SAFETY DATA SHEET

Date issued : 02/24/2015
SDS number : TC-1618 PART A
Date revised : 03/13/2025
Revision number : 3

TC-1618 PART A

1. Identification

Product identifier: TC-1618 PART A
Relevant identified uses: Epoxy resin

Manufacturer / Supplier
BJB Enterprises, Inc.
14791 Franklin Avenue
Tustin, CA 92780
Emergency Phone: (714) 734-8450

Emergency telephone number (24 hour)
CHEMTREC (USA & Canada): (800) 424-9300
or (703) 527-3887 CCN# 2820

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Skin Irritation, Category 2
Eye Irritation, Category 2A
Skin Sensitization, Category 1

Label elements

Exclamation mark

Signal word: WARNING

Hazard statement(s)

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H317: May cause an allergic skin reaction.

Precautionary statement(s)

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

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.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

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Chemical name	% w/w	CAS No.
Butyl 2,3-epoxypropyl ether	30 - 60	28064-14-4
Barium sulfate	10 - 30	7727-43-7
Aluminum	10 - 30	7429-90-5
1,4-Cyclohexanedimethanol diglycidyl ether	1 - 5	14228-73-0
Titanium dioxide (TiO2)	0.5 - 1.5	13463-67-7
Carbon black	0.1 - 1	1333-86-4
Silicon dioxide	0.1 - 1	7631-86-9

4. First-aid measures

Eye: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical advice/attention.

Skin: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical advice/attention if irritation or rash develops. Wash clothing before reuse.

Ingestion: If swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Provided the patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. Seek medical advice/attention if breathing becomes difficult or if respiratory irritation develops.

Indication of immediate medical attention and special treatment needed, if necessary: Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

5. Fire-fighting measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, or foam.

Hazardous combustion products: Carbon monoxide, carbon dioxide, aldehydes, and phenolics.

Fire fighting procedures: Cool fire exposed containers with water spray. Remove containers from the fire area if possible. Do not release runoff from fire control methods to sewers or waterways.

Fire fighting equipment: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and consider use of unmanned hose holders or monitor nozzles for fighting large fires.

6. Accidental release measures

Small spill: Evacuate the area. Clean-up should only be performed by trained personnel. People dealing with a major spill should wear full protective clothing including appropriate respiratory protection. Prevent product spill from entering sewers or waterways. Neutralize small spills with a decontaminant.

Large spill: Contain and absorb large spills onto an inert, non-flammable adsorbent carrier (such as earth or sand). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spill area clean with a liquid decontaminant. Remove and properly dispose of residues. Notify applicable government authorities if release is reportable. (See CERCLA in Section 15).

Environmental precautions

Water spill: Do not discharge into drains, surface waters, or groundwater.

General procedures: Refer to section 8 of SDS for personal protection details.

Release notes: Composition and extent of any spill should be evaluated against local regulations and reported to the proper agencies, if necessary.

7. Handling and storage

General procedures: Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Avoid breathing vapor over open containers. Avoid open container exposure to damp air. Avoid breathing aerosols, mists, and vapors.

Precautions for safe handling: Use appropriate personal protective equipment as specified in Section 8. Handle in a well-ventilated area. Handle and use in a manner consistent with good industrial/manufacturing techniques and practices.

Conditions for safe storage: Store in a dry and well-ventilated place, away from excessive heat, in original or similar container. Avoid unnecessary contact. Protect from freezing. Containers should be tightly sealed to prevent contamination with foreign materials.

Storage temperature: 65-80°F (18-27°C)

Shelf life: 12 months from date of shipment under manufacturers recommended storage conditions.

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8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
Barium sulfate	**OSHA PEL**	**TWA**	- [1]	15T 5R [1]
		STEL	-	-
	ACGIH TLV	**TWA**	-	10
		STEL	-	-
	NIOSH IDLH	**TWA**	- [1]	10T 5R [1]
	NIOSH REL	**STEL**	-	-
Aluminum	**OSHA PEL**	**TWA**	- [1]	15T 5R [1]
		STEL	-	-
	ACGIH TLV	**TWA**	- [1]	10T 1R [1]
		STEL	-	-
	NIOSH REL	**TWA**	- [1]	10T 5R [1]
		STEL	-	-
Titanium dioxide (TiO2)	**OSHA PEL**	**TWA**	- [2]	15 [2]
	ACGIH TLV	**TWA**	-	10
Carbon black	**OSHA PEL**	**TWA**	-	3.5
	ACGIH TLV	**TWA**	-	3.5
	NIOSH REL	**TWA**	-	3.5
Silicon dioxide	**OSHA PEL**	**TWA**	20 mppcf [3]	80 %SiO2 [3]
	NIOSH REL	**TWA**	-	6

Footnotes:
1. T = Total dust, R = Respirable fraction
2. Total dust
3. Mineral dusts

Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye / face protection: Safety goggles or glasses are recommended. Plastic face shields should be used for complete face protection to protect against possible splashing or spraying of material. ANSI Z87.1 or approved equivalent.

Skin protection - hand protection: Chemical-resistant gloves and chemical goggles, face-shield, and synthetic apron or coveralls should be used to prevent contact with eyes, skin, or clothing. Wear nitrile or neoprene gloves. Chemical resistant gloves lined with polyethylene offer maximum protection.

Respiratory protection: Exhaust ventilation recommended. An organic vapor cartridge or fresh air supplied respirator (NIOSH approved) may be necessary for certain applications. Consider the type of application, environmental concentrations, and other materials being used concurrently when determining respirator use and selection. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Skin protection - other: Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.

Occupational hygiene practices: Contaminated clothing should be changed and washed before reuse. Eating, drinking and smoking in immediate work area should be prohibited. Wash hands before eating.

Other use precautions: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Training is

important. Follow all label precautions.

9. Physical and chemical properties

Physical state: Paste-Like

Color: Gray

Odor: Slight

pH: No data available

Initial boiling point and boiling range: No data available

Flash point: > 93.3°C (200°F) Closed Cup

Vapor pressure: No data available

Relative vapor density: No data available

Relative density: 1.74 (water=1) at 25°C (77°F)

Solubility: Insoluble

Dynamic viscosity: 155000 Centipoise at 25°C (77°F)

Percent volatiles: Nil

VOC content: Nil

10. Stability and reactivity

Reactivity: Hazardous reactions will not occur under normal transport or storage conditions.

Chemical stability: This product is stable under normal ambient conditions of temperature and pressure.

Conditions to avoid: High temperatures and sources of ignition.

Possibility of hazardous reactions: Product can undergo hazardous polymerization. This product will autopolymerize at very high temperatures.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, aldehydes, and phenolics.

Incompatible materials: Strong acids, bases, oxidizing agents, and amines.

11. Toxicological information

Acute toxicity

Chemical name	LD_{50} (oral) mg/kg(rat)	LD_{50} (dermal) mg/kg(rabbit)	LC_{50} (inhalation) mg/l
Butyl 2,3-epoxypropyl ether	> 2000 mg/kg Rat	> 2000 mg/kg Rabbit	No data available
Barium sulfate	No data available	No data available	No data available
Aluminum	No data available	No data available	No data available
1,4-Cyclohexanedimethanol diglycidyl ether	2450 mg/kg Rat	2500 mg/kg Rabbit	No data available
Titanium dioxide (TiO2)	> 10000 mg/kg Rat	No data available	> 6.82 mg/l Rat (4 h)
Carbon black	> 8000 mg/kg Rat	No data available	No data available
Silicon dioxide	> 3300 mg/kg Rat	> 5000 mg/kg Rat	0.139 mg/l Rat (4 h)

Skin corrosion / irritation: Causes skin irritation.

Serious eye damage / irritation: Causes serious eye irritation.

Respiratory or skin sensitization: May cause sensitization by skin contact.

Germ cell mutagenicity: No data available

Carcinogenicity

Chemical name	IARC
Titanium dioxide (TiO2)	2B
Carbon black	2B
Silicon dioxide	3

Reproductive toxicity: No data available

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Specific Target Organ Toxicity - single exposure: No data available

Specific Target Organ Toxicity - repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological information

Ecotoxicological information: No specific ecological data are available for this product. Refer to Section 6 for information regarding accidental release and Section 15 for regulatory reporting information.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Environmental data: No data available

Mobility in soil: No data available

13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protections and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

USA Department of Transport Regulations (DOT): Not Regulated

ICAO / IATA - air

UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s. **(See Note)**

Technical name: Epoxy phenol novolac resin

UN number: UN3082

Transport hazard class(es): 9

Packing group: III

ERG: 9L

Hazard label: Class 9 (miscellaneous hazardous materials)

Note: Only regulated for bulk and vessel shipments, per 49CFR171.4 (c) Exceptions. Except when all or part of the transportation is by vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packagings transported by motor vehicle, rail car, or aircraft.

IMO / IMDG - sea

UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Technical name: Epoxy phenol novolac resin

UN number: UN3082

Transport hazard class(es): 9

Packing group: III

EmS: F-A, S-F

Hazard label: Class 9 (miscellaneous hazardous materials)

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Refer to Section 2 for hazard classification.

313 reportable ingredients: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

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EPCRA Section 313 Toxic Chemicals

Chemical name	% w/w	CAS No.	Comments
Aluminum	10 - 30	7429-90-5	Fume or Dust

CERCLA Hazardous Substances and Reportable Quantities (RQ)

CERCLA regulatory: This product does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

TSCA (The Toxic Substances Control Act)

TSCA regulatory: This product does not contain any substances subject to TSCA Section 12(b) export notification.

TSCA Status: This product or its components are listed in or exempt from the TSCA inventory requirements.

Occupational safety and health administration (osha)

29 cfr1910.119---process safety management of highly hazardous chemicals: None of the chemicals in this product are considered highly hazardous by OSHA.

California Proposition 65: ⚠ **WARNING:** This product can expose you to chemicals including [see table below], which is [are] known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

Chemical name	% w/w	Listed
Titanium dioxide (TiO2)	0.5 - 1.5	• Cancer
Carbon black	0.1 - 1	• Cancer

USA OSHA Hazard Communication Standard (29CFR 1910.1200): The contents of the SDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

CANADA

WHMIS Regulatory Status: This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL): All components in this product are listed in or exempted from the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

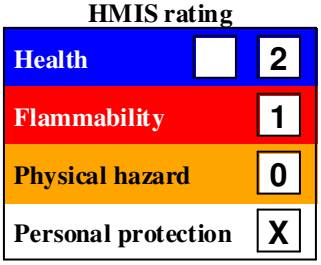
16. Other information

Reason for issue: Revision

Date revised: 03/13/2025

Revision summary: This SDS replaces the 03/12/2021 SDS.

HMIS rating



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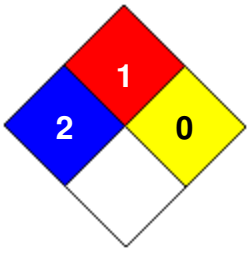

HMIS ratings notes: Personal Protection: See Section 8

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