## SAFETY DATA SHEET



## 1. Identification

**Product identifier** PENNTROWEL EPOXY PRIMER HARDENER

Other means of identification Not available. Recommended use Not available. **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

**Manufacturer** 

**Company Name** ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.

**Address** 2829 Lakeland Drive Jackson, MS 39232

USA

After hours telephone

1-800-222-7122

number

**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** Acute toxicity, oral Category 4

Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2

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

**Label elements** 



Signal word Warning

**Hazard statement** Causes skin irritation. Causes serious eye irritation.

**Prevention** Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear

protective gloves. Wear eye/face protection.

Response IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF IN EYES: Rinse

cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. IF ON SKIN: Wash with plenty of soap and water.

**Storage** Store in a well-ventilated place. Keep container tightly closed.

**Disposal** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with

applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise

classified (HNOC)

None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

Material name: PENNTROWEL EPOXY PRIMER HARDENER

### **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Fatty acids, C18 Unsatd., dimer, reaction products with polyethylenepolyamines		68410-23-1	90 - 97

**Chemical name** Common name and synonyms **CAS** number % 2,4,6-TRIS(DIMETHYLAMINOMETH 90-72-2 0 - 6

CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC.

PBT: persistent, bioaccumulative and toxic substance. vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

**Composition comments** 

YL)PHENOL

The full text for all R- and H-phrases is displayed in section 16.

### 4. First-aid measures

**Inhalation** 

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Move to fresh air. 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. Call a POISON CENTER or doctor/physician if you feel unwell. Call a physician if symptoms develop or persist.

Skin contact

Take off immediately all contaminated clothing. Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Wash off with soap and plenty of water. Wash off with warm water and soap. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Call a POISON CENTER or doctor/physician if you feel unwell. Get medical attention if irritation develops and persists. Wash clothing separately before reuse.

**Eye contact** 

Immediately flush eyes with plenty of water for at least 15 minutes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. If eye irritation persists: Get medical advice/attention. Get medical attention if irritation develops and persists.

**Ingestion** 

Do not induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth, Rinse mouth thoroughly, If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed

Upper respiratory tract irritation, Irritation of nose and throat, Irritation of eyes and mucous membranes. Prolonged exposure may cause chronic effects. May cause allergic skin reaction. Irritant effects.

**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** 

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off contaminated clothing and shoes immediately. Take off all contaminated clothing immediately. Consult a physician. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Keep victim warm. Wash contaminated clothing before reuse.

# 5. Fire-fighting measures

Suitable extinguishing media

Water Spray or Fog. Foam. Carbon dioxide (CO2). Powder.

Unsuitable extinguishing

media

Not available.

Specific hazards arising from the chemical

No unusual fire or explosion hazards noted.

**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.

Fire-fighting equipment/instructions Move containers from fire area if you can do so without risk.

**Specific methods** 

In the event of fire, cool tanks with water spray. Move container from fire area if it can be done

without risk.

Material name: PENNTROWEL EPOXY PRIMER HARDENER

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Avoid inhalation of vapors or mists. Avoid skin contact and inhalation of vapors during disposal of spills.

Methods and materials for containment and cleaning up

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 or absorbent material then place into containers. Prevent product from entering drains.

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

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.

### **Environmental precautions**

Do not contaminate water. 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 handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid breathing vapor. Avoid contact with skin. Avoid contact with eyes. Do not get this material on clothing. Avoid contact with clothing. Use personal protective equipment as required. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Do not use in areas without adequate ventilation. Wear positive pressure self-contained breathing apparatus (SCBA). Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

CAUTION Store locked up. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Store in original tightly closed container. Keep container tightly closed. Keep container dry. Store in a closed container away from incompatible materials. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

# 8. Exposure controls/personal protection

**Occupational exposure limits** 

No exposure limits noted for ingredient(s).

**Biological limit values** 

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

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Provide adequate general and local exhaust ventilation.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** 

Do not get in eyes. Avoid contact with eyes. Wear eye/face protection. Chemical goggles are recommended. Face-shield. Eye wash fountain is recommended. Goggles/face shield are recommended.

Hand protection

Wear protective gloves.

Skin protection
Other

Avoid contact with the skin. Wear appropriate chemical resistant clothing. Chemical resistant gloves. Wear protective gloves. Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Skin protection

**Respiratory protection** 

Wear positive pressure self-contained breathing apparatus (SCBA). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not available.

General hygiene considerations

When using, do not eat, drink or smoke. Do not get in eyes. Avoid contact with eyes. Avoid contact with skin. Avoid contact with clothing. Wash hands after handling. Wash hands before breaks and immediately after handling the product. Wash hands after handling and before eating. Keep away from food and drink. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

**Appearance** Liquid. **Physical state** Liquid. Liquid. **Form** Color Amber. Odor Amine-like. **Odor threshold** Not available. Not available. Melting point/freezing point Not available.

Initial boiling point and

boiling range

> 400 °F (> 204.44 °C)

Flash point > 212.0 °F (> 100.0 °C) Tag Closed Cup

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

Flammability limit - lower

(%)

Flammability limit -

upper (%)

Not available.

Not available.

**Explosive limit - lower** 

(%)

**Explosive limit - upper** 

(%)

Not available.

Not available. Vapor pressure Vapor density Not available. Not available. **Relative density** 

Solubility(ies)

Solubility (water) Partly soluble **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Specific gravity 0.98 @25 deg C

VOC (Weight %) < 1 %

# 10. Stability and reactivity

Reactivity Not available.

Material is stable under normal conditions. Chemical stability Possibility of hazardous Hazardous polymerization does not occur.

reactions

**Conditions to avoid** Contact with incompatible materials.

**Incompatible materials** Avoid contact with acids and alkalies. Strong oxidizing substances. Copper Chlorinated compounds.

**Hazardous decomposition** 

products

Nitrogen oxides (NOx). Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

**Ingestion** Not classified. Not available. **Inhalation** Not classified. Not available.

Skin contact Harmful in contact with skin. Causes skin irritation. Not classified. Not available.

**Eye contact** Causes serious eye irritation. May be irritating to eyes. Not available.

Symptoms related to the physical, chemical and toxicological characteristics Irritant effects.

Material name: PENNTROWEL EPOXY PRIMER HARDENER

5274 Version #: 03 Revision date: 08-30-2016 Issue date: 08-06-2015

Information on toxicological effects

**Acute toxicity** Harmful in contact with skin. Skin corrosion/irritation Causes skin irritation. Not available.

Serious eye damage/eye

irritation

Causes serious eye irritation. None known. May be irritating to eyes. Not available.

Respiratory or skin sensitization

**Respiratory sensitization** Not available.

Skin sensitization None known. Not available.

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

mutagenic or genotoxic. Not available.

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

Not classifiable as to carcinogenicity to humans.

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

Not listed.

Reproductive toxicity Not available. Not classified.

Specific target organ toxicity

- single exposure

Not available.

Specific target organ toxicity

- repeated exposure

Not available.

**Aspiration hazard** 

Not available.

**Chronic effects** Not expected to be hazardous by WHMIS criteria.

**Further information** This product has no known adverse effect on human health.

12. Ecological information

Not expected to be harmful to aquatic organisms. **Ecotoxicity** 

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

Not available. **Bioaccumulative potential** Mobility in soil Not available. Other adverse effects Not available.

13. Disposal considerations

**Disposal instructions** Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim

or dispose in sealed containers at licensed waste disposal site. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not

contaminate ponds, waterways or ditches with chemical or used container. Dispose of

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

accordance with all applicable regulations.

Hazardous waste code Not regulated.

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). Avoid discharge into water courses or onto the ground.

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

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

5274 Version #: 03 Revision date: 08-30-2016 Issue date: 08-06-2015

# 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazarc

Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

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

Not regulated.

# **CERCLA Hazardous Substance List (40 CFR 302.4)**

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

Not listed.

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

**Hazard categories** Immediate Hazard - Yes

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

## SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312** No

**Hazardous chemical** 

## SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

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

Not regulated.

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

Not regulated.

**Safe Drinking Water Act** 

(SDWA)

Not regulated.

**US state regulations** 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.

### **US. Massachusetts RTK - Substance List**

Not regulated.

## **US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

# **US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

#### **US. Rhode Island RTK**

Not regulated.

## **US. California Proposition 65**

Not Listed.

#### **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)	No
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	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Material name: PENNTROWEL EPOXY PRIMER HARDENER

\*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** 08-06-2015 **Revision date** 08-30-2016

Version # 03

**Further information** HMIS® is a registered trade and service mark of the NPCA.

NFPA ratings Health: 1

Flammability: 1 Instability: 0

References **ACGIH** 

EPA: AOUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control

Law, Executive Order No. 19203)

Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances

Safety Management Act No. 18406, Schedule 1)

Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial

Safety and Health Act (No. 13053), Article 29)

Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on

the Industrial Safety and Health Act (No. 13053), Article 30)

Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice

No. 1997-10, as amended)

Korea, Observational Chemicals (Ministerial Decree of TCCL Article 6)

Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor

(MOL) Public Notice No. 1986-45, as amended)

Korea. Prohibited Chemical Substances (TCCL Article 11)

Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as

amended)

Korea. Restricted Chemical Substances (TCCL Article 11)

Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI)

Korea. Toxic Chemical Control Law (TCCL), pre-1997 List

Korea. Toxic Chemicals (TCCL Article 10)

Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14)

Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic

Materials)

Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and

Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)

Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials) Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the

**Environmental Protection Administration)** 

Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic

Materials)

HSDB® - Hazardous Substances Data Bank

JIS Z 7250: 2005 Safety data sheet for chemical products-Part 1:Content and order of sections

JCIA GHS Guideline, October 2008

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

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits

GOST 30333-2007 - Chemical production safety passport. General requirements

This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemica Disclaimer

Products (JIS Z 7250:2005). Additional information is given in the Material Safety Data Sheet. The

information in the sheet was written based on the best knowledge and experience currently

available

**Revision Information** Physical & Chemical Properties: Multiple Properties

Transport Information: Material Transportation Information

Material name: PENNTROWEL EPOXY PRIMER HARDENER 5274 Version #: 03 Revision date: 08-30-2016 Issue date: 08-06-2015