

Product name: PENNGUARD™ ADHESIVE MEMBRANE PART A

Issue date: 07-29-2022

Revision date: 06-14-2024

Version #: 06

SDS No: 5944

**SECTION 1 Chemical product and company identification**

<b>Chinese name of chemical</b>	<b>PENNGUARD™ ADHESIVE MEMBRANE PART A</b>
<b>English name of chemical</b>	<b>PENNGUARD™ ADHESIVE MEMBRANE PART A</b>
<b>Company Name</b>	ErgonArmor, a division of Ergon Asphalt & Emulsions, Inc.
<b>Address</b>	2829 Lakeland Drive Jackson, MS 39232 USA
<b>After hours telephone number</b>	1-800-222-7122
<b>Normal work hours telephone number</b>	1-877-982-7667
<b>Website</b>	www.ergonarmor.com
<b>E-mail</b>	sds@ergon.com
<b>Emergency 24-hour telephone number</b>	CHEMTREC: North America 1-800-424-9300 International 1-800-527-3887
<b>Information on operation hours</b>	8:00 a.m. to 5:00 p.m.
<b>Manufacturer:</b>	Ergon, Inc. P.O. BoX 1639 Jackson, MS 39181 USA
<b>EU Contact:</b>	Ergon International, Inc. Drève Richelle 161 Building C B-1410 Waterloo, Belgium
<b>Emergency Phone Numbers:</b>	
<b>US Customer Service:</b>	+1-800-222-7122
<b>Chemtrec:</b>	+1-800-424-3900 After Business Hours (North America) +1-703-527-3887 (International) 4001-204937 (China) See section 16 for additional CHEMTREC Hotline Numbers
<b>E-mail:</b>	sds@ergon.com
<b>Recommended use and Limitations on use</b>	
<b>Recommended use</b>	Not available.
<b>Issue date</b>	07-29-2022
<b>Revision date</b>	06-14-2024
<b>Supersedes date</b>	10-30-2023

**SECTION 2 Hazards identification**

<b>Emergency overview</b>	May be ignited by heat, sparks or flames. May be fatal if swallowed and enters airways. May cause cancer. Causes mild skin irritation. May cause genetic defects. Prolonged exposure may cause chronic effects. Dangerous for the environment if discharged into watercourses.
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**GHS hazard categories**

<b>Physical hazards</b>	Flammable liquids	Category 3
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Germ cell mutagenicity	Category 1
	Carcinogenicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
<b>Environmental hazards</b>	Not classified.	

**Label elements****Pictograms****Signal word**

Danger

**Hazard statement**

H226	Flammable liquid and vapor.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

**Precautionary statement****Prevention**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P271	Use only outdoors or in a well-ventilated area.

**Response**

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a poison center/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P321	Specific treatment see Section 4 of this SDS.
P308 + P313	If exposed or concerned: Get medical advice/attention.
P370 + P378	In case of fire: Use appropriate media to extinguish.

**Safety storage**

P235	Keep cool.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

**Disposal**

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Physical and chemical hazards**

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

**Health hazards**

Prolonged inhalation may be harmful. May cause drowsiness or dizziness. Causes serious eye irritation. Causes skin irritation.

**Environmental hazards**

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.

**Supplemental information**

None.

**SECTION 3 Composition/information on ingredients****Substance/mixture**

Mixture

**Chemical name**

沥青

ASPHALT

**Concentration (%)**

40 - 50

**CAS Number**

8052-42-4

**Chemical name**

矿油精 MINERAL SPIRITS	10 - 15	8052-41-3/64742-48-9
石英 QUARTZ	< 1	14808-60-7
Other components below reportable levels	40 - 45	

**SECTION 4 First aid measures**

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Take off immediately all contaminated clothing. Wash clothing separately before reuse. Get medical attention if irritation develops and persists.
<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 immediately.
<b>Ingestion</b>	Rinse mouth. 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. Never give anything by mouth to a victim who is unconscious or is having convulsions. Call a physician or poison control center immediately.
<b>Most important symptoms and health effects</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
<b>Personal protection for first-aid responders</b>	Take off all contaminated clothing immediately. 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.
<b>Notes to physician</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**SECTION 5 Fire-fighting measures**

<b>Extinguishing media</b>	Water fog. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Extinguishing media to avoid</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back.
<b>Special fire fighting procedures</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. In the event of fire, cool tanks with water spray. In case of fire and/or explosion do not breathe fumes.
<b>Protection of fire-fighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>General fire hazards</b>	Flammable liquid and vapor.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

**SECTION 6 Accidental release measures****Personal precautions, protective equipment and emergency procedures**

<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not breathe mist/vapors. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment.
<b>For emergency responders</b>	Wear appropriate protective equipment and clothing during clean-up. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so.

**Clean-up methods and materials and containment measures**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewer, basements or confined areas. Take precautionary measures against static discharge. Use only non-sparking tools.

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. Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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. For waste disposal, see section 13 of the SDS. Put material in suitable, covered, labeled containers.

**Prevention of secondary hazards**

Not available.

**SECTION 7 Handling and storage****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. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment.

**Storage**

Store locked up. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Keep away from heat and sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

**SECTION 8 Exposure controls/personal protection****Exposure limits****Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2019)**

Components	Type	Value	Form
ASPHALT (CAS 8052-42-4)	PC-TWA	5 mg/m <sup>3</sup>	Fume.
QUARTZ (CAS 14808-60-7)	PC-TWA	0.5 mg/m <sup>3</sup>	Total dust.
		0.2 mg/m <sup>3</sup>	Respirable dust.

**Biological limit values****ACGIH Biological Exposure Indices (BEI)**

Components	Value	Determinant	Specimen	Sampling Time
ASPHALT (CAS 8052-42-4)	2.5 µg/l	1-Hydroxypyrene, with hydrolysis (1-HP)	Urine	*

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

**Monitoring methods**

Follow standard monitoring procedures.

**Engineering measures**

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

**Personal protective equipment****Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment.

**Hand protection**

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

**Eye protection**

Wear safety glasses with side shields (or goggles).

**Skin and body protection**

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

**Hygiene measures**

Observe any medical surveillance requirements. 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. Do not get in eyes, on skin, on clothing.

## SECTION 9 Physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid. Viscous. Semi-solid at ambient temperature
<b>Color</b>	Brown to Black
<b>Odor</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	Not available.
<b>Flash point</b>	≥ 100.0 - ≤ 140.0 °F (≥ 37.8 - ≤ 60.0 °C) Cleveland Open Cup
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>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>Flammability (solid, gas)</b>	Not applicable.
<b>Other data</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## SECTION 10 Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong reducing agents. Alkalines. Acids. This product reacts with hydrofluoric acid. Halogens.
<b>Hazardous decomposition products</b>	Carbon dioxide. Carbon monoxide.

## SECTION 11 Toxicological information

<b>Acute toxicity</b>	Not classified.	
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
ASPHALT (CAS 8052-42-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
<b>Routes of exposure</b>	Inhalation. Ingestion. Skin contact. Eye contact.	
<b>Symptoms</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Coughing. Skin irritation. May cause redness and pain. Severe eye irritation. Shortness of breath. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.	
<b>Skin corrosion/irritation</b>	Causes skin irritation.	

**Serious eye damage/eye irritation** May be irritating to eyes.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitizer** Not a skin sensitizer.

**Germ cell mutagenicity** May cause genetic defects.

**Carcinogenicity** May cause cancer.

**China OELs for hazardous agents in the workplace: Carcinogen Category**

Asphalt (petroleum) fume, as benzene soluble matter (CAS 8052-42-4) Possible human carcinogen.

Silica, respirable dust, 10% < = free SiO<sub>2</sub> < = 50% (CAS 14808-60-7) Carcinogenic to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans.

MINERAL SPIRITS (CAS 8052-41-3/64742-48-9) 3 Not classifiable as to carcinogenicity to humans.

QUARTZ (CAS 14808-60-7) 1 Carcinogenic to humans.

**Toxic to reproduction** Not classified.

**Specific target organ toxicity following single exposure** May cause drowsiness or dizziness.

**Specific target organ toxicity following repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not classified.

**Chronic effects** Prolonged exposure may cause chronic effects. Prolonged inhalation may be harmful.

## SECTION 12 Ecological information

### Ecotoxicological data

Product	Species	Test Results
PENNGUARD™ ADHESIVE MEMBRANE PART A	<b>Aquatic</b>	
	Crustacea	EC50 Daphnia 4289.7461 mg/l, 48 hours
	Fish	LC50 Fish 262.6234 mg/l, 96 hours
	<b>Acute</b>	
	Crustacea	EC50 Daphnia 87600 mg/l, 48 hours estimated
	Fish	LC50 Fish 59000 mg/l, 96 hours estimated

**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.

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

**Bioaccumulation**

**Mobility in soil** No data available for this product.

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

## SECTION 13 Disposal considerations

**Residual waste** 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.

**Local disposal regulations** Dispose of this material and its container to hazardous or special waste collection point. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14 Transport information

### CNDG

**UN number** UN1999

**UN proper shipping name** TARS, LIQUID

**Transport hazard class(es)**

<b>Class</b>	3
<b>Subsidiary hazard</b>	3
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**IATA**

<b>UN number</b>	UN1999
<b>UN proper shipping name</b>	Tars, liquid including road asphalt and oils, bitumen and cut backs
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary hazard</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<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>	UN1999
<b>UN proper shipping name</b>	TARS, LIQUID including road oils, and cutback bitumens
<b>Transport hazard class(es)</b>	
<b>Class</b>	3
<b>Subsidiary hazard</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-E, S-E
<b>Special precautions for user</b>	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.

**CNDG****IATA; IMDG****General information**

If shipped by ground in individual containers that are less than 119 gallons (450 L): Not regulated as a hazardous material (49 CFR 173.121). If shipped by vessel in individual containers that are less than 119 gallons (450 L) each, then IMDG 2.3.2.5 exception applies. Not subject to the provisions for marking, labelling, and testing of packages. "Transport in accordance with 2.3.2.5 of the IMDG code."

## SECTION 15 Regulatory information

### Law of the People's Republic of China on Prevention and Control of Occupational Diseases

#### Classification of occupational disease hazards

Petroleum pitch (CAS 8052-42-4)

Silica dust (free SiO<sub>2</sub> content ≥10%) (CAS 14808-60-7)

### Regulations on the Control over Safety of Dangerous Chemicals

#### Catalog of Hazardous Chemicals

Solvent naphtha [closed cup flash point ≤ 60 .degree.C] (CAS 8052-41-3/64742-48-9)

### Provision on the Environmental Administration of New Chemical Substances

#### China Inventory of Existing Chemical Substances

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	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).

#### Other regulations

This safety data sheet conforms to the following laws, regulations and standards:  
 Measures for the Safe Use of Chemicals in Workplaces  
 General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009 )  
 Regulations on Labor Protection in Workplaces Where Toxic Products Are Used  
 Packing Symbol of Dangerous Goods(GB190-2009)  
 Regulations on the Control over Safety of Dangerous Chemicals  
 Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)  
 Packing - Pictorial Marking for Handling of Goods (GB/T191-2008)  
 This safety data sheet was prepared in accordance with GB/T 16483-2008: Safety Data Sheet for Chemical Products - Content and Order of Sections. This material safety data sheet was prepared in accordance with the General Rules for the Preparation of Chemical Safety Data Sheets (GB16483-2000). Additional information is given in the Material Safety Data Sheet.

#### China. National Catalogue of Hazardous Wastes

ASPHALT (CAS 8052-42-4)

MINERAL SPIRITS (CAS 8052-41-3/64742-48-9)

#### International regulations

##### Stockholm Convention

Not applicable.

##### Rotterdam Convention

Not applicable.

##### Montreal Protocol

Not applicable.

##### Kyoto protocol

Not applicable.

##### Basel Convention

ASPHALT (CAS 8052-42-4)

## SECTION 16 Other information

#### References

EPA: AQUIRE database  
 GB6944-2012: Classification and Code of Dangerous Goods.  
 GB12268-2012: List of Dangerous Goods.  
 NLM: Hazardous Substances Data Base  
 US. IARC Monographs on Occupational Exposures to Chemical Agents

#### 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. 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

This document has undergone significant changes and should be reviewed in its entirety.