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24 Hour Emergency No: (800) 424-9300

Safety Data Sheet

SECTION 1: Product Identification

Product Name: WoodEpox A
Product Code: WE A
Product Class: Filled Epoxy Compounds
Product Type: Adhesive Epoxy Paste

Recommended Use: Epoxy paste filler used to repair and restore damaged or deteriorated wood.

Manufacturer/Supplier:
Abatron Incorporated
5501 95th Ave., Kenosha WI, 53144
Phone: 262-653-2000
Email: info@abatron.com

Telephone:
For 24 Hour Emergency Assistance
Call CHEMTREC (800) 424-9300 (USA)
1-703-527-3887 (International)

SECTION 2: Hazards Identification

Emergency Overview: Warning. Irritant. Light, white paste/putty with almost no odor. Material may cause skin irritation and prolonged contact may lead to skin sensitization and allergic skin reaction. Material may cause eye irritation. Vapors from heated material may cause upper respiratory tract irritation. Material may be harmful if ingested in large amounts.

Hazard Pictograms

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing genetic defects
Toxic to aquatic life
Toxic to aquatic life with long-lasting effects

Precautionary Statements

Wear protective gloves/protective clothing/eye protection/face protection.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
IF eye irritation persists: Get medical advice/attention.
IF ON SKIN: wash with plenty of soap and water.
IF SKIN irritation or rash occurs: Get medical advice/attention.,
Wash contaminated clothing before reuse.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

SECTION 3: Composition/Information on Ingredients

Composition: The exact composition is a trade secret. Proprietary epoxy and filler blend.

Hazardous Ingredients

Substance Name	CAS Number	Concentration (%)	Hazard Classification
Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy resin	25068-38-6	60-100%	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Aquatic Acute 2 H401 Aquatic Chronic 2 H411
2,3-epoxypropyl o-tolyl ether	2210-79-9	1–10%	Skin Irrit. 2 H315 Skin Sens. 1 H317 Muta. 2 H341 Aquatic Chronic 2 H411
Titanium Dioxide*	13463-67-7	< 5%	Carc. 2 H351

*Titanium Dioxide is considered a carcinogen as airborne, unbound particles of respirable size. The titanium dioxide in this product is bound and not airborne.

SECTION 4: First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes and check for and remove contacts. Hold eyelids apart to rinse entire eye surface. Seek medical attention if irritation persists. Continue washing if medical attention is not immediately available.

Skin Contact: Wipe off excess immediately and wash affected area with soap and water for at least 15 minutes. Remove contaminated clothing or shoes and seek medical attention if irritation persists. Continue washing if irritation persists.

Inhalation: If inhaled, remove victim to fresh air and consult medical personnel immediately. If person is not breathing or breathing is irregular, provide oxygen with the aid of trained personnel only. If unconscious, place in recovery position and seek medical attention immediately.

Ingestion: Wash out mouth with small amounts of water and remove person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention immediately. If unconscious, place in recovery position. Never give anything by mouth to an unconscious person.

Primary Routes of Entry: Eye and skin contact, breathing vapors.

SECTION 5: Fire-Fighting Measures

Flash Point: >450 ºF (>232 °C)
Method Used: ASTM D3278-96

Flammable Limits (STP In Air)
LFL/UFL: Not Determined

Suitable Extinguishing Media: Water fog, alcohol-resistant foam, CO_2 and dry chemicals

Unsuitable Extinguishing Media: None known

Specific Hazards and Procedures: Remove all persons from the vicinity. Burning material may generate large amounts of vapor and produce noxious and toxic fumes. Combustion and/or decomposition products include carbon oxides.

Specific Fire Fighting Equipment: Firefighters should wear a self-contained breathing apparatus and personal protective clothing.

Hazardous Combustion Products: Burning material may generate large amounts of vapor and produce noxious and toxic fumes. Combustion and/or decomposition products include carbon monoxide, carbon dioxide and halogenated compounds.

SECTION 6: Accidental Release Measures

Personal Protective Measures: Provide adequate ventilation and keep all unnecessary and unprotected personnel from entering the area. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Wear an appropriate respirator when ventilation is inadequate. Use appropriate safety equipment before taking any action.

Methods and Material for Containment and Cleaning Up: Absorb spill with an inert material such as sand if necessary. Scrape up and place in appropriate waste disposal container. Remove residual resin with non-flammable solvent and flush contaminated area with hot water. Do not dump waste into any sewers, on the ground or into any body of water. Avoid dispersal of spilled material and runoff. All disposal methods must be compliant with all Federal, State, and local laws and regulations.

SECTION 7: Handling and Storage

Precautions for Safe Handling: Wear safety glasses. Do not get in eyes, on skin or on clothing. Avoid any forms of ingestion. Do not breathe vapor. Use only with good ventilation or use suitable respiratory protection. Persons with a history of skin sensitization problems should avoid contact with any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage, Including Any Incompatibilities: Store in tightly sealed, original container in a cool, dry place protected from direct sunlight. Keep container sealed until use. Keep containers tightly closed when not in use. Store away from incompatible materials and food and drink. Use appropriate containment to avoid environmental contamination.

SECTION 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

OSHA	PEL/TWA	None available for formulated product.
ACGIH	TLV/TWA	None available for formulated product.

Chemical	CAS #	OSHA PEL 8-hr TWA (mg/m^3) inhalable dust	ACGIH TLV 8-hr TWA (mg/m^3) total inhalable dust
Titanium dioxide	13463-67-7	15	10

Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If user operations generate vapor, process enclosures or local exhaust may be necessary.

Individual Protection Measures

Eye/Face Protection: Use properly fitted safety glasses. If vapor exposure causes eye discomfort, a full-face respirator may be necessary.

Skin Protection: Wear protective clothing suitable to the conditions of use. Clean, body-covering clothing and protective gloves should be worn at all times when handling the product.

Respiratory Protection: If local exhaust ventilation is inadequate, use a properly fitted, air-purifying mask suitable to the level of anticipated exposure.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

SECTION 9: Physical and Chemical Properties

Physical State: White, light-weight thixotropic paste
Odor Threshold: Not Determined
Melting Point/Freezing Point: Not Determined
Flash Point: >450 ºF (>232 °C)
Flammability: Non-flammable
Vapor Pressure: Not Determined
Relative Density (water = 1): 0.4 – 0.6 @ 25°C
Partition Coefficient: Not Determined
Decomposition Temperature: Not Determined
Explosive Properties: None

Odor: Faint odor
pH: Not Applicable
Boiling Point: Not Applicable
Evaporation Rate: Not Determined
Explosive Limits: Not Determined
Vapor Density (air = 1): Not Applicable
Solubility in Water: None
Auto-Ignition Temp.: Not Determined
Viscosity: Not Applicable
Oxidizing Properties: None

Other Information: None **Percent Volatiles by Volume :** <0.1

SECTION 10: Stability and Reactivity

Reactivity: Product reacts exothermically with amine and amide-based curing agents. Product by itself is stable and relatively non-reactive under normal conditions of use, storage and shipping.

Chemical Stability: Product is stable under normal conditions. Prolonged excessive heat may cause partial degradation.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid contact with incompatible materials. Avoid excessive heat. Store between 60-90°F.

Incompatible Material: Avoid contact with strong acids or bases in bulk and strong oxidizing materials. Avoid bulk contact with amines, amides and other curing agents. Material reacts with considerable heat release with some curing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid smoke and fumes

Hazardous Polymerization: Will not occur by itself, but hazardous polymerizations may occur with aliphatic amines in masses greater than one pound with considerable heat buildup.

SECTION 11: Toxicological Information

Acute Toxicity: The formulated product is not considered to be acutely toxic.

Component	Oral LD50	Dermal LD 50	Inhalation LC 50
Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy	11.4 g/kg (rat)	>20g/kg (rabbit)	-
resin O-Cresyl Glycidyl Ether	5.8 g/kg (rat)	>2000 mg/kg (rabbit)	1220 ppm (rat, 4 hr)

Skin Corrosion/Irritation: The formulated product is considered a moderate skin irritant.

Component	Species	Skin Exposure	Observation
Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy resin	Rabbit	100 mg	Mild Irritant
Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy resin	Rabbit	20 mg, 24 hours	Moderate Irritant

Serious Eye Damage/Irritation: The formulated product is considered a severe eye irritant.

Component	Species	Eye Exposure	Observation
Reaction product: Bisphenol-A-	Rabbit	500 µl, 24 hours	Moderate Irritant

(Epichlorhydrin); epoxy resin Reaction product: Bisphenol-A- (Epichlorhydrin); epoxy resin	Rabbit	2 mg, 24 hours	Severe Irritant

Respiratory or Skin Sensitization: Sensitization is possible through skin contact.

Germ Cell Mutagenicity: Component 2,3-epoxypropyl o-tolyl ether, CAS # 2210-79-9, is a suspect mutagen.

Carcinogenicity:

Chemical	CAS #	Concentration	IARC	NTP	OSHA	ACGIH	
Titanium dioxide	13463-67-7	1 – 5 %	2B	Yes			

IARC Category 2B: Component titanium dioxide is a possible carcinogen

California Proposition 65: For titanium dioxide only airborne, unbound particles of respirable size are listed as known carcinogens. Titanium dioxide is in the bound state in this product.

Reproductive Toxicity: Not available

STOT-Single Exposure

Component	Category	Target Organ
Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy	3	Respiratory tract irritation
resin O-Cresyl Glycidyl Ether	3	Respiratory tract irritation
O-Cresyl Glycidyl Ether	2	Eyes

STOT-Repeat Exposure

Component	Category	Target Organ
Reaction product: Bisphenol-A- (Epichlorhydrin); epoxy resin	3	Respiratory tract irritation
O-Cresyl Glycidyl Ether	1	Skin, Respiratory tract
O-Cresyl Glycidyl Ether	2	blood stream, CNS

Routes of Exposure: Skin contact, eye contact, vapor inhalation.

Primary Symptoms: Material is a severe eye and skin irritant and moderate skin sensitizer. Prolonged exposure can cause dryness and cracking of the skin. Material vapor can be irritating to the respiratory and digestive tracts, and may be harmful if swallowed or inhaled in large amounts.

Effects of Overexposure: Overexposure to vapors can cause dizziness, headaches and other central nervous system effects.

SECTION 12: Ecological Information

Acute (short-term) toxicity: The formulated product is moderately toxic to aquatic organisms on an acute basis.

Component: Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy resin

Species	Result	Exposure
Oncorhynchus mykiss (rainbow trout)	LC50: 2 mg/L	96 hour; semi-static
Daphnia magna (water flea)	EC50: 1.8 mg/L	72 hour; static
Scenedesmus capricornutum (fresh water algae)	ErC50: 11 mg/L	72 hour; growth rate inhibition
Bacteria	IC50: >42.6 mg/L	18 hour; respiration rates

Chronic (long-term) toxicity: The formulated product is moderately toxic to aquatic organisms on a chronic basis.

MATC (Maximum Acceptable Toxicant Level)
Component: Reaction product: Bisphenol-A-(Epichlorhydrin); epoxy resin

Species	Result	Exposure
Daphnia magna (water flea)	0.55 mg/L	21 day; semi-static; number of offspring

Persistence and Degradability: The major component is not readily biodegradable.

Bioaccumulative potential: Not Available

Mobility in soil: Not Available

SECTION 13: Disposal Considerations

Disposal considerations apply only to the product as shipped in its original container.

Waste Disposal: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer. The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Packaging Methods of Disposal: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special Precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal considerations apply only to the product as shipped in its original container.

SECTION 14: Transportation Information

US DOT: Not regulated for transport

UN Number: Not Applicable

UN Proper Shipping Name: Not Applicable
Hazard Class: Not Applicable
Packing Group: Not Applicable
Marine Pollutant: Not Applicable

In quantities not to exceed 5kg/5L per single or inner packaging, marine pollutants are not subject to regulation by ground, air, or vessel. See 49 CFR 171.4(c)(2).

SECTION 15: Regulatory Information

HCS Classification: Irritating material, Sensitizing material

TSCA Status: All materials are either included on or exempt from the TSCA Inventory of Chemical Substances. This product does not contain any components subject to TSCA 12(b) export notification.

Global Chemical Inventory Status: All materials are either listed, compliant with or exempt from listing on the following global inventories:

Country/Region	Inventory Name	Listed?
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
EU	European List of Existing Commercial Chemical Substances (EINECS)	Yes
EU	European List on 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 of Chemicals (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
USA	Toxic Substances Control Act Inventory (TSCA)	Yes

Other Regulations: This product contains no Extremely Hazardous Substances, EPCRA Sec.311, Appendix A and B, or chemicals listed in EPCRA Sec. 313, Table II.

California Proposition 65: This product is not known to contain any chemicals known to the State of California to cause cancer or reproductive harm. For titanium dioxide, only airborne, unbound particles of respirable size are listed as known carcinogens. Titanium dioxide is in the bound state in this product.

SECTION 16: Other Information

HMIS Rating

The Hazardous Materials Identification System (HMIS) is a rating system with 0 representing a minimal risk or hazard and 4 representing a significant risk or hazard.

Health	2*
Flammability	1
Physical Hazard	0

SDS History

Version:	3.0
Revision Date:	December 5, 2019
Previous Update:	August 4, 2015
Creation Date:	April 1, 2000
Revision Notes:	

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.

SECTION 1: Product Identification

Product Name: WoodEpox B
Product Code: WE B
Product Class: Formulated epoxy co-reactant
Product Type: Epoxy Curing Agent

Recommended Use: Epoxy resin paste hardener used to repair and restore damaged or deteriorated wood.

Manufacturer/Supplier:
Abatron, Inc.
5501 95th Ave., Kenosha WI 53144
Phone: 262-653-2000
Email: info@abatron.com

Telephone:
For 24 Hour Emergency Assistance
Call CHEMTREC (800) 424-9300(USA)
1-703-527-3887 (International)

SECTION 2: Hazards Identification

Emergency Overview: Warning. Irritant. Light, tan colored paste/putty with a slight ammonia odor. Material can cause skin irritation and prolonged contact may lead to skin sensitization and allergic skin reaction. Material may cause eye irritation. Vapors from heated material may cause upper respiratory tract irritation. Material may be harmful if ingested in large amounts.

Hazard Pictograms

Signal Word
Warning
Hazard Statements

Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
Very toxic to aquatic life with long-lasting effects

Precautionary Statements

Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid contact during pregnancy/while nursing.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash contaminated clothing before reuse.
IF ON SKIN: wash with plenty of soap and water.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF SKIN irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
IF eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Avoid release to the environment. Collect spillage.
Dispose of contents/container to be specified in accordance with regulations.

SECTION 3: Composition/Information on Ingredients

Composition: The exact composition is a trade secret. Amidoamine and filler blend.

Hazardous Ingredients

Substance Name	CAS Number	Concentration (%)	Hazard Classification
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	68082-29-1	20 – 60%	Eye Dam. 1 H318 Skin Sens. 1 H317 Skin Irrit. 2 H315 Aquatic Chronic 2 H411
Phenol, 4-nonyl-, branched	84852-15-3	1–20%	Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Skin Corr. 1B H314 Repr. 2 H361fd Acute Tox. 4 H302
Triethylenetetramine, propoxylated	26950-63-0	1–10%	Skin Sens. 1 H317 Skin Corr. 1B H314 Eye Irrit. 2 H319 Acute Tox. 4 H312 Aquatic Chronic 3 H412
Triethylenetetramine	112-24-3	1–10%	Eye Dam. 1 H318 Skin Sens. 1 H317 Skin Corr. 1B H314 Acute Tox. 4 H302 Acute Tox. 4 H312 Aquatic Chronic 3 H412
Titanium Dioxide, rutile*	1317-80-2	1–5%	Carc. 2 H351

*Titanium Dioxide is considered a carcinogen as airborne, unbound particles of respirable size. The titanium dioxide in this product is bound and not airborne.

SECTION 4: First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes and check for and remove contacts. Do not delay. Hold eyelids apart to rinse entire eye surface. Seek medical attention if irritation persists. Continue washing if medical attention is not immediately available.

Skin Contact: Wipe off excess immediately and wash affected area with soap and water for at least 15 minutes. Remove contaminated clothing or shoes and seek medical attention if irritation persists. Continue washing if irritation persists.

Inhalation: If inhaled, remove victim to fresh air and consult medical personnel immediately. If person is not breathing or breathing is irregular, provide oxygen with the aid of trained personnel only. If unconscious, place in recovery position and seek medical attention immediately.

Ingestion: Wash out mouth with small amounts of water and remove person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Prevent aspiration of vomit. Seek medical attention immediately. Turn victim's head to one side. If unconscious, place in recovery position. Never give anything by mouth to an unconscious person.

Primary Routes of Entry: Eye and skin contact, breathing vapors.

SECTION 5: Fire-Fighting Measures

Flash Point: >450 ºF (>232 °C)
Method Used: ASTM D3278-96

Flammable Limits (STP In Air)
LFL/UFL: Not Determined

Suitable Extinguishing Media: Water fog, alcohol-resistant foam, CO_2 and dry chemicals such as sand and powdered limestone

Unsuitable Extinguishing Media: None known

Specific Hazards and Procedures: Heated containers may burst. Ammonia gas may be liberated at high temperatures. Incomplete combustion may result in the formation of toxic nitrogen oxide compounds (NOx) and carbon monoxide. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated. The material is toxic to aquatic life. Fire residues and water contaminated with this material must be contained and prevented from entering waterways, sewers or drains.

Hazardous Combustion Products: Burning material may generate ammonia gas and noxious and toxic fumes. Combustion and/or decomposition products include carbon monoxide and nitrogen oxides (NOx).

SECTION 6: Accidental Release Measures

Personal Protective Measures: Provide adequate ventilation and avoid all personnel contact. Wear suitable protective clothing. Do not touch or walk through spilled material. Avoid breathing vapor or

mist. Wear an appropriate respirator when ventilation is inadequate. Use appropriate safety equipment before taking any action.

Methods and Material for Containment and Cleaning Up: Remove container from spill area and scrape up material and place in appropriate waste disposal container. Remove residual resin with non-flammable solvent and flush contaminated area with hot water. Do not dump waste into any sewers, on the ground or into any body of water. Avoid dispersal of spilled material and runoff. All disposal methods must be compliant with all Federal, State, and local laws and regulations.

SECTION 7: Handling and Storage

Precautions for Safe Handling: Wear safety glasses. Do not combine this product with sodium nitrite or other nitrosating agents. Suspected cancer-causing nitrosamines could be formed. Avoid contact with acids, oxidizers, acrylates, alcohols, aldehydes, ketones and halogenated hydrocarbons. Avoid contact with metal such as copper, copper alloys, brass and bronze. Wear personal protection equipment including safety glasses. Do not get in eyes, on skin or on clothing. Avoid any forms of ingestion. Do not breathe vapor, mist or spray. Use only with good ventilation or use suitable respiratory protection. Persons with a history of skin sensitization problems should avoid contact with any process in which this product is used. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage, Including Any Incompatibilities: Store in tightly sealed, original container in a cool, dry and well-ventilated place protected from direct sunlight. Keep container sealed until use. Keep containers tightly closed when not in use. Store away from incompatible materials such as acids and food and drink. Use appropriate containment to avoid environmental contamination. Product may freeze with extended exposure to low temperatures. If this occurs, warm the product to 100 – 140°F (38 – 60°C) for one hour or longer and stir until limpid.

SECTION 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

OSHA PEL/TWA ACGIH	None available for formulated product.
TLV/TWA	None available for formulated product.

Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If user operations generate vapor, process enclosures or local exhaust may be necessary.

Individual Protection Measures

Eye/Face Protection: Use properly fitted safety glasses. If vapor exposure causes eye discomfort, a full-face respirator may be necessary.

Skin Protection: Wear protective clothing suitable to the conditions of use. Clean, body-covering clothing and protective gloves should be worn at all times when handling the product.

Respiratory Protection: If local exhaust ventilation is inadequate, use a properly fitted, air-purifying mask suitable to the level of anticipated exposure.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

SECTION 9: Physical and Chemical Properties

Physical State: Tan, light-weight thixotropic paste
Odor Threshold: Not Determined
Melting Point/Freezing Point: Not Determined
Flash Point: >450°F (>232 °C)
Flammability: Non-flammable
Vapor Pressure: Not Applicable
Relative Density (water = 1): 0.3 – 0.5@ 21°C
Partition Coefficient: Not determined
Decomposition Temperature: Not Determined
Explosive Properties: None

Odor: Slight ammonia or amine
pH: Not Applicable
Boiling Point: Not Applicable
Evaporation Rate: Not Applicable
Explosive Limits: Not Determined
Vapor Density: Not Applicable
Solubility in Water: Negligible
Auto-Ignition Temp.: Not Determined
Viscosity: Not Applicable
Percent Volatiles by Volume: <0.1%

SECTION 10: Stability and Reactivity

Reactivity: Product reacts exothermically with epoxide resins. Product by itself is stable and relatively non-reactive under normal conditions of use, storage and shipping.

Chemical Stability: Product is stable under normal use and temperature conditions. Prolonged excessive heat may cause partial degradation.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid contact with incompatible materials. Avoid excessive heat. Store between 60-90° F.

Incompatible Materials: Avoid contact with metal such as copper, copper alloys, brass and bronze. Avoid bulk contact with epoxides. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Avoid contact with sodium hypochlorite, mineral acids, organic acids and any oxidizing agents. Reactions with peroxides may be violent with possibility of an explosion. Avoid nitrous acid and other nitrosating agents as contact with nitrogen containing materials can produce N-Nitrosamines.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid smoke and fumes

Hazardous Polymerization: Will not occur by itself, but hazardous polymerizations may occur with aliphatic amines in masses greater than one pound with considerable heat buildup.

SECTION 11: Toxicological Information

Acute Toxicity: The formulated product is not considered to be acutely toxic.

Component	Oral LD50	Dermal LD 50	Inhalation LC 50
Triethylenetetramine	2.5 g/kg (rat)	550 mg/kg (rabbit)	-

Skin Corrosion/Irritation: The formulated product is considered a severe skin irritant. Brief contact may cause skin burns.

Serious Eye Damage/Irritation: The formulated product is considered a severe eye irritant. Exposure may cause severe irritation with corneal injury which may result in permanent impairment of vision.

Respiratory or Skin Sensitization: Sensitization is possible through skin contact. Sensitization has occurred in lab animals after repeated exposures.

Germ Cell Mutagenicity: Not available

Carcinogenicity:

Chemical	CAS #	Concentration	IARC	NTP	OSHA	ACGIH
Titanium dioxide	13463-67-7	1–5%	2B		Yes	

IARC Category 2B: Component titanium dioxide is a possible carcinogen

California Proposition 65: For titanium dioxide only airborne, unbound particles of respirable size are listed as known carcinogens. Titanium dioxide is in the bound state in this product.

Reproductive Toxicity: The component Phenol, 4-nonyl-, branched, CAS # 84852-15-3, is suspected of damaging fertility or the unborn child

STOT-Single Exposure: Not Available

STOT-Repeat Exposure: Not Available

Routes of Exposure: Skin contact, eye contact, vapor inhalation.

Primary Symptoms: Material is a severe eye and skin irritant and moderate skin sensitizer. Prolonged exposure can cause dryness and cracking of the skin. Material vapor can be irritating to the respiratory and digestive tracts, and may be harmful if swallowed or inhaled in large amounts.

Effects of Overexposure: Overexposure to vapors can cause dizziness, headaches and other central nervous system effects.

SECTION 12: Ecological Information

Acute (short-term) toxicity: The formulated product is toxic to aquatic organisms on an acute basis.

Component: triethylenetetramine (following OECD Test Guidelines 203, 202 and 201 as appropriate)

Species	Result	Exposure
Pimephales promelas	LC50: 495 mg/L	96 hour; semi-static
Daphnia magna (water flea)	EC50: 31.1 mg/L	48 hour
Freshwater algae	IC50: 2.5 mg/L	72 hour

Chronic (long-term) toxicity: The formulated product may cause long-term effects in the aquatic environment.

Persistence and Degradability: No information for the product itself.

Bioaccumulative potential: Partition coefficient n-octanol /water (log Pow): Not Available

Mobility in soil: Not Available

SECTION 13: Disposal Considerations

Disposal considerations apply only to the product as shipped in its original container.

Waste Disposal: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer. The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transportation Information

US DOT: Not regulated for transport

UN Number:	Not Applicable
UN Proper Shipping Name:	Not Applicable
Hazard Class:	Not Applicable
Packing Group:	Not Applicable
Marine Pollutant:	Not Applicable

In quantities not to exceed 5kg/5L per single or inner packaging, marine pollutants are not subject to regulation by ground, air, or vessel. See 49 CFR 171.4(c)(2).

SECTION 15: Regulatory Information

HCS Classification: Irritating material, Sensitizing material

TSCA Status: All materials are either included on or exempt from the TSCA Inventory of Chemical Substances. This product does not contain any components subject to TSCA 12(b) export notification.

EPCRA Sec. 311/312 Chemicals: None.

EPCRA Sec. 313 Chemicals:

Chemical	CAS #	Concentration
4-Nonylphenol, branched	84852-15-3	15 – 20%

Global Chemical Inventory Status: All materials are either listed, compliant with or exempt from listing on the following global inventories:

Country/Region	Inventory Name	Listed?
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
EU	European List of Existing Commercial Chemical Substances (EINECS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
USA	Toxic Substances Control Act Inventory (TSCA)	Yes

SARA 313 List:

Other Regulations: This product contains no Extremely Hazardous Substances, EPCRA Sec.311, Appendix A and B, or chemicals listed in EPCRA Sec. 313, Table II.

California Proposition 65: This product is not known to contain any chemicals known to the State of California to cause cancer or reproductive harm. For titanium dioxide, only airborne, unbound particles of respirable size are listed as known carcinogens. Titanium dioxide is in the bound state in this product.

SECTION 16: Other Information

HMIS Rating: The Hazardous Materials Identification System (HMIS) is a rating system with 0 representing a minimal risk or hazard and 4 representing a significant risk or hazard.

Health	2*
Flammability	1
Physical Hazard	0

SDS History:

Version:	3.0
Revision Date:	December 6, 2019
Previous Update:	August 4, 2015
Creation Date:	April 1, 2000
Revision Notes:	

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