SAFETY DATA SHEET



1. Identification

Product identifier	TUFCHEM II MEMBRANE - REGULAR GRADE RESIN PART A	
Other means of identification	None.	
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 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	Flammable liquids	Category 3
Health hazards	Skin corrosion/irritation	Category 2
	Germ cell mutagenicity	Category 1
	Carcinogenicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		

Signal word	Danger
Hazard statement	May cause cancer. May cause genetic defects. Flammable liquid and vapor. Causes skin irritation. May cause drowsiness or dizziness.
Precautionary statement	
Prevention	Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Use explosion-proof

electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Ground/bond container and receiving equipment. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.

Response	If exposed or concerned: Call a poison center/doctor. Specific treatment see Section 4 of this SDS. In case of fire: Use appropriate media for extinction. If skin irritation occurs, seek medical advice/attention. Take off contaminated clothing and wash before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water.
Storage	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations. See section 13 of this SDS for disposal instructions.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

Supplemental information

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ASPHALT		8052-42-4	30 - 40
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY		64742-48-9	20 - 30
BENZENE		71-43-2	<1
QUARTZ		14808-60-7	< 1
Other components below reporta	ble levels		39.22

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention, if needed.	
Skin contact	For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. For minor skin contact, avoid spreading material on unaffected skin. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.	
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 thoroughly. Call a POISON CENTER or doctor/physician. 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.	
Most important symptoms/effects, acute and delayed	Not available.	
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	IF exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.	
5. Fire-fighting measures		

Suitable extinguishing media	Foam. Carbon dioxide (CO2). Water fog. Dry chemical powder.
Unsuitable extinguishing media	Do not use water jet.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
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. 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. Move containers from fire area if you can do so without risk. Do not get water inside container. Some of these materials, if spilled, may evaporate leaving a flammable residue.
Specific methods	In the event of fire and/or explosion do not breathe fumes.
6. Accidental release me	asures
Personal precautions, protective equipment and emergency procedures	Remove sources of ignition. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.
Methods and materials for containment and cleaning up	Dike far ahead of spill for later disposal. Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Collect spillage. Prevent product from entering drains.
	Never return spills in original containers for re-use.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
7. Handling and storage	
Precautions for safe handling	Avoid heat, sparks, open flames and other ignition sources. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Do not empty into drains. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings.
Conditions for safe storage, including any incompatibilities	Store in a well-ventilated place. Keep container closed. Keep container dry. Keep away from food, drink and animal feedingstuffs. Keep out of reach of children. Use care in handling/storage.
8. Exposure controls/personal protection	

Exposure controls/personal protection

Occupational exposure limits	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
Individual protection measures	s, such as personal protective equipment
Eye/face protection	Chemical goggles are recommended.
Skin protection	
Hand protection	Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.
Other	Wear appropriate chemical resistant clothing. Chemical resistant 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. When using, do not eat, drink or smoke. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Black liquid
Physical state	Liquid.
Form	Semi-solid at ambient temperature
Color	Black
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	300 - 360 °F (148.89 - 182.22 °C)

Flash point	100.0 - 140.0 °F (37.8 - 60.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Specific gravity	1 - 1.05
VOC	1.23 lb/gal

10. Stability and reactivity

Reactivity	Not Reactive
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Irritants. Toxic gas.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea
Skin contact	Causes skin irritation. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	May be irritating to eyes.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms related to the physical, chemical and toxicological characteristics	Not available.
Information on toxicological effects	
Acute toxicity	Not classified.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	May be irritating to eyes.
Respiratory or skin sensitization	on
Respiratory sensitization	Not available.

Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	May cause genetic defects.
Carcinogenicity	May cause cancer.
IARC Monographs. Overall	Evaluation of Carcinogenicity
Not listed.	
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-1052)
Not regulated.	
US. National Toxicology Pr	ogram (NTP) Report on Carcinogens
Not listed.	
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not classified.
Chronic effects	Prolonged exposure may cause chronic effects.
12. Ecological informatio	n
Ecotoxicity	Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is expected. Not expected to be harmful to aquatic organisms.
Persistence and degradability	Not available

Persistence and degradability	Not available.
Bioaccumulative potential	Not available.
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. 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. Dispose in accordance with all applicable regulations.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 F
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	
UN number	UN1999
UN proper shipping name	Tars, liquid including road oils and cut back bitumens
Transport hazard class(es)	
Class	Combustible Liquid
Subsidiary risk	-
Label(s)	3
Packing group	III
Special precautions for	If shipped by ground in quantities LESS than 119 gallons (450 L): Not regulated as a hazardous
user	material.
Special provisions	B1, B13, IB3, T1, TP3
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1999
UN proper shipping name	Tars, liquid including road asphalt and oils, bitumen and cut backs
Transport hazard class(es)	
Class	3
Subsidiary risk	-

Packing group Environmental hazards ERG Code	III No. 3l
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.
IMDG	
UN number	UN1999
UN proper shipping name	TARS, LIQUID including road oils, and cutback bitumens
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-E
Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Sectio Not regulated.	n 112 Hazardous Air Pollutants (HAPs) List	
5	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
Safe Drinking Water Act (SDWA)	Not regulated.	
US state regulations	WARNING: This product contains a chemical known to the State of C	California to cause cancer.
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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	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 Revision date Version # Further information NFPA ratings	02-20-2017 09-18-2018 03 HMIS® is a registered trade and service mark of the NPCA. Health: 2 Flammability: 2 Instability: 0
References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base 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.

Hazard(s) identification: Response Hazard(s) identification: Prevention Hazard(s) identification: Hazard statement Hazard(s) identification: GHS Symbols Hazard(s) identification: GHS Signal Words Composition / Information on Ingredients: Ingredients Physical & Chemical Properties: Multiple Properties Stability and reactivity: Reactivity Toxicological information: Carcinogenicity Toxicological information: Mutagenicity Toxicological information: Eye contact Toxicological information: Skin contact HazReg Data: International Inventories GHS: Classification