

**1. Identification**

**Product identifier** PENNCHEM™ 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** Flammable liquids Category 3  
**Health hazards** Skin corrosion/irritation Category 2  
 Serious eye damage/eye irritation Category 2A  
 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** Combustible dust  
**Label elements**



**Signal word** Danger  
**Hazard statement** Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. May form combustible dust concentrations in air.  
**Precautionary statement**  
**Prevention** Observe good industrial hygiene practices. Wash thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. 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. Wear protective gloves/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product.

<b>Response</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off contaminated clothing and wash before reuse. Specific treatment (see on this label). Get medical advice/attention if you feel unwell. In case of fire: Use appropriate media for extinction. IF ON SKIN: Wash with plenty of water. 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 skin irritation occurs: Get medical advice/attention.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
STYRENE		100-42-5	20 - 50
METHACRYLIC ACID		79-41-4	0 - 5
TETRAMETHYLAMMONIUM CHLORIDE		75-57-0	< 1

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash clothing separately before reuse.
<b>Eye contact</b>	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 if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Shortness of breath. Skin irritation. May cause respiratory irritation. Irritating to mouth, throat, and stomach. Diarrhea. Dizziness. Headache. Nausea, vomiting.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Alcohol resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Fire may produce irritating, corrosive and/or toxic gases. During fire, gases hazardous to health may be formed. Dust may form explosive mixture with air. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Vapors may accumulate in low or confined areas.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In the event of fire and/or explosion do not breathe fumes.

**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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate personal protective equipment. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Extinguish all flames in the vicinity.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. 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.

**Environmental precautions** Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so.

## 7. Handling and storage

**Precautions for safe handling** Avoid breathing dust/fume/gas/mist/vapors/spray. Provide adequate ventilation. Observe good industrial hygiene practices. Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Avoid contact with eyes. Avoid contact with skin. Avoid prolonged exposure. When using do not eat or drink. Wear personal protective equipment. Do not empty into drains.

**Conditions for safe storage, including any incompatibilities** Keep upright to prevent leakage. Store in original tightly closed container. Store locked up. Store in cool place. Store in a well-ventilated place. Keep away from heat and sources of ignition. Store in a closed container away from incompatible materials. Keep away from food and drinking water.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

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

#### US. ACGIH Threshold Limit Values

Components	Type	Value
METHACRYLIC ACID (CAS 79-41-4)	TWA	20 ppm
STYRENE (CAS 100-42-5)	STEL	40 ppm
	TWA	20 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
METHACRYLIC ACID (CAS 79-41-4)	TWA	70 mg/m <sup>3</sup>
		20 ppm
STYRENE (CAS 100-42-5)	STEL	425 mg/m <sup>3</sup>
		100 ppm
	TWA	215 mg/m <sup>3</sup>
		50 ppm

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
STYRENE (CAS 100-42-5)	40 µg/l	Styrene	Urine	*

**ACGIH Biological Exposure Indices Components**

Value	Determinant	Specimen	Sampling Time
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**

METHACRYLIC ACID (CAS 79-41-4)

Can be absorbed through the skin.

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.

**US - Tennessee OELs: Skin designation**

METHACRYLIC ACID (CAS 79-41-4)

Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

METHACRYLIC ACID (CAS 79-41-4)

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**

Wear safety glasses; chemical goggles (if splashing is possible).

**Skin protection****Hand protection**

Wear protective gloves. Laminated gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

**Other**

Wear appropriate chemical resistant clothing. Impervious clothing.

**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**

When using, do not eat, drink or smoke. When using do not smoke. Wash hands after handling. Keep away from food and drink. 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.

**9. Physical and chemical properties****Appearance**

Liquid.

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Not available.

**Odor**

Pungent.

**Odor threshold**

Not available.

**pH**

Not available.

**Melting point/freezing point**

Not available.

**Initial boiling point and boiling range**

Not available.

**Flash point**

84.9 °F (29.4 °C) Setflash

**Evaporation rate**

Not available.

**Flammability (solid, gas)**

Not available.

**Upper/lower flammability or explosive limits****Explosive limit - lower (%)**

Not available.

**Explosive limit - upper (%)**

Not available.

**Vapor pressure**

Not available.

<b>Vapor density</b>	> 1 (Air = 1.0)
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	> 20.5 mm <sup>2</sup> /s @40°C
<b>Other information</b>	
<b>Density</b>	1.0832 g/cm <sup>3</sup> @25°C

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization can occur.
<b>Conditions to avoid</b>	Heat, flames and sparks. Avoid temperatures exceeding the flash point. Exposure to air. Sunlight.
<b>Incompatible materials</b>	Acids. Aluminum. Aluminum chlorides Peroxides. Amines. Bases. Copper and copper alloys. Iron chloride. Halogens. Metal salts Oxidizing agents. Peroxides.
<b>Hazardous decomposition products</b>	Hydrocarbons. Acetone. Carbon dioxide. Carbon monoxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Expected to be a low ingestion hazard. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritating to eyes, respiratory system and skin. Direct contact with eyes may cause temporary irritation. Exposure may cause temporary irritation, redness, or discomfort. Irritating to mouth, throat, and stomach. May cause respiratory irritation. Shortness of breathe.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
STYRENE (CAS 100-42-5)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	24 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	1 g/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Irritating to skin.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not classified.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Not classified.

## IARC Monographs. Overall Evaluation of Carcinogenicity

STYRENE (CAS 100-42-5)

2A Probably carcinogenic to humans.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

## US. National Toxicology Program (NTP) Report on Carcinogens

STYRENE (CAS 100-42-5)

Reasonably Anticipated to be a Human Carcinogen.

<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure. Auditory organs.
<b>Aspiration hazard</b>	Not classified.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects.

## 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	
<b>PENNCHEM™ RESIN</b>			
<b>Aquatic</b>			
Fish	LC50	92.2221 mg/l, 96 hours estimated	
<b>Components</b>			
<b>Species</b>			
<b>Test Results</b>			
STYRENE (CAS 100-42-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia)	42 g/ml, 24 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	5.1 - 16 mg/l, 96 hours
TETRAMETHYLAMMONIUM CHLORIDE (CAS 75-57-0)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	431 - 495 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

### Partition coefficient n-octanol / water (log Kow)

METHACRYLIC ACID	0.93
STYRENE	2.95

**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. Do not allow this material to drain into sewers/water supplies.

**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** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

<b>UN number</b>	UN1866
<b>UN proper shipping name</b>	Resin solution, flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	3
<b>Packing group</b>	III
<b>Special precautions for user</b>	Not available.
<b>Special provisions</b>	B1, B52, IB3, T2, TP1
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	173
<b>Packaging bulk</b>	242

### IATA

<b>UN number</b>	UN1866
<b>UN proper shipping name</b>	Resin solution flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Not available.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

### IMDG

<b>UN number</b>	UN1866
<b>UN proper shipping name</b>	RESIN SOLUTION flammable
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary risk</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-E, <u>S</u> - <u>E</u>
<b>Special precautions for user</b>	Not available.

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

### DOT





## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

### 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 1910.1001-1052)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

#### Classified hazard categories

Flammable (gases, aerosols, liquids, or solids)  
Combustible dust  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Specific target organ toxicity (single or repeated exposure)

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
STYRENE	100-42-5	20 - 50

### 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)** Not regulated.

#### 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

#### California Proposition 65



**WARNING:** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### California Proposition 65 - CRT: Listed date/Carcinogenic substance

STYRENE (CAS 100-42-5) Listed: April 22, 2016

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

STYRENE (CAS 100-42-5)

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes



<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
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** 04-07-2021

**Version #** 01

**NFPA ratings**  
Health: 2  
Flammability: 3  
Instability: 0

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety