SAFETY DATA SHEET



1. Identification

Product identifier	Pennguard HP Epoxy Primer Part B
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	Flammable liquids	Category 3
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 4
	Serious eye damage/eye irritation	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Harmful if swallowed. Causes serious eye irritation. Harmful if inhaled. Flammable liquid and vapor.
Precautionary statement	
Prevention	Keep container tightly closed. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces No smoking. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. In case of fire: Use appropriate media for extinction. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If skin irritation occurs, seek medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place.

Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. See section 13 of this SDS for disposal instructions.
Hazard(s) not otherwise classified (HNOC)	This product may contain the following ingredients; xylene, toluene, n-hexane, cyclohexane, naphtahlene, benze and ethyl benzene.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
HEPTAN-2-ONE		110-43-0	30 - 50
1-BUTANOL		71-36-3	1 - 10
Other components below report	table levels		34.4
Composition comments	The full text for all R- and H-phrases is display	ed in section 16	
4. First-aid measures			
Inhalation	If breathing is difficult, remove to fresh air and Call a physician if symptoms develop or persist immediate medical assistance. For those provid Use adequate respiratory protection. Give supp stopped, assist ventilation with a mechanical d	t. Immediately remove from f ding assistance, avoid expose plemental oxygen, if available	further exposure. Get ure to yourself or others.
Skin contact		Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If clothing sticks to the skin, do not remove. Wash contact areas with soap and water. If needed, seek medical attention.	
Eye contact	Immediately flush eyes with plenty of water for present and easy to do. Continue rinsing. Get		
Ingestion	Rinse mouth. DO NOT induce vomiting. Get manual amount does occur, call a poison control center		If ingestion of a large
Most important symptoms/effects, acute and delayed	Irritation of eyes and mucous membranes.		
Indication of immediate medical attention and special treatment needed	Treat symptomatically. Symptoms may be dela	ayed.	
5. Fire-fighting measures	5		
Suitable extinguishing media	Water spray, fog, CO2, dry chemical, or alcoho	ol resistant foam.	
Unsuitable extinguishing media	Do not use a solid water stream as it may scat	ter and spread fire.	
Specific hazards arising from the chemical	Do not use forced stream as this could cause f	ire to spread.	
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equip face shield, gloves, rubber boots, and in enclose clothing will only provide limited protection.		
Fire fighting equipment/instructions	ALWAYS stay away from tanks engulfed in flar unmanned hose holders or monitor nozzles. M risk. In the event of fire, cool tanks with water methods to sewers or waterways.	ove containers from fire area	if you can do so without
Specific methods	In the event of fire and/or explosion do not br water spray.	eathe fumes. In the event of	fire, cool tanks with
General fire hazards	Flammable liquid and vapor.		

6. Accidental release measures

Personal precautions,	Eliminate all sources of ignition. Keep unnecessary personnel away. Ventilate closed spaces before
protective equipment and	entering them. Do not touch damaged containers or spilled material unless wearing appropriate
emergency procedures	protective clothing.

Methods and materials for containment and cleaning up	Remove sources of ignition. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Dike far ahead of spill for later disposal. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist.
Environmental precautions	Do not allow the spilled product to enter public drainage systems or open watercourses.
7. Handling and storage	
Precautions for safe handling	Avoid heat, sparks, open flames and other ignition sources. Avoid breathing mist or vapor. Avoid contact with eyes and prolonged or repeated contact with skin.

Conditions for safe storage, Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Avoid heat, sparks, open flames and other ignition sources.

8. Exposure controls/personal protection

Occupational exposure limits

including any

incompatibilities

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

Components	Туре	Value
1-BUTANOL (CAS 71-36-3)	PEL	300 mg/m3
		100 ppm
HEPTAN-2-ONE (CAS 110-43-0)	PEL	465 mg/m3
		100 ppm
US. ACGIH Threshold Lim		
Components	Туре	Value
1-BUTANOL (CAS 71-36-3)	TWA	20 ppm
HEPTAN-2-ONE (CAS 110-43-0)	TWA	50 ppm
US. NIOSH: Pocket Guide	to Chemical Hazards	
Components	Туре	Value
1-BUTANOL (CAS 71-36-3)	Ceiling	150 mg/m3
		50 ppm
HEPTAN-2-ONE (CAS 110-43-0)	TWA	465 mg/m3
		100 ppm
logical limit values	No biological exposure limits noted for	the ingredient(s).
osure guidelines		
US - California OELs: Skin	designation	
1-BUTANOL (CAS 71-36-	·3) Can be	absorbed through the skin.
US - Minnesota Haz Subs	Skin designation applies	-
1-BUTANOL (CAS 71-36-		esignation applies.
IIC - Toppoccoo OEL ou Chi	n designation	
US - Tennessee OELs: Ski	-	
1-BUTANOL (CAS 71-36-	-3) Can be	absorbed through the skin.
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t	-3) Can be o Chemical Hazards: Skin designatio	n
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36-	-3) Can be o Chemical Hazards: Skin designation -3) Can be	n absorbed through the skin.
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t	-3) Can be o Chemical Hazards: Skin designation -3) Can be	n absorbed through the skin. appropriate local extraction, to ensure that the defined
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36- propriate engineering trols	 Can be Can be Chemical Hazards: Skin designation Can be Provide adequate ventilation, including 	n absorbed through the skin. appropriate local extraction, to ensure that the defined eded.
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36- propriate engineering trols	 Can be Can be Chemical Hazards: Skin designation Can be Provide adequate ventilation, including occupational exposure limit is not exce 	n absorbed through the skin. appropriate local extraction, to ensure that the defined eded. oment
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36- propriate engineering trols	 Can be o Chemical Hazards: Skin designation Can be Provide adequate ventilation, including occupational exposure limit is not excertes, such as personal protective equipational protective equipati	n absorbed through the skin. appropriate local extraction, to ensure that the defined eded. oment
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36- propriate engineering trols ividual protection measure Eye/face protection	 Can be o Chemical Hazards: Skin designation Can be Provide adequate ventilation, including occupational exposure limit is not exceres, such as personal protective equip Chemical goggles and face shield are r Use protective gloves. 	n absorbed through the skin. appropriate local extraction, to ensure that the defined eded. oment ecommended.
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36- propriate engineering trols ividual protection measure Eye/face protection Skin protection Hand protection Other	 Can be o Chemical Hazards: Skin designation Can be Provide adequate ventilation, including occupational exposure limit is not exce such as personal protective equip Chemical goggles and face shield are r Use protective gloves. Plastic or rubber gloves, apron and boo 	n absorbed through the skin. appropriate local extraction, to ensure that the defined eded. oment ecommended.
1-BUTANOL (CAS 71-36- US NIOSH Pocket Guide t 1-BUTANOL (CAS 71-36- propriate engineering trols ividual protection measure Eye/face protection Skin protection Hand protection	 Can be o Chemical Hazards: Skin designation Can be Provide adequate ventilation, including occupational exposure limit is not exce such as personal protective equip Chemical goggles and face shield are r Use protective gloves. Plastic or rubber gloves, apron and boo 	n absorbed through the skin. appropriate local extraction, to ensure that the defined eded. oment ecommended.

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.

9. Physical and chemical properties

· · · · · · · · · · · · · · · · · · ·	P P
Appearance	Clear.
Physical state	Liquid.
Form	Liquid.
Color	Amber.
Odor	Pungent ketone
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	102.0 °F (38.9 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	1.4 %
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	> 930.2 °F (> 499 °C)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Specific gravity	0.91
VOC	4.22 lb/gal
10 Stability and reactivit	Y

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	Heat, sparks, flames.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product emits oxides of sulfur, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation May be harmful if inhaled.

Skin contact	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis		
Eye contact	Causes eye irritation.		
Ingestion	May be harmful if swallowed.		
Symptoms related to the physical, chemical and toxicological characteristics	Not available.		
Information on toxicological e	ffects		
Acute toxicity	Harmful if swallowed. Harmful by inha	lation.	
Components	Species	Test Results	
1-BUTANOL (CAS 71-36-3) <u>Acute</u> Dermal LD50	Rabbit	3400 mg/kg	
HEPTAN-2-ONE (CAS 110-43-0)		5, 5	
Acute Dermal LD50	Rabbit	12600 mg/kg	
LESO	Rabbit	12000 Hig/kg	
* Estimates for product may b	be based on additional component data r	not shown.	
Skin corrosion/irritation	Causes severe eye irritation.		
Serious eye damage/eye irritation	Causes eye irritation.		
Respiratory or skin sensitizati	on		
Respiratory sensitization	Not classified. Not available.		
Skin sensitization	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Not classified. None known. Not available.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Not available. Not classified.		
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA		
IARC Monographs. Overal	l Evaluation of Carcinogenicity		
Not listed. OSHA Specifically Regulat	ed Substances (29 CFR 1910.1001-	1052)	
	rogram (NTP) Report on Carcinogen	s	
Not listed. Reproductive toxicity	Not classified.		
•	Not classified. Not available.		
Specific target organ toxicity - single exposure			
Specific target organ toxicity - repeated exposure	Not classified. Not available.		
Aspiration hazard	Not classified.		
Further information	Symptoms may be delayed.		
12. Ecological information	on		
Ecotoxicity	Components of this product are hazard	dous to aquatic life. Accumulation in aquatic organisms is	

Components of this product are hazardous to aquatic life. Accumulation in aquatic organisms is expected. Not expected to be harmful to aquatic organisms. Harmful to aquatic life with long lasting effects.

Product		Species	Test Results
Pennguard HP Epoxy I	Primer Part B		
Aquatic			
Crustacea	EC50	Daphnia	23712.5 mg/l, 48 hours estimated
Fish	LC50	Fish	216.5059 mg/l, 96 hours estimated

Components		Species	Test Results
1-BUTANOL (CAS 71-36-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1897 - 2072 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	100 - 500 mg/l, 96 hours
HEPTAN-2-ONE (CAS 110-4	3-0)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	126 - 137 mg/l, 96 hours
* Estimates for product may	be based on add	litional component data not shown.	
rsistence and degradabilit	y No data is ava	ailable on the degradability of this product.	
accumulative potential	Not available.		
Partition coefficient n-oc	tanol / water (log Kow)	
1-BUTANOL		0.88	
HEPTAN-2-ONE		1.98	
HEPTAN-2-ONE bility in soil	Not available.		

13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international 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	Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container. Recycle empty drums at an appropriate facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal. Ensure drums are tightly sealed.

14. Transport information

DOT	
UN number	UN1263
UN proper shipping name	Paint Related Materials
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	III
Special precautions for	Not available.
user	
Special provisions	B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242
ΙΑΤΑ	
UN number	UN1263
UN proper shipping name	Paint Related Material
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	3L
Special precautions for	Not available.
user	
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

INDG	
UN number	UN1263
UN proper shipping name	Paint Related Materials
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for	Not available.
user	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.
DOT	
FLAMMABLE LIQUID 3 IATA; IMDG	
3	

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

TSCA Section 12(b) Expo Not regulated.	ort Notification (40 CFR 707,	Subpt. D)
CERCLA Hazardous Subs	stance List (40 CFR 302.4)	
1-BUTANOL (CAS 71-36	6-3)	Listed.
SARA 304 Emergency re	lease notification	
Not regulated.		
OSHA Specifically Regula	ated Substances (29 CFR 191	L0.1001-1052)
Not regulated.		
Superfund Amendments and SARA 302 Extremely ha	l Reauthorization Act of 1986 zardous substance	5 (SARA)
Not listed.		
SARA 311/312 Hazardous chemical	Yes	

Classified hazard categories	Acute toxicity (any Skin corrosion or ir Serious eye damag Hazard not otherw)	
SARA 313 (TRI reporting Chemical name)	CAS number	% by wt.	
1-BUTANOL		71-36-3	<u> </u>	
Other federal regulations		,1000	1 10	
Clean Air Act (CAA) Section	on 112 Hazardous A	Air Pollutants (HAPs) Lis	st	
Not regulated. Clean Air Act (CAA) Section Not regulated.				
Safe Drinking Water Act (SDWA)	Not regulated.			
FEMA Priority Substa	nces Respiratory He	ealth and Safety in the	Flavor Manufacturing Workpla	ice
1-BUTANOL (CAS 7 HEPTAN-2-ONE (CA	,	Low priority Other Flavoriı	ng Substances with OSHA PEL's	
US state regulations			prcement Act of 1986 (Proposition v listed as carcinogens or reproduce	
International Inventories				
Country(s) or region	Inventory name		On inv	ventory (yes/no)*
Australia	Australian Inventor	ry of Chemical Substances	(AICS)	Yes
Canada	Domestic Substance	es List (DSL)		Yes
Canada	Non-Domestic Sub	stances List (NDSL)		No
China	Inventory of Existir	ng Chemical Substances in	China (IECSC)	Yes
Europe	European Inventor (EINECS)	y of Existing Commercial C	hemical Substances	Yes
Europe	European List of No	otified Chemical Substance	es (ELINCS)	No
Japan	Inventory of Existir	ng and New Chemical Subs	stances (ENCS)	Yes
Korea	Existing Chemicals	List (ECL)		Yes
New Zealand	New Zealand Inver	ntory		Yes
Philippines	Philippine Inventor (PICCS)	y of Chemicals and Chemic	cal Substances	Yes
Taiwan	Taiwan Chemical S	ubstance Inventory (TCSI)		Yes
United States & Puerto Rico *A "Yes" indicates that all comp		Control Act (TSCA) Invento	ry irements administered by the governir	Yes ng country(s)

*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	05-07-2015 05-20-2020 03 HMIS® is a registered trade and service mark of the NPCA. Health: 2 Flammability: 3 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.
Revision information	Hazard(s) identification: Response Hazard(s) identification: Hazard statement Hazard(s) identification: Supplemental information Physical & Chemical Properties: Multiple Properties Transport Information: Material Transportation Information GHS: Classification