



PRITHVI ALUSHIELD EP (2-PACK)

Category: Two-pack epoxy polyamide protective coating — epoxy resin base component

SECTION 1 — IDENTIFICATION

Product Name	PRITHVI ALUSHIELD EP (2-Pack)
Recommended Use	Industrial protective coating. Base (resin) component of a two-pack epoxy polyamide paint system; to be mixed with Hardener in the specified ratio immediately before application.
Restrictions on Use	For industrial / professional application only — not for consumer or retail use. Not to be applied as a single-pack product.

SECTION 2 — HAZARD(S) IDENTIFICATION

GHS Classification	Skin Irritation — Category 2 Skin Sensitisation — Category 1 Serious Eye Damage / Eye Irritation — Category 2 Hazardous to the Aquatic Environment (Chronic) — Category 2
Classification Pending Confirmation	Flammable Liquid — Category 3. The source data is internally inconsistent: a flash point of 480 °F (249 °C, Pensky-Martens) is reported alongside > 30 °C (closed cup), while the material is declared for transport as UN 1263 Class 3 PG III.
Signal Word	Warning

Hazard Statements

- H315 — Causes skin irritation
- H317 — May cause an allergic skin reaction
- H319 — Causes serious eye irritation
- H411 — Toxic to aquatic life with long lasting effects

Precautionary Statements

- P261 — Avoid breathing vapours / mists / spray
- P273 — Avoid release to the environment
- P280 — Wear protective gloves / eye protection / face protection
- P302 + P352 — IF ON SKIN: wash with plenty of soap and water
- P305 + P351 + P338 — IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
- P333 + P313 — If skin irritation or rash occurs: get medical advice / attention
- P391 — Collect spillage
- P501 — Dispose of contents and container in accordance with local regulations



Pictogram(s) Required: GHS07 (Exclamation Mark), GHS09 (Environment)

Other Hazards: Contact with hot or preheated material can cause thermal burns; vapours or mists from heated material can irritate the respiratory passages.

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name / Ingredient	CAS No.	Conc. (% w/w)	GHS Classification
Reaction product: bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight ≤ 700)	25068-38-6	≤ 100	Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); Skin Sens. 1 (H317); Aquatic Chronic 2 (H411)

SECTION 4 — FIRST-AID MEASURES

Inhalation	Remove the person from exposure to fresh air. Restore breathing if necessary. Keep the person warm and at rest. Obtain medical attention.
Skin Contact	Wash the affected area with soap and water. Remove contaminated clothing and do not re-use until cleaned; contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed. Consult a physician if irritation persists. If contact with hot product occurs, flush immediately with cool water for 15 minutes and remove clothing carefully — if clothing is stuck to a burn, do not pull it off but cut around it, cover the burn with clean material and obtain medical attention immediately.
Eye Contact	Flush the eyes immediately with water for 15 minutes, holding the eyelids open for complete irrigation. Rest the eyes for 30 minutes. If redness, burning, blurred vision or swelling persists, obtain medical attention.
Ingestion	Do not induce vomiting. Rinse the mouth with water and give sips of water to remove the taste. Consult a physician or poison control centre; treat symptomatically.
Most Important Symptoms / Effects	Eye irritation; thermal burns from hot material, which may cause permanent eye damage. Skin sensitisation (allergy) evidenced by rashes. Moderate irritation of the respiratory passages from vapours or mists. Ingestion is not expected to be a relevant route of exposure.
Indication of Immediate Medical Attention	Treat symptomatically. Pre-existing skin and eye disorders may be aggravated by exposure; pre-existing skin or lung allergies may increase the likelihood of allergic symptoms.

SECTION 5 — FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Carbon dioxide (CO ₂), dry chemical, foam, water fog.
Unsuitable Extinguishing Media	Direct high-volume water jet.



Specific Hazards Arising from the Product	Combustible liquid; the material will not burn unless preheated. Closed containers may rupture or explode when exposed to extreme heat. Incomplete combustion produces fumes, smoke, carbon monoxide, aldehydes and other decomposition products, which may be toxic.
Special Protective Equipment for Firefighters	Positive-pressure self-contained breathing apparatus (NIOSH / EN approved) and full bunker gear, particularly in confined spaces. Clear the fire area of all non-emergency personnel and shut off the source. Water fog may be used to cool closed containers exposed to extreme heat to prevent pressure build-up, autoignition or explosion.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions	Keep all non-essential personnel away. Shut off valves and eliminate ignition sources. Minimise breathing of vapours and skin contact; wear appropriate PPE as given in Section 8. Ventilate confined areas and open windows and doors.
Environmental Precautions	Contain the spill and keep it out of water sources, drains and sewers. Remove contaminated soil to eliminate residues. Report releases to the authorities where required.
Methods for Containment & Cleanup	Small spills: apply a non-flammable absorbent to the spill area and place the saturated absorbent in an approved container for disposal. Large spills: recover with vacuum trucks or pump to storage / salvage vessels, then soak up the residue with clay, sand or other suitable absorbent. Place in non-leaking containers and flush the area with water to remove trace residue. Ensure conformity with applicable government regulations.

SECTION 7 — HANDLING AND STORAGE

Precautions for Safe Handling	Do not take internally. Avoid prolonged or repeated contact with skin, eyes and clothing, and avoid breathing vapours at the top of the shipping container. Use with adequate ventilation and wash thoroughly after handling. To prevent thermal burns, avoid contact with hot product. Use non-sparking tools to open and close containers; bond and ground containers when pouring. This resin may be handled, shipped and stored at elevated temperature in bulk — the recommended pumping temperature is 180 °F (82 °C). Empty containers retain residue and can be dangerous: do not pressurise, cut, weld, braze, solder, drill or expose them to heat, sparks, static electricity or other ignition sources, and do not attempt to clean them. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.
Conditions for Safe Storage	Store in a cool, dry, well-ventilated area away from open flames and high temperatures. Keep containers tight, upright and closed when not in use to prevent leakage. Store bulk quantities only in buildings designed for flammable and combustible liquid storage (e.g. OSHA 29 CFR 1910.106 or the equivalent national requirement).
Incompatible Materials	Strong oxidising agents; strong Lewis or mineral acids; strong mineral and organic bases, especially primary and secondary aliphatic amines. Do not allow molten product to contact water or other liquids — this can cause violent eruption, splattering of hot material or ignition of flammable material.



SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	Exposure Limit	Source
Reaction product: bisphenol-A-(epichlorohydrin) epoxy resin (CAS 25068-38-6)	None established	—

Engineering Controls	Provide general dilution or local exhaust ventilation of a volume and pattern sufficient to keep airborne concentrations within permitted exposure limits. Safety showers and eyewash stations should be readily accessible to the work area.
Eye / Face Protection	Safety eyewear with splash guards, or a face shield.
Skin Protection	Butyl rubber chemical-resistant gloves; chemical-resistant apron or other impervious clothing. Remove and wash contaminated clothing before re-use.
Respiratory Protection	No respiratory protection is usually required under normal conditions of use with adequate ventilation. Where ventilation is inadequate or during spray application, use a NIOSH / EN-approved respirator for organic vapours.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear viscous liquid, or pigmented solution in pigmented grades
pH	Not applicable
Flash Point	> 30 °C (closed cup).
Flammability (Solid/Gas)	Not applicable — liquid
Vapour Pressure	0.03 mbar at 77 °C
Relative Density	1.17 – 1.50
Solubility in Water	Negligible

SECTION 10 — STABILITY AND REACTIVITY

Reactivity	Reaction with some curing agents produces considerable heat. Runaway cure reactions may char and decompose the resin system.
Chemical Stability	Stable under the recommended storage conditions.
Possibility of Hazardous Reactions	Hazardous polymerisation will not occur. Vigorous reaction is possible with the incompatible materials listed below.
Conditions to Avoid	High temperatures; open flames and other ignition sources.
Incompatible Materials	Strong oxidising agents; strong Lewis or mineral acids; strong mineral and organic bases, especially primary and secondary aliphatic amines. Do not allow molten product to contact water or other liquids.



Hazardous Decomposition Products

Fumes, smoke, carbon monoxide, aldehydes and other products of incomplete combustion. Decomposition and combustion products may be toxic.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Toxicity — Oral	LD50 (rat): 2000 mg/kg
Acute Toxicity — Dermal	LD50 (rabbit): < 2000 mg/kg
Skin Corrosion / Irritation	Irritating to the skin. Contact with hot material can cause thermal burns.
Serious Eye Damage / Irritation	Mildly irritating to the eyes; contact with hot material can cause thermal burns resulting in permanent damage.
Respiratory / Skin Sensitisation	May cause skin sensitisation (allergy), evidenced by rashes. No respiratory sensitisation data available.
Carcinogenicity	Not classified by IARC. Two-year dermal bioassays in rats and mice with the glycidyl ether of bisphenol A yielded no evidence of carcinogenicity to the skin or any other organ.
Germ Cell Mutagenicity	These resins have shown activity in in-vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these results to humans is not known.

SECTION 12 — ECOLOGICAL INFORMATION

Ecotoxicity	Fish, LC50 (96 h): 2.4 mg/L (trout) Daphnia magna, EC50 (24 h): 3.6 mg/L
Other Adverse Effects	Toxic to aquatic life with long lasting effects. Do not allow the product to enter drains, waterways or soil.

SECTION 13 — DISPOSAL CONSIDERATIONS

Disposal Methods	Dispose of in accordance with local, state and national regulations (in India, the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended). Incineration under controlled conditions in a permitted facility is suitable. Do not discharge into drains, waterways or soil. Hazard characteristics and waste-stream classification can change with product use; it is the responsibility of the user to determine the correct storage, transport, treatment and disposal route for spent material and residues at the time of disposal.
Contaminated Packaging	Empty containers retain product residue and can be dangerous; handle and dispose of accordingly. Do not re-use empty containers. "Empty" drums should be completely drained, properly bunged and returned to an authorised drum reconditioner.



SECTION 14 — TRANSPORT INFORMATION

UN Number	UN 1263
UN Proper Shipping Name	PAINT
Transport Hazard Class(es)	Class 3 — Flammable Liquid
Packing Group	III
Special Precautions for User	HAZCHEM code: 3[Y]E. Sub-risk: none.

SECTION 15 — REGULATORY INFORMATION

Indian regulations

- Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended)
- Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
- Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- Factories Act, 1948 and applicable State Factories Rules

Information carried over from the source (United States) documentation

CERCLA Reportable Quantity	No RQ assigned
SARA Section 302	No threshold planning quantity
SARA Section 313	No de minimis concentration
SARA Section 311 / 312 Hazards	Delayed (chronic) health hazard

This regulatory information is not intended to be comprehensive; other regulations may apply to this material.

Abbreviations: LD50 — median lethal dose; LC50 — median lethal concentration; EC50 — median effective concentration; TLV — threshold limit value; PEL — permissible exposure limit; TWA — time-weighted average; GHS — Globally Harmonised System; IARC — International Agency for Research on Cancer; PBT — persistent, bioaccumulative and toxic; vPvB — very persistent and very bioaccumulative; SCBA — self-contained breathing apparatus; VOC — volatile organic compound.



PRITHVI ALUSHIELD EP - PART B (HARDENER)

Category: Two-pack epoxy polyamide protective coating — cycloaliphatic amine curing agent component

SECTION 1 — IDENTIFICATION

Product Name	PRITHVI ALUSHIELD EP - Part B (Hardener)
Recommended Use	Industrial protective coating. Curing agent (hardener) component of a two-pack epoxy polyamide paint system; to be mixed with Part A (Base) in the specified ratio immediately before application.
Restrictions on Use	For industrial / professional application only — not for consumer or retail use. Not to be applied as a single-pack product.

SECTION 2 — HAZARD(S) IDENTIFICATION

GHS Classification	Acute Toxicity (Oral) — Category 4 Acute Toxicity (Dermal) — Category 4 Acute Toxicity (Inhalation) — Category 4 Skin Corrosion — Category 1B Serious Eye Damage — Category 1 Skin Sensitisation — Category 1 Specific Target Organ Toxicity, Single Exposure — Category 3 (respiratory tract irritation; narcotic effects) Specific Target Organ Toxicity, Repeated Exposure — Category 2 (lungs)
Signal Word	Danger

Hazard Statements

- H302 — Harmful if swallowed
- H312 — Harmful in contact with skin
- H332 — Harmful if inhaled
- H314 — Causes severe skin burns and eye damage
- H317 — May cause an allergic skin reaction
- H335 — May cause respiratory irritation
- H336 — May cause drowsiness or dizziness
- H373 — May cause damage to the lungs through prolonged or repeated exposure

Precautionary Statements

- P260 — Do not breathe vapours, mists or spray
- P264 — Wash thoroughly after handling
- P280 — Wear protective gloves, protective clothing, eye protection and face protection
- P301 + P330 + P331 — IF SWALLOWED: rinse mouth. Do NOT induce vomiting
- P303 + P361 + P353 — IF ON SKIN (or hair): take off immediately all contaminated clothing. Rinse skin with water



- P304 + P340 + P310 — IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a poison centre or doctor
- P305 + P351 + P338 + P310 — IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison centre or doctor
- P405 — Store locked up
- P501 — Dispose of contents and container in accordance with local regulations

Pictogram(s) Required: GHS05 (Corrosion), GHS07 (Exclamation Mark), GHS08 (Health Hazard)

Other Hazards: Corrosive. The material will not burn unless preheated. Delayed lung damage (pulmonary oedema) can occur after exposure to combustion products, sometimes hours after exposure. *PBT / vPvB assessment not performed — to be completed.*

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name / Ingredient	CAS No.	Conc. (% w/w)	GHS Classification
Cycloaliphatic amine			Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1

SECTION 4 — FIRST-AID MEASURES

Inhalation	Do not attempt to rescue the casualty unless proper respiratory protection is worn. Move the person to fresh air and provide oxygen if breathing is difficult. Obtain medical attention.
Skin Contact	Remove contaminated clothing immediately. Flush with large amounts of water for at least 15 minutes, then wash the exposed skin with soap if available. Transport to the nearest medical facility for further treatment.
Eye Contact	Flush the eyes immediately with plenty of water for 15 minutes while holding the eyelids open. Transport to the nearest medical facility for further treatment.
Ingestion	Do not induce vomiting. Rinse the mouth with water, then give sips of water to remove the taste. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration. Obtain medical attention.
Most Important Symptoms / Effects	Chemical burns to the skin, eyes, mouth, throat and digestive tract. CNS depression. Repeated skin contact may cause an allergic skin reaction with itching, burning, redness and swelling. Lung damage (scarring, bronchitis, emphysema) may be evidenced by shortness of breath, especially on exertion, and may be accompanied by a chronic cough.
Indication of Immediate Medical Attention	Treat symptomatically. Observe for delayed pulmonary effects following inhalation exposure. Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

SECTION 5 — FIRE-FIGHTING MEASURES



Suitable Extinguishing Media	Water fog, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media	Water fog sprayed into containers of hot or burning liquid may cause violent frothing.
Specific Hazards Arising from the Product	DANGER — corrosive. The material will not burn unless preheated. Nitrogen oxides and other potentially hazardous nitrogen-containing compounds may be released on combustion. Delayed lung damage (pulmonary oedema) can follow exposure to combustion products, sometimes hours after the exposure.
Special Protective Equipment for Firefighters	Do not enter a confined fire space without full bunker gear (helmet with face shield, bunker coat, gloves and rubber boots) including positive-pressure self-contained breathing apparatus. Evacuate all non-essential personnel. Cool fire-exposed containers with large quantities of water to prevent weakening of the container structure.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions	Corrosive — prevent all bodily contact with spilt material. The material may burn although it is not readily ignitable; remove ignition sources. Shut off leaks if this is possible without personal risk. Use cautious judgement when cleaning up large spills.
Environmental Precautions	Dike and contain. Contain run-off and dispose of it properly. Prevent entry into drains, ditches or rivers. Notify the authorities if exposure of the general public or the environment occurs or is likely to occur.
Methods for Containment & Cleanup	Neutralise the contaminated area as appropriate for a base spill. Small spills: soak up with clay, sand or other suitable absorbent, place in a non-leaking container and seal tightly for disposal. Large spills: recover with vacuum trucks or pump to storage / salvage vessels, soak up the residue with absorbent, place in non-leaking containers and seal tightly. Flush the area with water to remove trace residue.

SECTION 7 — HANDLING AND STORAGE

Precautions for Safe Handling	Do not get in the eyes, on the skin or on clothing. Do not taste or swallow. Do not breathe the material or its fumes. Use only with adequate ventilation and wash thoroughly after handling. Wash with soap and water before eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing before re-use; contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed. Do not pressurise drum containers to empty them. Heating this curing agent above 300 °F (149 °C) in the presence of air may cause slow oxidative decomposition; above 500 °F (260 °C) polymerisation may occur. Mixing with epoxy resins produces an exothermic reaction which, in large masses, can cause runaway polymerisation and charring of the reactants; the resulting fumes and vapours vary widely in composition and toxicity. Use a NIOSH / EN-approved respirator as required to prevent overexposure. Containers, even those that have been emptied, can contain hazardous product residues.
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Conditions for Safe Storage	Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures. Keep containers closed when not in use.
Incompatible Materials	Strong oxidising agents; strong Lewis or mineral acids; strong mineral and organic bases. Reaction with some resins may produce considerable heat and possible violent decomposition.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient	Exposure Limit	Source
Cycloaliphatic amine	None established	ACGIH
Proprietary component	None established	ACGIH
Phenolic compound	TWA: 10 ppm (44.2 mg/m ³)	WEEL

Engineering Controls	Adequate ventilation to control airborne concentrations. Eyewash fountains and safety showers should be available for emergency use.
Eye / Face Protection	Chemical goggles, and a face shield suitable to the potential exposure.
Skin Protection	Chemical-resistant protective clothing — gloves, outer clothing or apron and overshoes.
Respiratory Protection	Do not breathe vapours or mists. Use a NIOSH / EN-approved respirator as required to prevent overexposure: an air-purifying respirator for organic vapours, a full-face supplied-air respirator, or self-contained breathing apparatus (SCBA) in environments with unknown concentrations or in emergencies.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow liquid
Odour	Amine
Flash Point	> 93.33 °C (> 199.99 °F), closed cup
Flammability (Solid/Gas)	Not applicable — liquid
Solubility in Water	Partially soluble

SECTION 10 — STABILITY AND REACTIVITY

Reactivity	Reaction with some resins may produce considerable heat and possible violent decomposition.
Chemical Stability	Stable under normal use and recommended storage conditions.



Possibility of Hazardous Reactions	Hazardous polymerisation will not occur. Vigorous reaction is possible with the incompatible materials listed below.
Conditions to Avoid	High temperatures; open flames.
Incompatible Materials	Strong oxidising agents; strong Lewis or mineral acids; strong mineral and organic bases.
Hazardous Decomposition Products	Nitrogen oxides and other potentially hazardous nitrogen-containing compounds on combustion; carbon oxides and smoke.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Toxicity — Oral	Expected to be moderately toxic: $400 < LD50 \leq 2000$ mg/kg
Acute Toxicity — Dermal	Slightly toxic and may be harmful if absorbed through the skin.
Acute Toxicity — Inhalation	Toxic and harmful if inhaled — see the note above regarding the reported LC50 value.
Skin Corrosion / Irritation	May be corrosive, causing chemical burns which may result in permanent skin damage.
Serious Eye Damage / Irritation	May be corrosive to the eyes and may cause severe damage, including blindness. Vapours may be irritating.
Respiratory / Skin Sensitisation	May cause skin sensitisation. Repeated skin contact may result in an allergic skin reaction causing itching, burning, redness and swelling.
Specific Target Organ Toxicity	May be corrosive to the nose, throat and respiratory tract. May produce CNS depression. Repeated or prolonged exposure can result in lung damage (scarring, bronchitis, emphysema).
Carcinogenicity	None of the components has been classified by the International Agency for Research on Cancer (IARC).

SECTION 12 — ECOLOGICAL INFORMATION

Other Adverse Effects	Do not allow the product to enter drains, ditches, waterways or soil.
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SECTION 13 — DISPOSAL CONSIDERATIONS

Disposal Methods	If this material becomes waste it would be a corrosive hazardous waste (US hazardous waste number D002, 40 CFR 262). In India, dispose of in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, through an authorised treatment, storage and disposal facility. Do not discharge into drains, waterways or soil.
Contaminated Packaging	Empty containers retain product residue and can be dangerous; handle and dispose of accordingly. Do not re-use empty containers and do not pressurise them to empty them.



SECTION 14 — TRANSPORT INFORMATION

UN Number	UN 2735 — Polyamines, liquid, corrosive, n.o.s.
UN Proper Shipping Name	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (contains cycloaliphatic amine, unmodified)
Transport Hazard Class(es)	Class 8 — Corrosive (DOT, IMDG and IATA Cargo)
Packing Group	III
Special Precautions for User	ERG No. 153. IMDG EmS: F-A, S-B.

SECTION 15 — REGULATORY INFORMATION

Indian regulations

- Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 (as amended)
- Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
- Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- Factories Act, 1948 and applicable State Factories Rules

Inventory status carried over from the source documentation

Notification Status	TSCA (US), DSL (CA), AICS (AU), ENCS (JP), INV (CN), PICCS (PH), KECI (KR): all components listed. EINECS / ELINCS (EU): all components listed or polymer exempt.
CERCLA Hazardous Substances (40 CFR 302)	Cycloaliphatic amine, proprietary component and phenolic compound: no RQ assigned.
SARA 311 / 312 Hazards	Acute health hazard; chronic health hazard.
SARA 313 (40 CFR 372.65)	Cycloaliphatic amine, proprietary component and phenolic compound: no de minimis concentration.
SARA 302 (40 CFR 355, App. A)	Cycloaliphatic amine, proprietary component and phenolic compound: no threshold planning quantity and no reportable quantity.
HMIS Rating	Health: 3 Fire: 1 Reactivity: 0

This regulatory information is not intended to be comprehensive; other regulations may apply to this material.

Abbreviations: LD50 — median lethal dose; LC50 — median lethal concentration; TWA — time-weighted average; WEEL — Workplace Environmental Exposure Level; ACGIH — American Conference of Governmental Industrial Hygienists; CNS — central nervous system; GHS — Globally Harmonised System; HMIS — Hazardous Materials Identification System; IARC — International Agency for Research on Cancer; SCBA — self-contained breathing apparatus; PBT — persistent, bioaccumulative and toxic; vPvB — very persistent and very bioaccumulative; VOC — volatile organic compound.