

1. Identification

Product identifier	PENNTROWEL EPOXY PRIMER RESIN	
Other means of identification	None.	
Recommended use	Not available.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Company Name	ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.	
Address	2829 Lakeland Drive Jackson, MS 39232 USA	
After hours telephone number	1-800-222-7122	
Normal work hours telephone number	1-877-982-7667	
Website	www.ergonarmor.com	
E-mail	sds@ergon.com	
Emergency 24-hour telephone number	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887	
Information on operation hours	8:00 a.m. to 5:00 p.m.	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Causes severe skin burns and eye damage. Causes serious eye damage. May cause an allergic skin reaction. Suspected of causing genetic defects. May cause cancer.
Precautionary statement	
Prevention	Avoid breathing dust/fume/gas/mist/vapors/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	Specific treatment see Section 4 of this SDS. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention.

Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
BISPHENOL A-(EPICHLORHYDRIN) EPOXY RESIN		25068-38-6	80 - 95
BUTYL GLYCIDYL ETHER		2426-08-6	10 - 15
EPICHLOROHYDRIN		106-89-8	1 - 5

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Foam. Powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Use water spray to reduce vapors or divert vapor cloud drift. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	PEL	270 mg/m ³
		50 ppm
EPICHLOROHYDRIN (CAS 106-89-8)	PEL	19 mg/m ³
		5 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	TWA	3 ppm
EPICHLOROHYDRIN (CAS 106-89-8)	TWA	0.5 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)	Ceiling	30 mg/m ³
		5.6 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

EPICHLOROHYDRIN (CAS 106-89-8) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

EPICHLOROHYDRIN (CAS 106-89-8) Skin designation applies.

US - Tennessee OELs: Skin designation

EPICHLOROHYDRIN (CAS 106-89-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

BUTYL GLYCIDYL ETHER (CAS 2426-08-6)

Can be absorbed through the skin.

EPICHLOROHYDRIN (CAS 106-89-8)

Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

EPICHLOROHYDRIN (CAS 106-89-8)

Can be absorbed through the skin.

Appropriate engineering controls Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Wash hands after handling and before eating. Keep away from food and drink. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties**Appearance**

Physical state Liquid.

Form Liquid.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) 3.8 % estimated

Flammability limit - upper (%) 21 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 6.03 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature 772 °F (411.11 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

Other information

Specific gravity 1.11 @25°C

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Toxic in contact with skin. Harmful if swallowed.

Components	Species	Test Results
BUTYL GLYCIDYL ETHER (CAS 2426-08-6)		
Acute		
Dermal		
LD50	Rabbit	0.788 g/kg
Inhalation		
LC50	Rat	> 670 mg/l, 8 Hours
Oral		
LD50	Rat	2.05 g/kg
EPICHLOROHYDRIN (CAS 106-89-8)		
Acute		
Oral		
LD50	Rat	90 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
ACGIH sensitization		
N-BUTYL GLYCIDYL ETHER (BGE) (CAS 2426-08-6)	Dermal sensitization	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	Suspected of causing genetic defects.	
Carcinogenicity	May cause cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
EPICHLOROHYDRIN (CAS 106-89-8)	2A Probably carcinogenic to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
Not regulated.		
US. National Toxicology Program (NTP) Report on Carcinogens		
EPICHLOROHYDRIN (CAS 106-89-8)	Reasonably Anticipated to be a Human Carcinogen.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects	

Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species		Test Results
PENNTROWEL EPOXY PRIMER RESIN			
Aquatic			
Crustacea	EC50	Daphnia	3.0857 mg/l, 48 hours estimated
Fish	LC50	Fish	1.7123 mg/l, 96 hours estimated
Components	Species		Test Results
EPICHLOROHYDRIN (CAS 106-89-8)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	9.1 - 12.3 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)	
BUTYL GLYCIDYL ETHER	0.63
EPICHLOROHYDRIN	0.45

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-(EPICHLORHYDRIN) EPOXY RESIN), MARINE POLLUTANT (EPICHLOROHYDRIN)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes

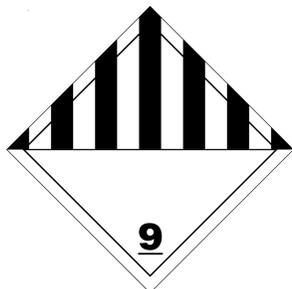
EmS
Special precautions for user

F-A, S-F
Read safety instructions, SDS and emergency procedures before handling.

EPICHLOROHYDRIN

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

EPICHLOROHYDRIN (CAS 106-89-8) Listed.

SARA 304 Emergency release notification

EPICHLOROHYDRIN (CAS 106-89-8) 100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
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EPICHLOROHYDRIN	106-89-8	100	1000		
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SARA 311/312 Yes
Hazardous chemical

Classified hazard categories

Acute toxicity (any route of exposure)
 Skin corrosion or irritation
 Serious eye damage or eye irritation
 Respiratory or skin sensitization
 Germ cell mutagenicity
 Carcinogenicity
 Reproductive toxicity
 Specific target organ toxicity (single or repeated exposure)
 Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
EPICHLOROHYDRIN	106-89-8	1 - 5

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

EPICHLOROHYDRIN (CAS 106-89-8)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

EPICHLOROHYDRIN (CAS 106-89-8)

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****California Proposition 65**

WARNING: California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

EPICHLOROHYDRIN (CAS 106-89-8) Listed: October 1, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin

EPICHLOROHYDRIN (CAS 106-89-8) Listed: September 1, 1996

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

EPICHLOROHYDRIN (CAS 106-89-8)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of 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	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 02-19-2020
Version # 01

NFPA ratings

Health: 2
Flammability: 3
Instability: 0

Disclaimer

Ergon Armor cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available