

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	PENNGUARD ADHESIVE MEMBRANE - CURED
Registration number	-
Synonyms	None.
Issue date	23-September-2015
Version number	02
Revision date	18-April-2016
Supersedes date	23-September-2015

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Not available.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

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.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation does not meet the criteria for classification according to Directive 1999/45/EC as amended.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	No hazards resulting from the material as supplied.
Main symptoms	Not available.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:	Asphalt, POLYURETHANE POLYMER
Hazard pictograms	None.
Signal word	Not applicable.
Hazard statements	Not applicable.

Precautionary statements

Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.

Disposal	Not applicable.
Supplemental label information	None.
2.3. Other hazards	None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Asphalt	60 - 75	8052-42-4 232-490-9	-	-	
Classification:	DSD: -				
	CLP: Flam. Liq. 2;H225				
Distillates (petroleum), hydrotreated heavy naphthenic	1 - 10	64742-52-5 265-155-0	01-2119467170-45	649-465-00-7	L
Classification:	DSD: -				
	CLP: Asp. Tox. 1;H304				
POLYURETHANE POLYMER	0 - 10	NA	-	-	
Classification:	DSD: -				
	CLP: -				

Other components below reportable levels 40 - < 50

Composition comments * All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

General information If you feel unwell, seek medical advice (show the label where possible). Discard any shoes or clothing items that cannot be decontaminated.

4.1. Description of first aid measures

Inhalation	Get medical attention, if needed.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly wash (or discard) clothing and shoes before reuse.
Eye contact	Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do not induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance.

4.2. Most important symptoms and effects, both acute and delayed

Not available.

4.3. Indication of any immediate medical attention and special treatment needed

In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician. Certain pre-existing conditions may make workers particularly susceptible to the effects of this chemical: asthma, allergies, impaired pulmonary function.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). Addition of water or foam to the fire may cause frothing.
Unsuitable extinguishing media	Not available.

5.2. Special hazards arising from the substance or mixture

Development of hazardous combustion gases or vapours possible in the event of a fire. The following may develop: Acrolein.

5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

Special fire fighting procedures In the event of fire, cool tanks with water spray. By fire, toxic gases may be formed (COx, NOx). Keep run-off water out of sewers and water sources. Dike for water control.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

For emergency responders Not available.

6.2. Environmental precautions Prevent further leakage or spillage if safe to do so. Runoff or release to sewer, waterway or ground is forbidden.

6.3. Methods and material for containment and cleaning up Dike far ahead of spill for later disposal. Following product recovery, flush area with water.

Never return spills in original containers for re-use.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling The product is non-combustible. If heated, irritating vapours may be formed. Do not use in areas without adequate ventilation. Wash hands after handling. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities Prevent electrostatic charge build-up by using common bonding and grounding techniques. Keep the container tightly closed and dry.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	5 mg/m ³	Fume.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Asphalt (CAS 8052-42-4)	STEL	10 mg/m ³
	TWA	5 mg/m ³
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m ³

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
Asphalt (CAS 8052-42-4)	MAC	5 mg/m ³
	STEL	10 mg/m ³

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	5 mg/m ³	Fume.

Czech Republic. OELs. Government Decree 361

Components	Type	Value
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	1000 mg/m ³
	TWA	200 mg/m ³

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TLV	1 mg/m ³	Dust.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TLV	1 mg/m ³	Mist.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	5 mg/m ³	Vapor.

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	5 mg/m ³	
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m ³	Mist.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	Ceiling	5 mg/m ³	Mist.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	5 mg/m ³	Fume.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	1 mg/m ³	Mist.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	STEL	10 mg/m ³	Fume.
	TWA	0,5 mg/m ³	Fume.

Italy. Occupational Exposure Limits

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	0,5 mg/m ³	Inhalable fraction.

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	3 mg/m ³	Fume and mist.
	TWA	1 mg/m ³	Fume and mist.

Netherlands. OELs (binding)

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TWA	5 mg/m ³	Mist.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TLV	5 mg/m ³	Fume.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	TLV	1 mg/m ³	Mist.

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	STEL	10 mg/m ³	Fume.
	TWA	5 mg/m ³	Fume.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m ³	Aerosol
	TWA	5 mg/m ³	Aerosol

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	0,5 mg/m ³	Inhalable fume.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m ³	Aerosol
	TWA	5 mg/m ³	Aerosol

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	5 mg/m ³	Fume.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m ³	
	TWA	5 mg/m ³	

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	10 ppm	Vapor and aerosol.

Spain. Occupational Exposure Limits

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	0,5 mg/m ³	Aerosol
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)	STEL	3 mg/m ³	Mist.
	TWA	1 mg/m ³	Mist.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	TWA	10 mg/m ³	Vapor and aerosol.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Asphalt (CAS 8052-42-4)	STEL	10 mg/m ³	Fume.
	TWA	5 mg/m ³	Fume.

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

Recommended monitoring procedures	Not available.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

8.2. Exposure controls

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.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Keep working clothes separately.

Eye/face protection Wear safety glasses; chemical goggles (if splashing is possible). Wear chemical goggles; face shield (if handling molten material).

Skin protection

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

- Other Wear suitable protective clothing and eye/face protection. Use of an impervious apron is recommended.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards During product use, there is a risk of thermal burns.

Hygiene measures Handle in accordance with good industrial hygiene and safety practices.

Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Solid.
Physical state	Solid.
Form	Solid.
Colour	Black. Dark brown
Odour	Product is a black, semi-solid with a burnt tar odour.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	65,56 - 121,11 °C (150 - 250 °F) ASTM D36 Softening Point
Initial boiling point and boiling range	> 426,67 °C (> 800 °F)
Flash point	> 204,4 °C (> 400,0 °F)
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.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 371,11 °C (> 700 °F)
Decomposition temperature	Not available.

Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.

9.2. Other information

Density	Not available
Percent volatile	0 %
Specific gravity	1 - 1,9

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Not available.
10.4. Conditions to avoid	Strong oxidising agents.
10.5. Incompatible materials	Incompatible with oxidising agents.
10.6. Hazardous decomposition products	Upon decomposition, product emits acrid dense smoke with carbon dioxide, carbon monoxide, trace oxides of nitrogen and sulfur, and water.

SECTION 11: Toxicological information

General information	Not available.
----------------------------	----------------

Information on likely routes of exposure

Ingestion	May cause gastrointestinal discomfort if swallowed. Do not induce vomiting. Vomiting may increase risk of product aspiration.
Inhalation	May be harmful if inhaled. However, this product does not currently meet the criteria for classification.
Skin contact	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	May be irritating to eyes.

Symptoms	Not available.
-----------------	----------------

11.1. Information on toxicological effects

Acute toxicity	Not classified.
Skin corrosion/irritation	Not classified. May cause defatting of the skin, but is neither an irritant nor a sensitizer.
Serious eye damage/eye irritation	Not classified.
Respiratory sensitisation	Not classified.
Skin sensitisation	Not classified.
Germ cell mutagenicity	Non-mutagenic based on Modified Ames Assay.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

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

Reproductive toxicity	Contains no ingredient listed as toxic to reproduction
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.
Mixture versus substance information	Not available.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity	Not expected to be harmful to aquatic organisms.
12.2. Persistence and degradability	Not available.
12.3. Bioaccumulative potential	Not available.
Partition coefficient n-octanol/water (log Kow)	Not available.

Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	Not available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.
EU waste code	Not available.
Disposal methods/information	When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261.

SECTION 14: Transport information

General Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

Further information If the product is shipped at temperatures below 212°F (100°C), it is not regulated for transport by ground, air or vessel. If shipped above 212 deg F: "UN3257, Elevated Temperature Liquid, n.o.s. (Asphalt mixture), 9, PG III"

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, Article 59(1). Candidate List

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not listed.

Other EU regulations**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not listed.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulations

The product does not need to be labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Not available.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information**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)	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
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).

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

Revision information

Product and Company Identification: Product and Company Identification

Training information

Not available.

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.