SAFETY DATA SHEET



1. Identification

Product identifier	ERTECH 2000
Other means of identification	None.
Recommended use	Not available.
Recommended restrictions	None known.
Manufacturer/Importer/Suppl	ier/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	Not classified.	
Health hazards	Not classified.	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Hazard symbol	None.	
Signal word	None.	
Hazard statement	Not available.	
Precautionary statement		
Prevention	Observe good industrial hygiene practices.	
Response	Wash hands after handling.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	Not applicable.	

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ASPHALT		8052-42-4	35 - 45
QUARTZ		14808-60-7	1 - 5
Other components below re	eportable levels		69.6227

4. First-aid measures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact	If clothing sticks to the skin, do not remove. Lotion or hand cream may aid in the removal of asphalt. Wash contact areas with soap and water. If needed, seek medical attention.		
Eye contact	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 if irritation develops and persists.		
Ingestion	Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large amount does occur, call a poison control center immediately.		
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.		
Indication of immediate medical attention and special treatment needed	Treat symptomatically.		
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.		

5. Fire-fighting measures

Suitable extinguishing media	Foam. Dry chemical powder. Carbon dioxide (CO2).		
Unsuitable extinguishing media	Water. Do not use water jet as an extinguisher, as this will spread the fire.		
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed:		
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	ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray.		
Specific methods	In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.		
General fire hazards	No unusual fire or explosion hazards noted.		

6. Accidental release measures

incompatibilities

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water.
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 and place into containers. Prevent entry into waterways, sewer, basements or confined areas.
	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. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Avoid prolonged exposure. Use only in well-ventilated areas. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.
Conditions for safe storage, including any	Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Do not allow material to freeze.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	s for Air Contaminants (29 CFR 191 Type	Value	Form
KAOLIN (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
QUARTZ (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
US. OSHA Table Z-3 (29 C	-		
Components	Туре	Value	Form
KAOLIN (CAS 1332-58-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
QUARTZ (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
US. ACGIH Threshold Lim	it Values		
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	TWA	0.5 mg/m3	Inhalable fume.
KAOLIN (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide	to Chemical Hazards		
Components	Туре	Value	Form
ASPHALT (CAS 8052-42-4)	Ceiling	5 mg/m3	Fume.
KAOLIN (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
QUARTZ (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
logical limit values	No biological exposure limits noted for	r the ingredient(s).	
propriate engineering trols	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.		
ividual protection measure Eye/face protection	es, such as personal protective equi Chemical goggles and face shield are goggles).	-	asses with side shields (or
Skin protection			
Hand protection	Chemical resistant gloves are recomn gloves.	nended. If contact with forearm	ns is likely wear gauntlet sty
Other	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact. Plastic or rubber gloves, apron and boots.		
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.		
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.	
neral hygiene Isiderations	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 remove contaminants.		
Physical and chemica	l properties		
pearance	Heavy-consistency emulsion.		
Physical state	Liquid.		

Physical state	Liquid.
Form	Liquid.
Color	Brown
Odor	Mild Petroleum Odor

Odor threshold	N/A
рН	6 - 9
Melting point/freezing point	N/A
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	> 212.0 °F (> 100.0 °C)
Evaporation rate	N/A
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	N/A
Flammability limit - upper (%)	N/A
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	60 mm Hg at 100°F, approx.
Vapor density	N/A
Relative density	N/A
Solubility(ies)	
Solubility (water)	Slightly
Partition coefficient (n-octanol/water)	N/A
Auto-ignition temperature	> 400 °F (> 204.44 °C)
Decomposition temperature	N/A
Viscosity	100000 cP
Viscosity temperature	77 °F (25 °C)
Other information	
Specific gravity	1 - 1.2
VOC	0.2 lb/gal maximum

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport		
Chemical stability	Stable under normal temperature conditions.		
Possibility of hazardous reactions	Hazardous polymerization does not occur.		
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat product.		
Incompatible materials	Strong oxidizing agents.		
Hazardous decomposition products	Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen sulfide.		

11. Toxicological information

Information on likely routes of exposure

Inhalation	May be harmful if inhaled.		
Skin contact	No adverse effects due to skin contact are expected.		
Eye contact	May be irritating to eyes.		
Ingestion	Expected to be a low ingestion hazard.		
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.		

Information on toxicological effects

Acute toxicity						
Components	Species		Test Results			
KAOLIN (CAS 1332-58-7)						
<u>Acute</u>						
Dermal						
LD50	Rat		> 5000 mg/kg			
Oral						
LD50	Rat > 5000 mg/kg					
* Estimates for product may l						
Skin corrosion/irritation	-	kin contact may cause	cemporary irritation.			
Serious eye damage/eye irritation	May be irrita	ating to eyes.				
Respiratory or skin sensitizati	on					
Respiratory sensitization	Not availabl	e.				
Skin sensitization	May cause s	skin disorders if contact	is repeated or prolonged.			
Germ cell mutagenicity		ailable to indicate produ or genotoxic.	ct or any components present at greater than 0.1% are			
Carcinogenicity		t contains crystalline sil rmal routes of exposure	ica. Silica is a known carcinogen; however in this encapsulate a are unavailable.			
IARC Monographs. Overal	l Evaluation	of Carcinogenicity				
ASPHALT (CAS 8052-42-	4)	2B	Possibly carcinogenic to humans.			
QUARTZ (CAS 14808-60-			arcinogenic to humans.			
OSHA Specifically Regulat		-	-			
QUARTZ (CAS 14808-60-			ncer			
US. National Toxicology P						
QUARTZ (CAS 14808-60-			wn To Be Human Carcinogen.			
Reproductive toxicity		Not available.				
Specific target organ toxicity - single exposure	Not classifie	Not classified.				
Specific target organ toxicity - repeated exposure	Not classifie	Not classified.				
Aspiration hazard	Not availabl	e.				
Chronic effects	Not expecte	ed to be hazardous by C	SHA criteria.			
Further information	•		e effect on human health.			
	-					
12. Ecological informatio						
Ecotoxicity	Not expecte	ed to be harmful to aqua	-			
Product		Species	Test Results			
ERTECH 2000						
Aquatic						
Crustacea	EC50	Daphnia	64516.1289 mg/l, 48 hours estimated			
* Estimates for product may	be based on a	dditional component da	ta not shown.			
Persistence and degradability	No data is a	available on the degrada	bility of this product.			
Bioaccumulative potential	No data ava	ailable.				
Mobility in soil	No data ava	ailable.				
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.					
13. Disposal consideration	-					
Disposal instructions		reclaim or dispose in co	aled containers at licensed waste disposal site. Dispose in			
พระควรสา เกราะ แต่เปปไร	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. No components are identified as hazardous wastes. Disposal recommendations are based on uncontaminated material.					

Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Not applicable.
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

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)

ASPHALT (CAS 8052-42-4)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

QUARTZ (CAS 14808-60-7)

Cancer lung effects immune system effects kidney effects

Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.	
Classified hazard	Skin corrosion or irritation
categories	Serious eye damage or eye irritation
	Respiratory or skin sensitization
	Reproductive toxicity
	Specific target organ toxicity (single or repeated exposure)

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 Not regulated.

(SDWA) US state regulations

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

California Proposition 65

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

California Proposition 65 - CRT: Listed date/Carcinogenic substance ASPHALT (CAS 8052-42-4) Listed: January 1, 1990 QUARTZ (CAS 14808-60-7) Listed: October 1, 1988 US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)) ASPHALT (CAS 8052-42-4)

QUARTZ (CAS 14808-60-7)

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)	No
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	07-09-2015 12-03-2018 03 HMIS® is a registered trade and service mark of the NPCA.
NFPA ratings	Health: 1 Flammability: 1 Instability: 0
References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents 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. The information in the sheet was written based on the best knowledge and experience currently available.

Revision information

Hazard(s) identification: Storage Hazard(s) identification: GHS Symbols Composition / Information on Ingredients: Ingredients Fire-fighting measures: Specific hazards arising from the chemical Physical & Chemical Properties: Multiple Properties Toxicological information: Chronic effects Toxicological information: Reproductivity Toxicological information: Eye contact HazReg Data: International Inventories GHS: Classification