PRITHVI EPOX-OG 100 (Epoxy FC Primer & Paint, Curing Agent)

Category: Epoxy Resin Coating (Hardener/Curing Agent Component)

SECTION 1 — IDENTIFICATION

Product Name	Prithvi Epox-OG 100 (Epoxy FC Primer & Paint, Curing Agent)
Recommended Use	Industrial protective coating — supplied as a two-pack system: Part A (base epoxy resin) and Part B (curing agent/hardener), used together as a two-pack epoxy primer and paint.

SECTION 2 — HAZARD(S) IDENTIFICATION

Part A

Emergency Overview	Can irritate eyes and skin. May cause skin sensitization. Contact with hot material can cause thermal burns. Vapours of hot material can irritate respiratory passages.
Effects of Overexposure (Acute)	Eye: Mildly irritating; contact with hot material can cause thermal burns resulting in permanent damage. Skin: Skin sensitization (allergy) may be evidenced by rashes. Inhalation: Exposure to vapours or mists is moderately irritating to respiratory passages. Ingestion: Not likely to be a relevant route of exposure.
Chronic Effects	N/A
Medical Conditions Aggravated by Exposure	Pre-existing skin and eye disorders may be aggravated by exposure to this product. Pre-existing skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

Part B

Human Health Hazards	Product is toxic and harmful if inhaled. May be moderately toxic if swallowed. Slightly toxic and may be harmful if absorbed through the skin. May be corrosive to the eyes. May be corrosive to the skin. May be corrosive to the respiratory tract. Corrosive to mouth, throat, and stomach. May produce CNS depression. May cause skin sensitization.
Safety Hazards	Corrosive. The material will not burn unless preheated.

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

Part A

Reaction product: bisphenol-A-(epichlorohydrin) and epoxy resin (number average molecular weight ≤ 700).

Ingredient	CAS No.	% by Wt. Range	Exposure Limits
Epoxy-Coat Part A	25068-38-6	100	Not Established

Part B

Chemical Name	CAS No.	Weight %
Cycloaliphatic amine	*	—
Proprietary Component	*	—

Chemical Name	CAS No.	Weight %
Phenolic Compound	*	—

**The specific chemical identity/proportion of this component is considered trade secret information under 29 CFR 1910.1200.*

SECTION 4 — FIRST-AID MEASURES

Part A

Inhalation	Remove from exposure, restore breathing. Keep warm and quiet. Notify physician.
Eyes (splash)	Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Rest eyes for 30 minutes; if redness, burning, blurred vision or swelling persist, take to a physician.
Skin (splash)	Wash affected area with soap and water. Remove contaminated clothing. Consult a physician if irritation persists. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse. If contact with a hot product occurs, immediately flush with cool water for 15 minutes and carefully remove clothing. If clothing is stuck to a burn area, do not pull it off, but cut around it. Cover a burn with clean material and get medical attention immediately.
Ingestion	Do not induce vomiting. Have victim rinse out the mouth with water, drink sips of water to remove the taste from mouth. Consult a physician or poison control centre, treat symptomatically.

Part B

Inhalation	Do not attempt to rescue the victim unless proper respiratory protection is worn. Remove victim to fresh air and provide oxygen if breathing is difficult. Get medical attention.
Skin Contact	Immediately remove contaminated clothing. Flush with large amounts of water for at least 15 minutes. Flush exposed skin with water and follow by washing with soap if available. Transport to the nearest medical facility for additional treatment.
Eye Contact	Immediately flush eyes with plenty of water for 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.
Ingestion	Do not induce vomiting. Have victim rinse out the mouth with water, then drink sips of water to remove the taste from mouth. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get medical attention.
Notes to Physician — Symptoms	Lung damage (scarring, bronchitis, emphysema) may be evidenced by shortness of breath, especially on exertion, and may be accompanied by a chronic cough. Repeated skin contact may result in an allergic skin reaction causing itching, burning, redness, and swelling.

SECTION 5 — FIRE-FIGHTING MEASURES

Part A

Flash Point	480°F PM
Extinguishing Media	Foam, CO_2, dry chemical, water fog, other.

Special Fire Fighting Procedures	The material will not burn unless preheated. Clear fire area of all non-emergency personnel. Shut off source. Water fog may be used to cool closed containers exposed to extreme heat to prevent pressure build-up and possible autoignition or explosion. Wear NIOSH-approved positive-pressure self-contained breathing apparatus and full bunker gear for confined spaces.
Unusual Fire and Explosion Hazards	Keep containers tightly closed. Combustible liquid; isolate from all sources of ignition. Closed containers may explode due to extreme heat.

Part B

Suitable Extinguishing Media	Use water fog, "alcohol foam", dry chemical or carbon dioxide. Water fog may cause frothing which can be violent, especially if sprayed into containers of hot or burning liquid.
Specific Hazards During Fire-Fighting	DANGER. Corrosive. The material will not burn unless preheated. Delayed lung damage (pulmonary oedema) can be experienced after exposure to combustion products, sometimes hours after the exposure. Nitrogen oxides and other potentially hazardous nitrogen-containing compounds may be released upon combustion. Evacuate the area of all non-essential personnel. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure. Cool fire-exposed containers with water.
Special Protective Equipment for Fire-Fighters	Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves, and rubber boots) including a positive-pressure NIOSH-approved self-contained breathing apparatus.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Part A

Shut off valves, contain the spill, and keep out of water sources and sewers; for small spills add non-flammable absorbent in the spill area. Place saturated absorbent in an approved container for disposal. Remove contaminated soil to remove contaminated trace residues. For large spills, remove with vacuum trucks or pump to storage/salvage vessels. Then soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking containers. Flush area with water to remove trace residue. Minimize breathing vapours and skin contact, ventilate the confined area, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away.

Part B

Personal Precautions	Corrosive. May burn although not readily ignitable. Remove ignition sources. Prevent all bodily contact with spilt materials. Use cautious judgment when cleaning up large spills. Shut off leaks, if possible without personal risk.
Environmental Precautions	Dike and contain. Contain run-off and dispose of properly. Neutralize contaminated area as appropriate for acid or base spill. Prevent from entering into drains, ditches or rivers.
Clean-Up Methods — Small Spills	Soak up with an absorbent such as clay, sand or other suitable material. Place in non-leaking container. Seal tightly for proper disposal.
Clean-Up Methods — Large Spills	Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material. Place in non-leaking container. Seal tightly for proper disposal. Flush area with water to remove trace residue.

Additional Advice	Notify authorities if any exposures to the general public or environment occur or are likely to occur.

SECTION 7 — HANDLING AND STORAGE

Part A

Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Keep away from open flames and high temperatures.

Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing. Wash thoroughly after handling. This resin may be handled, shipped and stored at elevated temperature in bulk. The recommended pumping temperature is 180°F. Containers should be bonded and grounded when pouring. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.

Avoid breathing vapours in top of the shipping container. To prevent thermal burns, avoid contact with the hot product. Use with adequate ventilation. Use non-sparking tools to open or close containers.

Part B

Do not get in eyes, on the skin or clothing. Do not taste or swallow. Do not breathe material. Use only with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Heating this curing agent above 300°F in the presence of air may cause slow oxidative decomposition; above 500°F, polymerization may occur. Some epoxy resins can produce exothermic reactions which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapours from these thermal and chemical decompositions vary widely in composition and toxicity. DANGER. May be corrosive to the eyes. May be corrosive to the skin. Corrosive to the digestive tract. Toxic and harmful if inhaled. Slightly toxic and may be harmful if absorbed through the skin. May be moderately toxic if swallowed. May be corrosive to the respiratory tract. May cause CNS depression. May cause skin sensitization. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse. Do not pressurize drum containers to empty them. Do not breathe fumes. Use a NIOSH-approved respirator as required to prevent overexposure. In accord with 29 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapours. Containers, even those that have been emptied, can contain hazardous product residues.

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.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Part A

Respiratory Protection	No respiratory protection is usually required under normal conditions of use.
Ventilation	Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated under OSHA Regulation 29 CFR Part 1910.
Protective Gloves	Butyl rubber chemical-resistant gloves.
Eye Protection	Use safety eyewear with splash guards or face shield.
Other Protective Clothing or Equipment	Use chemical-resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse. Shower and eyewash should be easily accessible to the work area.

Part B

Components with Workplace Control Parameters	Regulation	Exposure Time / Value	Remarks
Cycloaliphatic amine	ACGIH	—	None established
Proprietary Component	ACGIH	—	None established
Phenolic Compound	WEEL	TWA: 10 ppm / 44.2 mg/m³	—

Protective Measures	Wear an appropriate respirator and full-body protective clothing.
Engineering Measures	Adequate ventilation to control airborne concentrations. Eyewash fountains and safety showers should be available for emergency use.
Eye Protection	Do not get in eyes. Wear chemical goggles.
Skin and Body Protection	Do not get on skin or clothing. Wear chemical-resistant protective clothing such as gloves, outer clothing or apron, overshoes and a face-shield suitable to potential exposure.
Respiratory Protection	Do not breathe vapours or mists. Use a NIOSH-approved respirator as required to prevent overexposure. In accord with 29 CFR 1910.134, the types of respirator(s) to be considered include: Air-Purifying Respirator for Organic Vapors; Full-Face Supplied-Air Respirator; Self-Contained Breathing Apparatus (SCBA) — for use in environments with unknown concentrations or emergencies.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Part A

Appearance	Clear viscous liquid or pigmented solution
Solubility in Water	Negligible
Vapour Pressure	0.03 mbar @ 77°C
Specific Gravity	1.17–1.50
Flash Point	>30°C (closed cup)

Part B

Form	Liquid
Colour	Yellow
Odour	Amine
Flash Point	>93.33°C (>199.99°F), closed cup
Solubility in Water	Partially soluble

SECTION 10 — STABILITY AND REACTIVITY

Part A

Conditions to Avoid	Avoid high temperatures. Reaction with some curing agents may produce considerable heat. Run-away cure reactions may char and decompose the resin system.
Incompatibility (Materials to Avoid)	Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and 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 eruptions, splatter hot material, or ignite flammable material.
Hazardous Decomposition Products	Fumes, smoke, carbon monoxide, aldehydes and other decomposition products where combustion is not complete. Decomposition and combustion products may be toxic.
Hazardous Polymerization	Will not occur.

Part B

Conditions to Avoid	Avoid high temperatures.
Materials to Avoid	Can react vigorously with strong oxidizing agents, strong Lewis or mineral acid, and strong mineral and organic bases. Reaction with some resins may produce considerable heat and possible violent decomposition.
Hazardous Reactions	Stable under normal use conditions. Hazardous polymerization will not occur.

SECTION 11 — TOXICOLOGICAL INFORMATION

Part A

Oral LD50 (Rat)	2000 mg/kg
Skin LD50 (Rabbit)	<2000 mg/kg
Carcinogenicity / Mutagenicity	This product has not been classified by IARC. Recent 2-year bioassays in rats and mice exposed by the dermal route to the glycidyl ether of bisphenol A yielded no evidence of carcinogenicity to the skin or any other organ. These resins have shown activity in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.

Part B

Acute Oral Toxicity	Expected to be moderately toxic, 400 < LD50 ≤ 2000 mg/kg.
Acute Dermal Toxicity	1 < LC50 ≤ 5 mb/l.
Chronic Health Hazard — Carcinogenicity	Cycloaliphatic amine: Not classified by the International Agency for Research on Cancer (IARC), per the US IARC Monographs on Occupational Exposures to Chemical Agents. Proprietary Component: Not classified by IARC (same basis). Phenolic Compound: Not classified by IARC (same basis).

Potential Health Effects — Inhalation	Product is toxic and harmful if inhaled. May be corrosive to the nose, throat and respiratory tract. Repeated or prolonged exposure can result in lung damage. May produce CNS depression.
Potential Health Effects — Skin	May be corrosive (causing chemical burns) which may result in permanent skin damage. Slightly toxic and may be harmful if absorbed through the skin. May cause skin sensitization.
Potential Health Effects — Eyes	May be corrosive to the eyes and may cause severe damage, including blindness. Vapours may be irritating.
Potential Health Effects — Ingestion	May be moderately toxic if swallowed. Corrosive and may cause severe and permanent damage to mouth, throat and stomach. May produce CNS depression.
Aggravated Medical Condition	Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product.

SECTION 12 — ECOLOGICAL INFORMATION

Part A

Ecotoxicity	Toxicity to fish LC50: Species Forelle (trout), Dose 2.4 mg/L, 96 hour. EC50: Species Daphnia magna, Dose 3.6 mg/L, 24 hour.

SECTION 13 — DISPOSAL CONSIDERATIONS

Part A

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at time of disposition. Dispose of by all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

Part B

If this material becomes waste material, it would be a corrosive hazardous waste, hazardous waste number D002 (40 CFR 262). Refer to the latest EPA or state regulations regarding proper disposal.

SECTION 14 — TRANSPORT INFORMATION

Part A

HAZCHEM	3[Y]E
UNDG	Dangerous Goods
Class	3
Subrisk	None
UN Number	1263
Packing Group	III
Shipping Name	PAINT

Part B

DOT — UN/NA No.	1263
DOT — Class	8
DOT — Packing Group	III
DOT — ERG No.	153
DOT — Proper Shipping Name	POLYAMINES, LIQUID, CORROSIVE, N.O.S., CYCLOALIPHATIC AMINE (UNMODIFIED)
IMDG — UN Number / Class / Packing Group	1263 / Class 8 / Packing Group III; EMS F-A, S-B
IMDG — Description of Goods	POLYAMINES, LIQUID, CORROSIVE, N.O.S., CYCLOALIPHATIC AMINE (UNMODIFIED)
IATA Cargo — UN Number / Class / Packing Group	1263 / Class 8 / Packing Group III; EMS F-A, S-B
IATA Cargo — Description of Goods	POLYAMINES, LIQUID, CORROSIVE, N.O.S., CYCLOALIPHATIC AMINE (UNMODIFIED)

SECTION 15 — REGULATORY INFORMATION

Part A

(RQ) Reportable Quantity	CERCLA
SARA 302	No TPQ
SARA 313	No minimise concentration
SARA Section 311 List Hazards	(a) Immediate Acute Health: N/A (b) Delayed Chronic Health: Yes (c) Fire: N/A (d) Reactive: N/A (e) Sudden Release of Pressure: N/A

Part B

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Notification Status	TSCA: All components listed. DSL: All components listed. EIECS: All components listed or polymer exempt. AICS: All components listed. ENCS (Japan): All components listed. INV (China): All components listed. PICCS (Philippines): All components listed. KECI (Korea): All components listed.
CERCLA Hazardous Substances (40 CFR 302)	Cycloaliphatic amine: No RQ Proprietary Component: No RQ Phenolic Compound: No RQ
SARA 311/312 Hazards	Acute Health Hazard; Chronic Health Hazard
EPCRA SARA Title III Section 313 (40 CFR 372.65) — Supplier Notification Required	Cycloaliphatic amine: No De minimis Concentration Proprietary Component: No De minimis Concentration Phenolic Compound: No De minimis Concentration

EPCRA SARA Title III Section 302 EHS (40 CFR 355, Appendix A)	Cycloaliphatic amine: Threshold Planning Quantity: No TPQ; Reportable Quantity: No RQ Proprietary Component: Threshold Planning Quantity: No TPQ; Reportable Quantity: No RQ Phenolic Compound: Threshold Planning Quantity: No TPQ; Reportable Quantity: No RQ
HMIS Rating	Health: 3; Fire: 1; Reactivity: 0

SECTION 16 — OTHER INFORMATION

Abbreviations: ACGIH – American Conference of Governmental Industrial Hygienists; CAS – Chemical Abstracts Service; CNS – Central Nervous System; EC50 – Median Effective Concentration; EHS – Extremely Hazardous Substance; ERG – Emergency Response Guide; HAZCHEM – Hazardous Chemical Code; HMIS – Hazardous Materials Identification System; IARC – International Agency for Research on Cancer; LC50 – Median Lethal Concentration; LD50 – Median Lethal Dose; NIOSH – National Institute for Occupational Safety and Health; PM – Pensky-Martens (closed cup flash point method); RQ – Reportable Quantity; SARA – Superfund Amendments and Reauthorization Act; SCBA – Self-Contained Breathing Apparatus; TPQ – Threshold Planning Quantity; TWA – Time-Weighted Average; WEEL – Workplace Environmental Exposure Level.

The information in this Safety Data Sheet is believed to be accurate as of the date of preparation and is provided in good faith. It does not constitute a warranty of any kind. Users should independently verify that it is suitable and complete for their own particular handling, storage, and application conditions.