

1. Identification

Product identifier	PENNCOAT™ 380 RESIN (All Colors)
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	Flammable liquids	Category 3
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention	Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
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Response	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 INHALED: Remove person to fresh air and keep comfortable for breathing. Specific treatment see Section 4 of this SDS. Take off contaminated clothing and wash before reuse. Call a POISON CENTER/doctor if you feel unwell. In case of fire: Use appropriate media for extinction.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep cool.
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	%
STYRENE		100-42-5	20 - 30
BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN		25068-38-6	1 - 10
Other components below reportable levels			72.925

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Take off immediately all contaminated clothing. Wash clothing separately before reuse. Get medical attention if irritation develops and persists.
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. Get medical attention immediately.
Ingestion	Rinse mouth. Do not induce vomiting. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention.
Most important symptoms/effects, acute and delayed	Skin irritation. Irritating to mouth, throat, and stomach. Contact may cause redness, burning, drying, and cracking of the skin, and skin damage. Causes serious eye irritation. May cause an allergic skin reaction.
Indication of immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Keep victim warm. Keep victim under observation. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Foam. Dry chemical. Carbon dioxide (CO2). Alcohol resistant foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Eliminate sources of ignition. Keep out of low areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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 release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Keep away from sources of ignition - No smoking. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Eliminate sources of ignition. Store in tightly closed container. Store in a well-ventilated place. 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-2 Permissible Exposure Limits (PEL) (29 CFR 1910.1000)

Components	Type	Value
STYRENE (CAS 100-42-5)	Ceiling	200 ppm
	TWA	100 ppm

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
STYRENE (CAS 100-42-5)	STEL	20 ppm
	TWA	10 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value
STYRENE (CAS 100-42-5)	STEL	425 mg/m3
		100 ppm
	TWA	215 mg/m3
		50 ppm

Biological limit values

ACGIH Biological Exposure Indices (BEI)

Components	Value	Determinant	Specimen	Sampling Time
STYRENE (CAS 100-42-5)	40 µg/l	Styrene	Urine	*
	400 mg/g	Mandelic acid plus phenylglyoxylic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

STYRENE (CAS 100-42-5) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

STYRENE (CAS 100-42-5) Skin designation applies.

Appropriate engineering controls	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Provide eyewash station and safety shower.
Individual protection measures, such as personal protective equipment	
Eye/face protection	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	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not smoke. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	Paste.
Physical state	Liquid.
Form	Liquid.
Color	Varies
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	84.0 °F (28.9 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	10.45 lb/gal @25°C
Specific gravity	1.25 @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	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents. Aluminum. Peroxides.
Hazardous decomposition products	Carbon dioxide. Aldehydes. Carbon monoxide. Nitrogen oxides (NOx). Formaldehyde.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Headache. Dizziness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
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Information on toxicological effects

Acute toxicity

Components	Species	Test Results
STYRENE (CAS 100-42-5)		
<u>Acute</u>		
Oral		
LD50	Rat	1 g/kg

Skin corrosion/irritation	Causes skin irritation.
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Serious eye damage/eye irritation	Causes serious eye irritation.
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Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
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Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity	
STYRENE (CAS 100-42-5)	2A Probably carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	
Not listed.	

US. National Toxicology Program (NTP) Report on Carcinogens	
STYRENE (CAS 100-42-5)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
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Specific target organ toxicity - single exposure	May cause respiratory irritation.
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Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard	Not available.
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Chronic effects	Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.
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12. Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects.
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Product	Species		Test Results
PENNCOAT™ 380 RESIN (All Colors)			
Aquatic			
Crustacea	EC50	Daphnia	112.5 mg/l, 48 hours estimated
Fish	LC50	Fish	62.5 mg/l, 96 hours estimated

Product		Species	Test Results
Acute			
Crustacea	EC50	Daphnia	411.9108 mg/l, 48 hours estimated
Fish	LC50	Fish	20.5915 mg/l, 96 hours estimated
Components		Species	Test Results
STYRENE (CAS 100-42-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia)	42 g/ml, 24 hours
Acute			
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	>= 5.1 - <= 16 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)			
STYRENE		2.95	
Mobility in soil	No data available.		
Other adverse effects	Not available.		
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			
UN number	UN1993		
UN proper shipping name	Flammable liquids, n.o.s. (STYRENE RQ = 4055 LBS, BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN)		
Transport hazard class(es)			
Class	3		
Subsidiary hazard	-		
Label(s)	3		
Packing group	III		
Environmental hazards			
Marine pollutant	NO		
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.		
Special provisions	B1, B52, IB3, T4, TP1, TP29		
Packaging exceptions	150		
Packaging non bulk	203		
Packaging bulk	242		
IATA			
UN number	UN1993		
UN proper shipping name	Flammable liquid, n.o.s. (STYRENE, BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN)		
Transport hazard class(es)			
Class	3		
Subsidiary hazard	-		
Packing group	III		
Environmental hazards	YES		
ERG Code	3L		

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S. (STYRENE, BISPHENOL A-(EPICHLOROHYDRIN) EPOXY RESIN), MARINE POLLUTANT

Transport hazard class(es)

Class 3

Subsidiary hazard -

Packing group III

Environmental hazards

Marine pollutant Yes

EmS F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

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

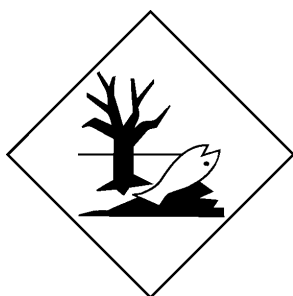
DOT



IATA; IMDG



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.

Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive".

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

STYRENE (CAS 100-42-5)

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical Yes**Classified hazard categories**

Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
STYRENE	100-42-5	20 - 30

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

STYRENE (CAS 100-42-5)

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

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

STYRENE (CAS 100-42-5)

Other Flavoring Substances with OSHA PEL's

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

STYRENE (CAS 100-42-5)

California Proposition 65**WARNING:** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

STYRENE (CAS 100-42-5)

Listed: April 22, 2016

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	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

Country(s) or region	Inventory name	On inventory (yes/no)*
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	06-15-2023
Revision date	01-23-2024
Version #	02
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.
Revision information	Hazard(s) identification: Storage Hazard(s) identification: GHS Symbols Ecological information: Other adverse effects Transport Information: Proper Shipping Name/Packing Group GHS: Classification