to avoid) - can react vigorously with strong oxidizing agents and strong lewis acids or mineral acids.
Hazardous Decomposition or By-Products - co2, aldehydes, acids. Reaction with some curing agents can generate large amounts of heat.
Hazardous Polymerization - will not occur

11. Toxicological Information

No data for the product itself.
Component data:
CAS# 25068-38-6 MODIFIED DIGLYCIDYL ETHER OF BISPHENOL A
*Acute Oral Toxicity: LD50 (rat) : > 15,000 mg/kg
*Acute Inhalation Toxicity: LC50 not determined
*Acute Dermal Toxicity: LD50 (rabbit): 23,000 mg/kg
*Skin Corrosion/Irritation: This is a skin irritant. Prolonged or repeated contact may cause skin irritation with local redness.
*Serious eye damage/eye irritation: Mild eye irritant. May cause eye irritation but corneal injury is unlikely.
*Respiratory or Skin Sensitization: This product is a skin sensitizer, sub-category 1B. Has caused allergic skin reactions in humans. Has demonstrated the potential for contact allergy in mice. As for respiratory sensitization, no relevant data was found.
*Germ cell mutagenicity: Genotoxicity in vitro – In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.
*Carcinogenicity – Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of Bisphenol A (DGEBPA). Indeed, the most recent review of the available data

by the IARC has concluded that DGEBPA is not classified as a carcinogen. Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBA is carcinogenic.

*Reproductive Toxicity:

Effects on fertility – In animal studies, did not interfere with reproduction.

Effects on fetal development – Resins based on DGEBA did not cause birth defects or other adverse effects on the fetus when pregnant rabbits were exposed by skin contact, the most likely route of exposure, or when pregnant rats or rabbits were exposed orally.

*STOT-single exposure – Evaluation of available data suggests that this material is not a STOT-SE toxicant.

*STOT-repeated dose – Except for skin sensitization, repeated dose exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

*Aspiration Toxicity – based on physical properties, not likely to be an aspiration hazard.

<u>CAS# 68953-58-2 Alkyl Quaternary Ammonium Bentonite</u>

*Acute Dermal Toxicity: 2,577 mg/kg (calculated)

<u>CAS# 14808-60-7 crystalline silica (as a component of Alkyl Quartenary Ammonium Bentonite & talc)</u>

Inhalation: Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath.

Ingestion: Ingestion is an unlikely route of exposure. If dust is swallowed, it may irritate the mouth and throat.

Skin Contact: No adverse effects are expected.

Eye Contact: Particulates may cause abrasive injury.

Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer and other effects as indicated below. **The method of exposure that can lead to the adverse health effects described below is <u>inhalation</u>.**

A. **Silicosis –** Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute:
    a. <u>Chronic or Ordinary Silicosis</u> is the most common form of silicosis and can occur after many years (10-20 or more) of prolonged repeated inhalation of relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 cm in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown or radiographic opacities) greater than 1 cm in diameter. Complicated silicosis or PMF symptoms, if present, are shortness of breath and cough.

Complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale).

b. Accelerated Silicosis can occur with prolonged repeated inhalation of high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier, and progression is more rapid.

c. Acute Silicosis can occur after the repeated inhalation of very high concentrations of respirable crystalline silica over a short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough, weakness and weight loss. Acute silicosis is fatal.

B. **Cancer –** IARC – The International Agency for Research on Cancer ("IARC") concluded that "crystalline silica in the form of quartz or cristobalite dust is *carcinogenic to humans (Group 1)*". For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risk to Humans, Volume 100C, "A Review of Human Carcinogens: Arsenic, Metals, Fibers and Dusts" (2011). NTP – classifies "Silica, Crystalline (respirable size)" as Known to be a human carcinogen.

C. **Autoimmune Diseases** – Several studies have reported excess cases of several autoimmune disorders – scleroderma, systemic lupus erythematosus, rheumatoid arthritis – among silica-exposed workers.

D. **Tuberculosis** – Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to tuberculosis bacteria. Individuals with chronic silicosis have a three-fold higher risk of contracting tuberculosis than similar individuals without silicosis.

E. **Kidney Disease –** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

F. **Non-Malignant Respiratory Diseases –** The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airway disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

Sources of Information:

The **NIOSH Hazard Review – Occupational Effects of Occupational Exposure to Respirable Crystalline Silica** published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH –

Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or through the NIOSH website, www.cdc.gov/niosh/topics/silica , then click on the line "NIOSH Hazard Review: Health Effects of Occupational Exposures to Respirable Crystalline Silica" found under "Hazard Review". For a more recent review of the health effects of respirable crystalline silica, the reader may consult *Fishman/s Pulmonary Diseases and Disorders*, Fourth Edition, Chapter 57. "Coal Workers' Lung Diseases and Silicosis". The US Occupational Safety and Health Administration (OSHA) Crystalline Silica Standards 29CFR1910.1053, 1915.1053 and 1926.1053, Appendix B describes the silica related diseases and provides resources and references.

Numerical measures of toxicity:

LD50 oral rat > 22,500 mg/kg

Talc CAS# 14807-96-6

*Carcinogenicity: ln 2006, lARC concluded that inhaled talc not containing asbestos or asbestiform fibers is not classifiable as a human carcinogen (Group 3). IARC ruled that there is limited evidence that the use of talc-based body powder for perineal dusting is a possible risk factor for ovarian cancer (Group 28). This is not a route of exposure relevant to workers and applies only to one specific use of talc. WHMIS Z015 classification: Specific Target Organ Toxicity -Repeated Exposure -Category 1 (STOTRE1)

Limestone CAS# 1317-65-3

*Carcinogenicity: Limestone is not listed by MSHA, OSHA, or IARC as a carcinogen; however, this product contains crystalline silica, which has been classified by IARC as a (Group 1) carcinogen to humans when inhaled.

Benzyl Alcohol CAS# 100-51-6

*Acute oral toxicity: LD5o, rat: 1,620 mg/kg
*Acute inhalation toxicity: LC5o, rat: > 5,000 mg/I, 4 h
*Acute dermal toxicity: LD5o, rat: > 2,000 mg/kg
*Skin corrosion/irritation: May cause skin irritation.
*Serious Eye damage/eye irritation: Causes serious eye irritation.
*STOT – single exposure: may cause respiratory irritation, drowsiness or dizziness.

12. Ecological Information

No data for the product itself.

Component data:

CAS# 25068-38-6 MODIFIED DIGLYCIDYL ETHER OF BISPHENOL A

*Ecotoxicity:

*Toxicity to fish – Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/L, 96h, semi-static test.

*Toxicity to daphnia and other aquatic invertebrates – EC50 (Daphnia magna (water flea)): 1.8mg/L, 48h, static test.

*Toxicity to algae/aquatic plants – ErC50 (Scenedesmus capricornutum (freshwater algae)): 11 mg/L, 72h, static test (growth rate inhibition).

*Chronic toxicity to daphnia and other aquatic invertebrates – NOEC (Daphnia magna (water flea)): 0.3mg/L, 21d, semi-static test (number of offspring). MATC (maximum acceptable toxicant level)(Daphnia magna (water flea)): 0.55mg/L, 21d, semi-static test (number of offspring).

*Toxicity to microorganisms – IC50 (bacteria): > 42.6mg/L, 18h (respiration rates).

*Persistence and degradability:

*Biodegradability – Not biodegradable; Aerobic, 12% biodegradation, 28d, (OECD 302B or equivalent).

*ThOD – 2.35 mg/mg (estimated)

*Photodegradation – half-life (indirect photolysis), OH radicals, 6.69E-11 cm3/s (estimated).

*Bioaccumulative potential:

*Bioaccumulation – Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

*Partition coefficient: n-octanol/water – low Pow: 3.242 (77F/25C), pH = 7.1 (estimated), GLP: yes.

*Mobility in Soil – Potential for mobility in soil is low (Koc: 1800-4400 (estimated)). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

*Other adverse effects – This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

<u>CAS# 100-51-6 Benzyl Alcohol</u>

*Ecotoxicity:

*Toxicity to fish - LC5o -Pimephales promelas (Fathead minnow) 96 h: 460 mg/I

*Toxicity to daphnia or other aquatic invertebrates - LC5o - Daphnia magna (Water flea), 48 h: 230 mg/I

*Toxicity to algae/aquatic plants - Ebc5o - Pseudokirchneriella subcapitata (Green algae), 72 h: 700 mg/I

*Persistence and degradability – readily biodegradable.

*Bioaccumulative potential – will not bioaccumulate.

*Mobility in soil – no data

*Other adverse effects - Do not allow material to run into surface waters, wastewater or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13.Waste Disposal

Waste Disposal Method: Dispose of material in a waste disposal site in accordance with local, state, and federal law. Do not dump into any sewers, on the ground, or into any body of water. For unused and uncontaminated products, the preferred options include sending to a licensed, permitted incinerator or other thermal destructive device.

14. Transport Information

DOT: Not Regulated
IMO/IMDG: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CONTAINS Bisphenol A Diglycidyl Ether Polymer), 9, PGIII

15. Regulatory Information

No data for the product itself.
Component data:
CAS# 25068-38-6 MODIFIED DIGLYCIDYL ETHER OF BISPHENOL A
*EPCRA – Emergency Planning and Community Right-To-Know
*SARA 302 Extremely Hazardous Substances Threshold Planning Quantity – This material does not contain any components with a section 302 EHS TPQ.
*SARA 311/312 Hazards – See section 2
*SARA 313 – This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
*US State Regulations
*Pennsylvania Right To Know – To the best of our knowledge, this product does not contain chemicals at levels which require reporting.
*California Prop 65 – CAS# 25068-38-6 does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
*The ingredients of this product are either listed or exempted on the following chemical inventories: TCSI, TSCA, AICS, DSL, ENCS, ISHL, KECI, PICCS, IECSC, NZIoC, CH INV.
*TSCA list – No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.
*HMIS Rating – Health 2, Flammability 1, Reactivity 0
CAS# 68953-58-2 Alkyl Quaternary Ammonium Bentonite
*US State Regulations – Listed on PA & NJ Right To Know Lists.
*California Prop 65 – Contains crystalline silica, which is known by the State of California to cause cancer. www.P65Warnings.ca.gov
*Listed on TSCA & DSL.
CAS# 14808-60-7 crystalline silica (as a component of Alkyl Quaternary Ammonium Bentonite & talc)
Listed on EPA's TSCA inventory, the Canadian DSL, Australia's AICS, China's IECSC, Japan's MITI (registry # 1-548), Korea's KECI (registry # 9212-5667), New Zealand's HSNO,

Philippines' PICCS, and Taiwan's CSNN inventories. Not classified as hazardous waste under RCRA, not classified as hazardous substance under CERCLA, does not meet de minimis concentrations for classification under SARA 302 or SARA 313, not processed with or does not contain Class I or Class II ozone depleting substances, is included in the FDA's list of substances that may be included in coatings used in food contact surfaces, (respirable particle size < 10 microns) considered "toxic" for purposes of the Massachusetts Toxic Use Reduction Act, listed as a hazardous substance by the Pennsylvania Worker and Community Right to Know Act.

- California Prop 65 lists crystalline silica (airborne particles of respirable size) as a substance known to the State of California to be a carcinogen.
- California Inhalation Reference Exposure Level (REL) established a chronic non-cancer effect REL of 3ug for respirable crystalline silica. A chronic REL is an airborne level of a substance at or below which no non-cancer health effects are anticipated in individuals indefinitely exposed to the substance at that level.
- Texas Commission on Environmental Quality: established chronic and acute Reference Values and short term and long term Effects Screening Levels for crystalline silica (quartz). The information can be accessed through www.tceq.texas.gov .

Talc CAS# 14807-96-6
*US State Regulations – Listed on Illinois, Massachusetts, Pennsylvania, New Jersey and Florida Right To Know Lists.

California Prop 65 - Warning: Talc is not listed, however the product supplied can expose you to chemicals including crystalline silica (airborne particles of respirable size) which has been identified by the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

HMIS Rating – Health 1 (chronic potential), Flammability 0, Reactivity 0 – Personal Protection: dust respirator, safety glasses or goggles, gloves.
Limestone CAS# 1317-65-3
*SARA 311/312 Codes: Considered by SARA (1986) to be a hazardous chemical and a delayed health hazard.
*TSCA listed
*HMIS Rating – Health 1, Flammability 0, Reactivity 0
Benzyl Alcohol CAS# 100-51-6
*US Federal Regulations - This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

*SARA 311/312 – Harmful if swallowed or inhaled, Causes serious eye damage.

*Listed on TSCA, DSL, EINECS, AICS, NZIoC, IECSC, ENCS, KEIC, PICCS Inventories.
*US State Regulations – on PA Right to Know list.
*HMIS Rating – Health 2, Flammability 1, Reactivity 0 – Personal Protection: C

16.Other Information

DISCLAIMER: THE INFORMATION HEREIN IS BASED ON THE DATA AVAILABLE AND IS BELIEVED TO BE ACCURATE, HOWEVER, THE MANUFACTURER MAKES NO WARRANTY EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS OBTAINED FROM THE USE THEREOF. ACCORDINGLY, WE ASSUME NO RESPONSIBILITY FOR INJURY FROM THE USE OF THIS PRODUCT.

HMIS Hazard Classification
Health - 2 Flammability - 1 Reactivity - 0 Personal Protective Equipment - G

N/A = Not Available
See Section 1 for date of preparation

1. Product and Company Identification

Product Name	Epoxy Paste
Product Codes	Epoxy Paste
Manufacturer	Concrete Floor Solutions, Inc.
Street Address	6801 Tilghman Street #113
City, State, Zip	Allentown, PA 18106
Information Phone	610-366-0208
Emergency Phone	Chemtrec 800-424-9300
Prepared By	Jason Kehnel
Date Revised	3/19/2024
Chemical Name or Class	Polyamine mixture

2. Hazards Identification

GHS Classification: Skin corrosion/irritation category 2, serious eye damage/irritation category 2A, sensitization skin category 1, acute toxicity oral category 4, acute toxicity inhalation category 4, hazardous to the aquatic environment, long term lazard category 3

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H317 - May cause an allergic skin reaction
H302 - Harmful if swallowed
H332 - Harmful if inhaled
H412 - Harmful to aquatic life with long lasting effects

Signal Word: Warning

Precautionary Statements:
P102 Keep out of reach of children.
P103 Read label before use.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P270 Do not eat, drink or smoke while using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.

Response:
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 IF eye irritation persists: Get medical advice/attention.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330 Rinse mouth
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Disposal:
P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws.

3. Composition/Information on Ingredients

Ingredient	Cas No.	Weight %
TriethyleneTetramine	112-24-3	1-5
Dimer/tofa, reaction products with Teta	68082-29-1	10-30
Hydrocarbon Resin	Proprietary	1-5
*Naphthalene	91-20-3	<0.06
Hydroxy Modified Resin	Proprietary	1-5
*Xylene	1330-20-7	0.1-1
*Ethyl Benzene (as a component of Xylene)	100-41-4	<0.2
Castor oil, sulfated, sodium salt	68187-76-8	<0.2
Alkyl Quaternary Ammonium Bentonite	68953-58-2	5-15
*Crystalline Silica (as a component of Alkyl Quaternary Ammonium Bentonite)	14808-60-7	<0.5%
Talc	14807-96-6	20-40
*Crystalline Silica (as a component of Talc)	14808-60-7	<1%

Limestone	1317-65-3	5-15
Benzyl Alcohol	100-51-6	2-10
*Carbon	1333-86-4	<1
Titanium Dioxide	13463-67-7	1-5

*Indicates toxic chemical(s) subject to the reporting requirements of section 313 Title III and of 40 CFR 372.***
Note: Ingredients listed without percentages, the percentages are considered a trade secret.

4. First Aid Measures

GENERAL INFORMATION: Seek medical advice. If breathing is irregular or stopped, administer artificial respiration. Treat symptomatically. Beware corrosive and sensitizing effects.
INHALATION: Move to fresh air.
SKIN: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation. Wash off immediately with soap and plenty of water.
EYES:Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Rinse immediately with plenty of water for at least 15 minutes.
INGESTION: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn the victim's head to the side.

5. Fire Fighting Measures

GENERAL FIRE HAZARDS:
Do not allow run-off from firefighting to enter drains or water courses.
SUITABLE EXTINGUISHING MEDIA:
Alcohol resistant foam, water spray, carbon dioxide, dry chemical, dry sand, limestone powder
UNSUITABLE EXTINGUISHING MEDIA:
No data available
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL MIXTURE:
May generate ammonia gas. May generate toxic nitrogen oxide gasses. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from firefighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning products are noxious and toxic fumes.
SPECIAL FIRE FIGHTING PROCEDURES:

No data available
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:
Avoid contact with skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

6. Release Measures

Steps to be taken in case material is released or spilled - Use a self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves, and eye/face protection. Evacuate personnel to safe areas. If possible, stop flow of product. Approach suspected lead areas with caution. Place in the appropriate chemical waste container. Construct a dike to prevent spreading.

7. Handling and Storage

*SAFE HANDLING - Discard contaminated leather articles. Remove contaminated clothing. Drench the affected area with water for at least 15 minutes. Provide readily accessible eye wash stations and safety showers. Wash hands at the end of each work shift and before eating, smoking or using the toilet. Avoid contact with skin and eyes. Adhere to work practice rules established by government regulations. Use personal protective equipment.
*SAFE STORAGE – Do not store in reactive metal containers. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls/Personal Protection

Ingredient	Type	Exposure Limits Value	Source
Naphthalene CAS #91-20-3	TWA	10 ppm	ACGIH
	STEL	15 ppm	ACGIH
	TWA	10 ppm (50mg/m3)	OSHA
	TWA	10 ppm (50mg/m3)	NIOSH
	STEL	15 ppm (75mg/m3)	NIOSH
	IDLH	250 ppm	NIOSH
Xylene CAS #1330-20-7	STEL	150 ppm	OSHA
	PEL	100 ppm	OSHA
	TWA	100 ppm	OSHA

	TWA	50 ppm	OEL - long term
	TLV	100 ppm	ACGIH
	STEL	100 ppm	OES - short term
Ethyl Benzene (as a component of Xylene) CAS #100-41-4	STEL	125 ppm	OSHA
	PEL	100 ppm	OSHA
	TWA	100 ppm	OSHA
	TLV	20ppm	ACGIH
	IDLH	800 ppm	NIOSH
Titanium Dioxide CAS# 13463-67-7	TLV	10mg/m3	ACGIH
	PEL	10mg/m3	OSHA
	IDLH	5000mg/m3	NIOSH
Carbon CAS# 1333-86-4	TWA	3mg/m3	ACGIH
Crystalline silica CAS# 14808-60-7	PEL	0.05 mg/m3 TWA (respirable dust)	OSHA
	TLV	0.025 mg/m3 TWA (respirable dust)	ACGIH
	REL	0.05 mg/m3 TWA (respirable dust)	NIOSH
Talc CAS# 14807-96-6	TWA	2 mg/m3 (respirable dust)	ACGIH
	PEL	20 mppcf	OSHA
Limestone CAS# 1317-65-3	PEL	5 mg/m3 (respirable dust)	OSHA
	TLV	5 mg/m3 (respirable dust)	ACGIH
Alkyl Quaternary Ammonium Bentonite CAS# 68953-58-2	TWA	5 mg/m3 (respirable dust)	OSHA

Respiratory Protection: Niosh Approved Respirator Protection Required In The Absence Of Proper Environmental Controls. For Emergencies A Self Contained Breathing Apparatus Or A Full Face Respirator Is Recommended.
Ventilation: Avoid Breathing Vapors. Ventilation Must Be Sufficient To Control Vapors.
Protective Gloves: Chemically Resistant Impervious Gloves – Neoprene Or Rubber
Eye Protection: Full Face Shield With Splash Proof Goggles Or Glasses With Side Shields Underneath.

Other Protective Clothing Or Equipment: Clean Body Covering Clothing As Well As Apron Footwear Or Other Equipment Should Be Used As Deemed Necessary To Avoid Contact With The Material.
Work Hygienic Practices: Observe Good General Hygienic Practices.

9. Physical and Chemical Properties

Appearance and Odor - Viscous paste with amine odor
Boiling Point or Range - 279 to 401 degrees F
Vapor Density (Air = 1) - N/A
Specific Gravity (H2O = 1) - 1.5
Evaporation Rate - N/A
Solubility in Water - Negligible

Odor Threshold - N/A
pH - N/A
Melting Point/Freezing Point - N/A
Vapor Pressure - N/A
Auto Ignition Temperature - N/A
Partition Coefficient: n-octanol/water - N/A
Decomposition Temperature- N/A

10.Stability and Reactivity

Stability - stable
Conditions to Avoid (Stability) - avoid contact with open flames and all sources of ignitions and sparks.
Incompatibility (material to avoid) - sodium hypochlorite. organic acids (acetic acid, citric acid, etc.). the mineral acid product slowly corrodes copper, aluminum, zinc and galvanized surfaces. reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. reactive metals (sodium, calcium, zinc, etc.). materials reactive with hydroxyl compounds. oxidizing agents.
Hazardous Decomposition or By-Products - nitric acid. ammonia nitrogen oxides. nitrogen oxide can react with water vapors to form corrosive nitric acid. carbon monoxide. carbon dioxide. aldehydes. flammable hydrocarbon fragments.

11. Toxicological Information

No data for the product itself.
Component data:
CAS# 112-24-3 TRIETHYLENETETRAMINE
*Acute Oral toxicity – LD50 (rat) > 300-2,000 mg/kg.
*Acute Dermal toxicity – LD50 (rabbit) > 1,000-2,000 mg/kg.

*Skin corrosion/irritation – causes burns
*Skin sensitization – may cause sensitization by skin contact
*General information
    *Inhalation – inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gasses and vapors. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
    *Skin contact – Symptoms may be delayed. Harmful in contact with skin. May cause an allergic skin reaction. Causes severe skin burns.
    *Eye contact – Causes serious eye damage.
    *Ingestion – harmful if swallowed. Causes burns.

CAS# 68082-29-1 Dimer/tofa, reaction products with Teta
*Acute Oral toxicity – ATEmix > 2,000 mg/kg
*Skin corrosion/irritation – Corrosive. Corrosive in an in vitro test.
*Serious eye damage/eye irritation – Risk of serious damage to eyes.
*Skin sensitization – may cause sensitization by skin contact. Sensitization has occurred in laboratory animals after repeated exposure.

CAS# PROPRIETARY HYDROXY MODIFIED RESIN
*Acute Toxicity (LD50/LC50) – no information available
*Skin Corrosion/Irritation: Causes skin irritation. May cause an allergic skin reaction.
*Serious eye damage/eye irritation: May cause eye irritation.
*Respiratory or Skin Sensitization: May cause an allergic skin reaction. No know information on respiratory sensitization.
*Germ cell mutagenicity: No data available.
*Reproductive Toxicity – no information available.
*STOT-single exposure – no target organs identified.
*STOT-repeated dose – no target organs identified.
*Aspiration Toxicity – no information available.

CAS# PROPRIETARY HYDROCARBON RESIN
*Acute Toxicity (LD50/LC50) – no information available
*Skin Corrosion/Irritation: Causes skin irritation through prolonged or repeated exposure.
*Serious eye damage/eye irritation: May cause eye irritation.
*Respiratory or Skin Sensitization: Not known.
*Germ cell mutagenicity: No data available.
*Reproductive Toxicity – no information available.
*STOT-single exposure – no information available.
*STOT-repeated dose – no information available.
*Aspiration Toxicity – not an aspiration hazard.

CAS# 1330-20-7 Xylene
*Acute Oral Toxicity – LD50 (rat) 3500 mg/kg
*Acute Dermal Toxicity – LD50 (rabbit) > 4350 mg/kg

*Acute Inhalation Toxicity – LC50 (rat) 29.08 mg/L, 4h
*Carcinogenicity – IARC Group 3 Unclassifiable as to the carcinogenicity to humans.
*Target organs effects – eyes, skin
CAS# 100-41-4 Ethyl benzene (as a component of xylene)
*Acute Oral Toxicity – LD50 (rat) 3500 mg/kg
*Acute Dermal Toxicity – LD50 (rabbit) 15400 mg/kg
*Acute Inhalation Toxicity – LC50 (rat) 17.2 mg/L, 4h
*Carcinogenicity – IARC Group 2B possibly carcinogenic to humans.
*Target organs effects – eyes, skin
CAS# 13463-67-7 Titanium Dioxide
*Acute oral toxicity > 5,000 mg/kg
*Acute inhalation toxicity > 6.82 mg/L (rat, 4h) – comments: As a nuisance dust, prolonged exposures above recommended levels may cause adverse effects on the lung. Temporary drying effect and/or irritation of mucous membranes may result from excessive exposure. Exposure to dust may aggravate pre-existing respiratory conditions.
*Carcinogenicity - Titanium dioxide is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have been shown to cause lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. However, other laboratory animals such as mice and hamsters did not develop lung tumors under similar testing with titanium dioxide. Furthermore, human epidemiology studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer.
CAS# 1333-86-4 Carbon
*Acute oral toxicity – LD50 (rat) > 8,000 mg/kg
*Carcinogenicity – IARC Group 2B – possibly carcinogenic to humans. NTP says it is reasonably anticipated to be a human carcinogen.
*General information:
    *Inhalation – Dust may irritate the respiratory system.
    *Skin contact – Powder may irritate skin.
    *Eye contact – Dust in eyes will cause irritation.
    *Target organs – respiratory system (lungs).
CAS# 68953-58-2 Alkyl Quaternary Ammonium Bentonite
*Acute Dermal Toxicity: 2,577 mg/kg (calculated)
CAS# 14808-60-7 crystalline silica (as a component of Alkyl Quaternary Ammonium Bentonite & talc)
Inhalation: Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath.

Ingestion: Ingestion is an unlikely route of exposure. If dust is swallowed, it may irritate the mouth and throat.
Skin Contact: No adverse effects are expected.
Eye Contact: Particulates may cause abrasive injury.
Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer and other effects as indicated below. **The method of exposure that can lead to the adverse health effects described below is inhalation.**

A. **Silicosis –** Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute:
    a. Chronic or Ordinary Silicosis is the most common form of silicosis and can occur after many years (10-20 or more) of prolonged repeated inhalation of relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 cm in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown or radiographic opacities) greater than 1 cm in diameter. Complicated silicosis or PMF symptoms, if present, are shortness of breath and cough. Complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale).
    b. Accelerated Silicosis can occur with prolonged repeated inhalation of high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier, and progression is more rapid.
    c. Acute Silicosis can occur after the repeated inhalation of very high concentrations of respirable crystalline silica over a short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough, weakness and weight loss. Acute silicosis is fatal.

A. **Cancer –** IARC – The International Agency for Research on Cancer ("IARC") concluded that "crystalline silica in the form of quartz or cristobalite dust is *carcinogenic to humans (Group 1)*". For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risk to Humans, Volume 100C, "A Review of Human Carcinogens: Arsenic, Metals, Fibers and Dusts" (2011). NTP – classifies "Silica, Crystalline (respirable size)" as Known to be a human carcinogen.
B. **Autoimmune Diseases** – Several studies have reported excess cases of several autoimmune disorders – scleroderma, systemic lupus erythematosus, rheumatoid arthritis – among silica-exposed workers.

C. **Tuberculosis** – Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to tuberculosis bacteria. Individuals with chronic silicosis have a three-fold higher risk of contracting tuberculosis than similar individuals without silicosis.
D. **Kidney Disease –** Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).
E. **Non-Malignant Respiratory Diseases –** The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airway disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

Sources of Information:

The **NIOSH Hazard Review – Occupational Effects of Occupational Exposure to Respirable Crystalline Silica** published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH – Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or through the NIOSH website, www.cdc.gov/niosh/topics/silica , then click on the line "NIOSH Hazard Review: Health Effects of Occupational Exposures to Respirable Crystalline Silica" found under "Hazard Review". For a more recent review of the health effects of respirable crystalline silica, the reader may consult *Fishman/s Pulmonary Diseases and Disorders*, Fourth Edition, Chapter 57. "Coal Workers' Lung Diseases and Silicosis". The US Occupational Safety and Health Administration (OSHA) Crystalline Silica Standards 29CFR1910.1053, 1915.1053 and 1926.1053, Appendix B describes the silica related diseases and provides resources and references.

Numerical measures of toxicity:

LD50 oral rat > 22,500 mg/kg

Talc CAS# 14807-96-6

*Carcinogenicity: ln 2006, lARC concluded that inhaled talc not containing asbestos or asbestiform fibers is not classifiable as a human carcinogen (Group 3). IARC ruled that there is limited evidence that the use of talc-based body powder for perineal dusting is a possible risk factor for ovarian cancer (Group 28). This is not a route of exposure relevant to workers and applies only to one specific use of talc. WHMIS Z015 classification: Specific Target Organ Toxicity -Repeated Exposure -Category 1 (STOTRE1)

Limestone CAS# 1317-65-3

*Carcinogenicity: Limestone is not listed by MSHA, OSHA, or IARC as a carcinogen; however, this product contains crystalline silica, which has been classified by IARC as a (Group 1) carcinogen to humans when inhaled.

Benzyl Alcohol CAS# 100-51-6

*Acute oral toxicity: LD5o, rat: 1,620 mg/kg
*Acute inhalation toxicity: LC5o, rat: > 5,000 mg/I, 4 h
*Acute dermal toxicity: LD5o, rat: > 2,000 mg/kg
*Skin corrosion/irritation: May cause skin irritation.
*Serious Eye damage/eye irritation: Causes serious eye irritation.
*STOT – single exposure: may cause respiratory irritation, drowsiness or dizziness.

12. Ecological Information

No data for the product itself.

Component data:

CAS# 112-24-3 TRIETHYLENE TETRAMINE

Harmful to aquatic life with long lasting effects.
*Toxicity to fish – LC50 (Pimephales promelas (fathead minnow)) > 100 mg/L, 96h
*Toxicity to daphnia and other aquatic invertebrates – EC50 (Daphnia magna (Water flea)) > 10-100 mg/L, 48h
*Toxicity to algae – ErC50 (Pseudokirchneriella subcapitata (green algae)) > 10-100 mg/L, 72h
*Biodegradability – Not readily biodegradable

CAS# 68082-29-1 Dimer/tofa, reaction products with Teta

Do not allow to enter soil, waterways or waste water canal
*Toxicity to fish – LC50 (zebra fish) 7.07 mg/L, 96h
*Toxicity to daphnia and other aquatic invertebrates – EC50 (daphnia magna (water flea)) 7.07mg/L, 48h
*Toxicity to algae – EC50 (Pseudokirchneriella subcapitata (green algae)) 4.34 mg/L, 72h
*Toxicity to aquatic plants – NOEC (Pseudokirchneriella subcapitata (green algae)) 0.5 mg/L, 72h

CAS# 1330-20-7 Xylene

Do not allow it to reach groundwater, watercourse, or sewage systems. Danger to drinking water if even small quantities leak into the ground.
*Toxicity to fish – 13.4: 96 h Pimephales promelas mg/L LC50 flow-through,
2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static,
13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50,
13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through,
19: 96 h Lepomis macrochirus mg/L LC50,
7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static,
23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static,
780: 96 h Cyprinus carpio mg/L LC50 semi-static,

780: 96 h Cyprinus carpio mg/L LC50,
30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static.
*Toxicity to daphnia and other aquatic invertebrates - EC50: 3.82 mg/L (48 h), LC50: 0.6 mg/L (48 h)
*Biaccumulative potential – 3.15 log Pow

CAS# 100-41-4 Ethyl benzene (as a component of xylene)

Do not allow it to reach groundwater, watercourse, or sewage systems. Danger to drinking water if even small quantities leak into the ground.
*Toxicity to fish - 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static,
4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static,
7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through,
32: 96 h Lepomis macrochirus mg/L LC50 static,
9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static,
9.6: 96 h Poecilia reticulata mg/L LC50 static.
*Toxicity to daphnia and other aquatic invertebrates - EC50: 1.8 - 2.4 mg/L (48 h)
*Toxicity to algae - 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50,
438: 96 h Pseudokirchneriella subcapitata mg/L EC50,
2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static,
1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static.
*Bioaccumulative potential – 3.118 log Pow

CAS# 13463-67-7 Titanium Dioxide

*Toxicity to fish – Titanium dioxide is of low acute aquatic toxicity
*Persistence and degradability – Titanium dioxide is persistent and does not bioaccumulate. Not readily biodegradable.
*Bioaccumulative potential – Does not bioaccumulate
*Mobility – is not mobile

CAS# 1333-86-4 Carbon

*Toxicity to fish – LC50 (Brachydanio rerio) > 1,000 mg/L, 96h (OECD 203)
*Toxicity to daphnia and other aquatic invertebrates – EC50 (daphnia magna) > 5,600 mg/L, 24h (OECD 202)
*Toxicity to algae – EC50 (Scenedesmus subspicatus) > 10,000 mg/L, 72h.
NOEC (Scenedesmus subspicatus) > 10,000 mg/L
EC0 (activated sludge) >= 800 mg/L, 3h (DEV L3 TTC test)
*Persistence and degradability – Not readily biodegradable
*Bioaccumulative potential – Bioaccumulation is unlikely due to low water solubility.
*Mobility is soil – This product is insoluble in water.

CAS# PROPRIETARY HYDROXY MODIFIED RESIN

*Ecotoxicity – harmful to aquatic life with long lasting effects. Do not allow sewers or waterways. No other information available.

CAS# PROPRIETARY HYDROCARBON RESIN

*Ecotoxicity – may be harmful to aquatic life with lasting effects. No other information available.

CAS# 100-51-6 Benzyl Alcohol

*Ecotoxicity:

*Toxicity to fish - LC5o -Pimephales promelas (Fathead minnow) 96 h: 460 mg/I

*Toxicity to daphnia or other aquatic invertebrates - LC5o - Daphnia magna (Water flea), 48 h: 230 mg/I

*Toxicity to algae/aquatic plants - Ebc5o - Pseudokirchneriella subcapitata (Green algae), 72 h: 700 mg/I

*Persistence and degradability – readily biodegradable.

*Bioaccumulative potential – will not bioaccumulate.

*Mobility in soil – no data

*Other adverse effects - Do not allow material to run into surface waters, wastewater or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Waste Disposal

Waste Disposal Method: Dispose of material as a hazardous waste according to federal, state, and local regulations.

14. Transport Information

DOT: Not Regulated

IMO/IMDG: Not Regulated

15. Regulatory Information

No data for the product itself.

Component data:

CAS# 112-24-3 TRIETHYLENE TETRAMINE

*US State Regulations

*Listed on NJ, PA and MA Right to Know

*Listed on CH INV, TSCA, DSL, AICS, NZloC, ENCS, ISHL, KEIC, PICCS and IECSC chemical inventories.

CAS# 68082-29-1 Dimer/tofa, reaction products with Teta

*Hazard categories – Acute toxicity (any route of exposure), Skin corrosion/irritation, serious eye damage/eye irritation, respiratory or skin sensitization.

*Listed on AICS, DSL, CH INV, ENCS, KEIC, PICCS, NZloC, TSCA & EINECS chemical inventories.

CAS# PROPRIETARY HYDROXY MODIFIED RESIN

*U.S. Federal Regulations - None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

*SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories - Skin Corrosion/Irritation; Respiratory/Skin Sensitization.
*U.S. State Regulations - None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.
*California Prop 65 – not listed
*Canadian WHMIS Ingredient Disclosure List (IDL) - The components of this product are either not listed on the IDL or are present below the threshold limit listed on the IDL.
*Component Analysis Inventory:

Component	CAS#	US	CA	EU	AU	PH	JP	KR	CN	NZ
Hydroxy Modified Resin	Proprietary	Yes	DSL	*Yes	Yes	Yes	No	Yes	Yes	Yes

*Via an alternative description
*HMIS Rating – Health 1, Flammability 1, Reactivity 0, Personal Protection B (minimum)
CAS# PROPRIETARY HYDROCARBON RESIN
*US Federal Regulations - This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Napthalene	CAS# 91-20-3
SARA 313	0.1% de minimis concentration This product has
CERCLA	100 lb final RQ; 45.4 Kg final RQ

*SARA 311/312 Hazardous categories – (Acute Health: No), (Chronic Health: No), (Fire: No), (Pressure: No), (Reactive: No)
*U.S. State Regulations - The following components appear on one or more of the following state hazardous substances lists:

Component	CAS#	CA	MA	MN	NJ	PA
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes

*California Prop 65 – WARNING! This product contains a chemical known to the state of California to cause cancer.

Naphthalene	CAS# 91-20-3	Carcinogen, initial date 4/19/02

*Canada Regulations - This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.
*Canadian WHMIS Ingredient Disclosure List (IDL) - Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on SDSs if they are included in products which meet

WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL:

Naphthalene	CAS# 91-20-3	1%

*Canadian WHMIS Information - WHMIS CLASSIFICATION: Causes skin irritation through prolonged or repeated skin contact.

*Component Analysis - Inventory

Component	CAS#	US	CA	EU	AU	PH	JP	KR	CN	NZ
Naphtha (petroleum), aromatic containing	68603-08-7	Yes	DSL	EIN	Yes	No	No	Yes	No	Yes

*HMIS Rating – Health *1 (skin), Flammability 1, Reactivity 0, Personal Protection B (minimum)

CAS# 1330-20-7 Xylene

*Listed on the following international chemical inventories: TSCA, EINECS, DSL, ENCS, PICCS, KECL, IECSC, AICS, NZloC, NECSI.

*Listed chemical on EPCRA (SARA Title III) Section 313 Toxic Chemicals.

*Listed as a hazardous substance under the US Clean Water Act Section 311 (Tables 116.4A and 117.3)

*A component of this product (p-Xylene CAS# 106-42-3) has a TSCA Section 12(b) Export Notification – Section 4 (1% De Minimus concentration).

*CERCLA RQ = 100#

*Listed under US Clean Air Act Section 111 SOCMI Intermediate or final VOC's (40 CFR 60.489)

*Listed on PA and MA Right To Know Lists.

CAS# 68187-76-8 Castor Oil, sulfonated, sodium salt

*Listed on the following international chemical inventories: TSCA, EINECS, DSL, ENCS, PICCS, KECL, IECSC, AICS, NZloC, NECSI.

*has a TSCA Section 12(b) Export Notification – Section 4 (1% De Minimus concentration)

CAS# 100-41-4 Ethyl benzene (as a component of xylene)

*Listed on the following international chemical inventories: TSCA, EINECS, DSL, ENCS, PICCS, KECL, IECSC, AICS, NZloC, NECSI.

*Listed chemical on EPCRA (SARA Title III) Section 313 Toxic Chemicals.

*CERCLA RQ = 1000#

*Listed as HAP under US Clean Air Act Section 12 (40 CFR 61)

*Listed under US Clean Air Act Section 111 SOCMI Intermediate or final VOC's (40 CFR 60.489)

*Listed as a pollutant under the US Clean Water Act Section 307.

*Listed as a hazardous substance under the US Clean Water Act Section 311 (Tables 116.4A and 117.3)
*Listed on PA and MA Right To Know Lists.
*California Prop 65 – WARNING! Ethyl Benzene is known to the State of California to cause cancer. www.P65Warnings.ca.gov
CAS# 13463-67-7 Titanium Dioxide
*Listed on the following international chemical inventories: TSCA, EINECS, DSL, ENCS, PICCS, KECL, IECSC, AICS, NZloC, TCSI.
*California Prop 65 – WARNING! Titanium Dioxide is known to the State of California to cause cancer. www.P65Warnings.ca.gov
*Listed on PA, MA & NJ Right to Know Lists.
CAS# 1333-86-4 Carbon
Listed on the following international chemical inventories: TSCA, DSL, EINECS.
*California Prop 65 – WARNING! Carbon Black (airborne, unbound particles of respirable size) is known to the State of California to cause cancer. www.P65Warnings.ca.gov
*Listed on PA, MA, RI, MN & NJ Right to Know lists.
CAS# 68953-58-2 Alkyl Quartenary Ammonium Bentonite
*US State Regulations – Listed on PA & NJ Right To Know Lists.
*California Prop 65 – WARNING! Contains crystalline silica, which is known by the State of California to cause cancer. www.P65Warnings.ca.gov
*Listed on TSCA & DSL.
CAS# 14808-60-7 crystalline silica (as a component of Alkyl Quartenary Ammonium Bentonite & talc)
Listed on EPA's TSCA inventory, the Canadian DSL, Australia's AICS, China's IECSC, Japan's MITI (registry # 1-548), Korea's KECI (registry # 9212-5667), New Zealand's HSNO, Philippines' PICCS, and Taiwan's CSNN inventories. Not classified as hazardous waste under RCRA, not classified as hazardous substance under CERCLA, does not meet de minimus concentrations for classification under SARA 302 or SARA 313, not processed with or does not contain Class I or Class II ozone depleting substances, is included in the FDA's list of substances that may be included in coatings used in food contact surfaces, (respirable particle size < 10 microns) considered "toxic" for purposes of the Massachusetts Toxic Use Reduction Act, listed as a hazardous substance by the Pennsylvania Worker and Community Right to Know Act.

- California Prop 65 lists crystalline silica (airborne particles of respirable size) as a substance known to the State of California to be a carcinogen.
- California Inhalation Reference Exposure Level (REL) established a chronic non-cancer effect REL of 3ug for respirable crystalline silica. A chronic REL is an airborne level of a substance at or below which no non-cancer health effects are anticipated in individuals indefinitely exposed to the substance at that level.

- Texas Commission on Environmental Quality: established chronic and acute Reference Values and short term and long term Effects Screening Levels for crystalline silica (quartz). The information can be accessed through www.tceq.texas.gov .

Talc CAS# 14807-96-6
*US State Regulations – Listed on Illinois, Massachusetts, Pennsylvania, New Jersey and Florida Right To Know Lists.

California Prop 65 - Warning: Talc is not listed, however the product supplied can expose you to chemicals including crystalline silica (airborne particles of respirable size) which has been identified by the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

HMIS Rating – Health 1 (chronic potential), Flammability 0, Reactivity 0 – Personal Protection: dust respirator, safety glasses or goggles, gloves.
Limestone CAS# 1317-65-3
*SARA 311/312 Codes: Considered by SARA (1986) to be a hazardous chemical and a delayed health hazard.
*TSCA listed
*HMIS Rating – Health 1, Flammability 0, Reactivity 0
Benzyl Alcohol CAS# 100-51-6
*US Federal Regulations - This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

*SARA 311/312 – Harmful if swallowed or inhaled, Causes serious eye damage.

*Listed on TSCA, DSL, EINECS, AICS, NZIoC, IECSC, ENCS, KEIC, PICCS Inventories.
*US State Regulations – on PA Right to Know list.
*HMIS Rating – Health 2, Flammability 1, Reactivity 0 – Personal Protection: C

16. Other Information

DISCLAIMER: THE INFORMATION HEREIN IS BASED ON THE DATA AVAILABLE AND IS BELIEVED TO BE ACCURATE, HOWEVER, THE MANUFACTURER MAKES NO WARRANTY EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS OBTAINED FROM THE USE THEREOF. ACCORDINGLY, WE ASSUME NO RESPONSIBILITY FOR INJURY FROM THE USE OF THIS PRODUCT.

HMIS Hazard Classification
Health - 2 Flammability - 1 Reactivity - 0 Personal Protective Equipment - G

N/A = Not Available
See Section 1 for date of preparation

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