

1. Identification

Product identifier	PENNPPLY 101 FABRIC
Other means of identification	Not available.
Recommended use	Not available.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Manufacturer	Ergon Armor
Division	Corrosion Engineering
Address	300 Stevens Drive, Suite 310 Lester, PA 19113
E-mail	sds@ergon.com
Hours of Operation	8:00 a.m. - 5:00 p.m. US Central Time
24-hour Customer Service	1-800-222-7122
CHEMTREC (N. America)	1-800-424-9300
CHEMTREC (International)	1-703-527-3887

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Warning
Hazard statement	Causes skin irritation. Causes eye irritation.
Prevention	Wash thoroughly after handling. Wear protective gloves.
Response	IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. 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.
Storage	Not applicable.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ASPHALT, OXIDIZED		64742-93-4	60 - < 70
Glass, oxide, chemicals		65997-17-3	40 - < 50

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

4. First-aid measures

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed. Call a physician if symptoms develop or persist.
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	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. 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. Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms/effects, acute and delayed	Not available.
Indication of 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.
General information	If you feel unwell, seek medical advice (show the label where possible). 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. Discard any shoes or clothing items that cannot be decontaminated.

5. Fire-fighting measures

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	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases. Development of hazardous combustion gases or vapours possible in the event of a fire. The following may develop: Acrolein.
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. Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.
Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. In the event of fire, cool tanks with water spray. By fire, toxic gases may be formed (CO _x , NO _x). Keep run-off water out of sewers and water sources. Dike for water control.
Specific methods	In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear necessary protective equipment.
Methods and materials for containment and cleaning up	Shovel into a dry metal container.
Environmental precautions	Not relevant because of the packaging.

7. Handling and storage

Precautions for safe handling	The product is non-combustible. If heated, irritating vapors may be formed. Do not use in areas without adequate ventilation. Wash hands thoroughly after handling. Wash hands after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep the container tightly closed and dry. Store in a closed container away from incompatible materials. Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Glass, oxide, chemicals (CAS 65997-17-3)	TWA	1 fibers/cm ³	Fiber.
		5 mg/m ³	Inhalable fraction.

U.S. - NIOSH Components

Components	Type	Value
ASPHALT, OXIDIZED (CAS 64742-93-4)	REL	5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards Components

Components	Type	Value	Form
Glass, oxide, chemicals (CAS 65997-17-3)	TWA	3 fibers/cm ³	Fiber.
		3 fibers/cm ³	Dust.
		5 mg/m ³	fibers, total dust
		5 mg/m ³	Fiber, total

Biological limit values

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

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

If contact is likely, safety glasses with side shields are recommended.

Hand protection

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

Other

Use impervious gloves.

Respiratory protection

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

Thermal hazards

Not available.

General hygiene considerations

When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Solid. Sheets.

Physical state

Solid.

Form

Solid.

Color

Varies

Odor

Product is a black, semi-solid with a burnt tar odor.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

150 - 250 °F (65.56 - 121.11 °C) ASTM D36 Softening Point

Initial boiling point and boiling range

> 800 °F (> 426.67 °C)

Flash point

> 400.0 °F (> 204.4 °C)

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

4 hPa estimated

Vapor density

Not available.

Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	> 700 °F (> 371.11 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	Not Available
Percent volatile	0 %
Specific gravity	1 - 1.9

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Strong oxidizing agents.
Incompatible materials	Incompatible with oxidizing agents.
Hazardous decomposition products	Upon decomposition, product emits acrid dense smoke with carbon dioxide, carbon monoxide, trace oxides of nitrogen and sulfur, and water.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Inhalation	May cause irritation to the respiratory system.
Skin contact	Irritating to skin.
Eye contact	Causes eye irritation. Molten material will produce thermal burns.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosion/irritation	Defats the skin. Causes irritation.
Serious eye damage/eye irritation	Irritating to eyes.

Respiratory or skin sensitization

Respiratory sensitization	Not available.
Skin sensitization	Irritating to skin.

Germ cell mutagenicity No 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

ASPHALT, OXIDIZED (CAS 64742-93-4)	2A Probably carcinogenic to humans.
Glass, oxide, chemicals (CAS 65997-17-3)	2B Possibly carcinogenic to humans.
	3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Glass, oxide, chemicals (CAS 65997-17-3) Reasonably Anticipated to be a Human Carcinogen.

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

Not listed.

Reproductive toxicity	Contains no ingredient listed as toxic to reproduction
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.

Aspiration hazard Not available.
Chronic effects Prolonged inhalation may be harmful. May cause eczema-like skin disorders (dermatitis).

12. Ecological information

Ecotoxicity This product has no known eco-toxicological effects. Not expected to be harmful to aquatic organisms.
Persistence and degradability Not available.
Bioaccumulative potential Not available.
Mobility in soil Not available.
Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations. 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.
Hazardous waste code Not applicable.
Waste from residues / unused products Dispose of in accordance with local regulations.
Contaminated packaging 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 Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

US federal regulations 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)

Not listed.

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 Hazardous chemical No

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 WARNING: This product contains a chemical known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

Glass, oxide, chemicals (CAS 65997-17-3)

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

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Glass, oxide, chemicals (CAS 65997-17-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Glass, oxide, chemicals (CAS 65997-17-3)

Listed: July 1, 1990

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).

16. Other information, including date of preparation or last revision**Issue date** 04-22-2015**Version #** 01**Further information** HMIS® is a registered trade and service mark of the NPCA.

References

ACGIH
 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 in the sheet was written based on the best knowledge and experience currently available. 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.