SAFETY DATA SHEET



1. Identification

Product identifier EP38XX Series Part B Coating and Lining (All Colors)

Other means of identification

Synonyms EP3840 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

1-877-982-7667

telephone number Website

www.ergonarmor.com

Emergency 24-hour

sds@ergon.com

telephone number

CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887

Information on operation

8:00 a.m. to 5:00 p.m.

hours

E-mail

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, dermal Category 4 Acute toxicity, inhalation Category 3 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 1 Sensitization, skin Category 1 Germ cell mutagenicity Category 2

exposure

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Specific target organ toxicity, repeated

Signal word Danger

Hazard statement Suspected of causing genetic defects by ingestion. May cause damage to organs through

prolonged or repeated exposure. Toxic if inhaled. Harmful in contact with skin. Causes skin

irritation. May cause an allergic skin reaction.

Precautionary statement

Prevention Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye

protection/face protection. Wash thoroughly after handling. Contaminated work clothing should

Category 2

not be allowed out of the workplace.

Material name: EP38XX Series Part B Coating and Lining (All Colors)

SDS US 1/9 6188 Version #: 01 Issue date: 03-15-2017

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON Response

CENTER/doctor. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If eye irritation persists: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep cool. Store locked up. Storage

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures _.

Chemical name	Common name and synonyms	CAS number	%	
ALUMINIUM OXIDE		1344-28-1	5 - 15	
2,4,6-TRIS(DIMETHYLAMINOMETH YL)PHENOL		90-72-2	1 - 5	
BENZYL ALCOHOL		100-51-6	1 - 5	
TRIENTINE		112-24-3	1 - 5	
PHENOL		108-95-2	< 2	
Other components below reportable	e levels		80.89	

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. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device. Call a physician or poison control center immediately.

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or Skin contact poison control center immediately. Chemical burns must be treated by a physician. For minor skin

contact, avoid spreading material on unaffected skin. Wash contaminated clothing before reuse.

Wash clothing separately before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO

NOT delay irrigation or attempt to remove the lens. Continue rinsing. Call a physician or poison

control center immediately.

Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if Ingestion

the person is conscious). Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device.

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. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information 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

Suitable extinguishing media Unsuitable extinguishing

Water fog. Alcohol foam. Foam. Dry chemical powder. Carbon dioxide (CO2). Water. Do not use water jet as an extinguisher, as this will spread the fire.

media Specific hazards arising from

Fire may produce irritating, corrosive and/or toxic gases.

the chemical

Material name: EP38XX Series Part B Coating and Lining (All Colors)

SDS US 2/9 6188 Version #: 01 Issue date: 03-15-2017

Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions

In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. Water runoff can cause environmental damage.

Specific methods
General fire hazards

In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

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. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Extinguish all flames in the vicinity. This product is miscible in water.

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. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. 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.

Environmental precautions

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. When using do not eat or drink. Do not get this material in contact with skin. Do not taste or swallow. Avoid prolonged exposure. Use personal protective equipment as required. Do not get this material on clothing. Observe good industrial hygiene practices. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Store away from incompatible materials (see Section 10 of the SDS). Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Туре	Value	Form
ALUMINIUM OXIDE (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
PHENOL (CAS 108-95-2)	PEL	19 mg/m3	
		5 ppm	
US. ACGIH Threshold Limit Val	ues		
Components	Туре	Value	Form
ALUMINIUM OXIDE (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
PHENOL (CAS 108-95-2)	TWA	5 ppm	
US. NIOSH: Pocket Guide to Ch	nemical Hazards		
Components	Туре	Value	
PHENOL (CAS 108-95-2)	Ceiling	60 mg/m3	
,	J	15.6 ppm	
	TWA	19 mg/m3	
		<i>5,</i>	

Material name: EP38XX Series Part B Coating and Lining (All Colors)

6188 Version #: 01 Issue date: 03-15-2017 3 / 9

Value Components Type 5 ppm **US. AIHA Workplace Environmental Exposure Level (WEEL) Guides Value** Components **Type** BENZYL ALCOHOL (CAS **TWA** 44.2 mg/m3 100-51-6) 10 ppm **TRIENTINE (CAS 112-24-3) TWA** 6 mg/m3 1 ppm

Biological limit values

ACGIH Riological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
PHENOL (CAS 108-95-2)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*

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

Exposure guidelines

US - California OELs: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

PHENOL (CAS 108-95-2) Skin designation applies.

US - Tennesse OELs: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

US WEEL Guides: Skin designation

TRIENTINE (CAS 112-24-3) Can be absorbed through the skin.

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

PHENOL (CAS 108-95-2) Can be absorbed through the skin.

Appropriate engineering

controls

occupational exposure limit is not exceeded. Individual protection measures, such as personal protective equipment

Eye/face protection Chemical goggles and face shield are recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Skin protection should include disposable chemical resistant coveralls with hoods. Hand protection Other

should include appropriate chemical resistant disposable gloves, such as nitrile rubber.

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined

Respiratory protection should include at a minimum a fullface air purifying respirator (APR) with Respiratory protection

combination particulate (P100) and organic vapor (OV) cartridges. A full-face APR has an assigned protection factor (APF) of 50, as designated by OSHA. As a substitute, a PAPR with a loose-fitting

hood could be used as respiratory protection.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene Do not get in eyes. Do not get this material in contact with skin. Do not get this material on considerations clothing. Wash hands before breaks and immediately after handling the product. Keep away from

food and drink.

9. Physical and chemical properties

Appearance

Physical state Liauid. **Form** Liquid. Color Not available. Odor Not available. **Odor threshold** Not available.

Material name: EP38XX Series Part B Coating and Lining (All Colors)

Not available. pН Melting point/freezing point Not available.

Initial boiling point and

boiling range

212 °F (100 °C) estimated

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Vapor pressure 0.01 hPa estimated

Vapor density Not available.

Relative density 2.387

Solubility(ies)

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

Auto-ignition temperature

640 °F (337.78 °C) estimated

Decomposition temperature Not available. Not available. **Viscosity**

Other information

Flammability class Combustible IIIA estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

Hazardous polymerization can occur with elevated temperatures.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Acids. Alkaline metals. Amines. Peroxides. Fluorine. Chlorine. Phenols. Strong acids, alkalies and

oxidizing agents.

Hazardous decomposition

products

Toxic gas. If product is burned hazardous gases such as oxides of carbon and nitrogen and various

hydrocarbons may be produced. Upon combustion, oxides of chlorine may be released.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. Harmful in contact with skin.

Eye contact Causes eye irritation.

Ingestion Expected to be a low ingestion hazard. Symptoms related to the Irritation of eyes and mucous membranes.

physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Material name: EP38XX Series Part B Coating and Lining (All Colors)

SDS US 6188 Version #: 01 Issue date: 03-15-2017

Components Species Test Results

BENZYL ALCOHOL (CAS 100-51-6)

<u>Acute</u> Dermal

LD50 Rabbit 2000 mg/kg

Oral

LD50 Rat 1230 - 3100 mg/kg

PHENOL (CAS 108-95-2)

<u>Acute</u>

Dermal

LD50 Rat 669 mg/kg

Oral

LD50 Rat 317 mg/kg

Skin corrosion/irritation Irritating and may cause redness and pain.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. This product

contains crystalline silica. Silica is a known carcinogen; however in this encapsulated form the

normal routes of exposure are unavailable.

IARC Monographs. Overall Evaluation of Carcinogenicity

PHENOL (CAS 108-95-2)

3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicityThis 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 available.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Harmful to aquatic life. Components of this product are hazardous to aquatic life. Accumulation in

aquatic organisms is expected.

Product Species Test Results

EP38XX Series Part B Coating and Lining (All Colors)

Aquatic

Crustacea EC50 Daphnia 4299.5537 mg/l, 48 hours estimated

Components Species Test Results

BENZYL ALCOHOL (CAS 100-51-6)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 10 mg/l, 96 hours

6/9

SDS US

^{*} Estimates for product may be based on additional component data not shown.

Components Species Test Results

PHENOL (CAS 108-95-2)

Aquatic

Crustacea EC50 Water flea (Daphnia obtusa) 4.7 - 6.4 mg/l, 48 hours
Fish LC50 Asiatic knifefish (Notopterus notopterus) 8 - 8.25 mg/l, 96 hours

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)

BENZYL ALCOHOL 1.1 PHENOL 1.46

Mobility in soil No data available.

Other adverse effectsNo 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 instructionsDispose of contents/container in accordance with local/regional/national/international regulations.

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria

for hazardous waste.

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.

US RCRA Hazardous Waste U List: Reference

PHENOL (CAS 108-95-2) U188

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. Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

US federal regulationsThis product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

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)

PHENOL (CAS 108-95-2) Listed.

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity

PHENOL (CAS 108-95-2) 1000 LBS

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes **Hazard categories**

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name CAS number Reportable **Threshold Threshold Threshold** quantity planning quantity planning planning quantity, lower quantity, upper (pounds) (pounds) value (pounds) value (pounds)

PHENOL 108-95-2 1000 500 10000

SARA 311/312 Yes

Hazardous chemical

SARA 313 (TRI reporting)

Chemical name CAS number % by wt. **ALUMINIUM OXIDE** 1344-28-1 9.63

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

PHENOL (CAS 108-95-2)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

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

PHENOL (CAS 108-95-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
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)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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)

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

Issue date 03-15-2017

Version # 01

NFPA ratings Health: 3

Flammability: 0 Instability: 0

Material name: EP38XX Series Part B Coating and Lining (All Colors)

8/9 6188 Version #: 01 Issue date: 03-15-2017

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).

References EPA: AQUIRE database

US. IARC Monographs on Occupational Exposures to Chemical Agents

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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.

SDS US 9/9 6188 Version #: 01 Issue date: 03-15-2017