

Material Safety Data Sheet





HP Epoxy-Finish Asphalt Protector

1. Product and company identification

Product name	: HP Epoxy-Finish Asphalt Protector
Material uses	: Protects asphalt against penetration by oil, gasoline and other harmful products.
Supplier/Manufacturer	: Techniseal 300, avenue Liberté Candiac, QC, Canada, J5R 6X1 Tel: (514) 523-2110 Toll free: 1-800-465-7325 Fax: (450) 633-3035
Validation date	: 4/13/2016
Prepared by	: IHS
In case of emergency	: CANUTEC (613) 996-6666

2. Hazards identification

Physical state	: Liquid.
Color	: Black.
Odor	: Latex. [Slight]
<u>Emergency overview</u>	
Signal word	: WARNING!
Hazard statements	:  CAUSES EYE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. BIRTH DEFECT HAZARD - CAN CAUSE BIRTH DEFECTS. DEVELOPMENTAL HAZARD - CAN CAUSE ADVERSE DEVELOPMENTAL EFFECTS. REPRODUCTIVE HAZARD.
Precautions	:  Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not get on skin or clothing. Avoid contact with eyes. Avoid exposure during pregnancy. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
<u>Potential acute health effects</u>	
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin	: No known significant effects or critical hazards.

HP Epoxy-Finish Asphalt Protector

- Eyes** : Irritating to eyes.
- Potential chronic health effects**
- Chronic effects** : Contains material that may cause target organ damage, based on animal data.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : ☒ Can cause birth defects.
- Developmental effects** : ☒ Can cause developmental abnormalities.
- Fertility effects** : ☒ Can impair fertility.
- Target organs** : Contains material which may cause damage to the following organs: blood, eyes, central nervous system (CNS).

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin** : No specific data.
- Eyes** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

3. Composition/information on ingredients

United States

Name	CAS number	%
<input checked="" type="checkbox"/> Nepheline syenite	37244-96-5	10-30
Diethylene glycol monobutyl ether	112-34-5	1-5

Canada

Name	CAS number	%
<input checked="" type="checkbox"/> Nepheline syenite	37244-96-5	10-30
Diethylene glycol monobutyl ether	112-34-5	1-5
dibutyl phthalate	84-74-2	0.1-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

HP Epoxy-Finish Asphalt Protector

Inhalation	: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Ingestion	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product	: In a fire or if heated, a pressure increase will occur and the container may burst. May be combustible at high temperature.
<u>Extinguishing media</u>	
Suitable	: Use an extinguishing agent suitable for the surrounding fire. Use water spray, dry chemical powder or carbon dioxide for extinction.
Not suitable	: None known.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
<u>Methods for cleaning up</u>	
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

HP Epoxy-Finish Asphalt Protector

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Do not store below the following temperature: 15°C (59°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Nepheline syenite	ACGIH TLV (United States). TWA: 10 mg/m ³ Form: Inhalable ACGIH TLV (United States, 3/2015). TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Diethylene glycol monobutyl ether	

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m ³	Other	ppm	mg/m ³	Other	ppm	mg/m ³	Other	
Nepheline syenite	US ACGIH ON 7/2015	-	10	-	-	-	-	-	-	-	[a]
Diethylene glycol monobutyl ether	US ACGIH 3/2015	10	-	-	-	-	-	-	-	-	[b]
		10	-	-	-	-	-	-	-	-	[c]
dibutyl phthalate	US ACGIH 3/2015	-	5	-	-	-	-	-	-	-	
	AB 4/2009	-	5	-	-	-	-	-	-	-	
	BC 5/2015	-	5	-	-	-	-	-	-	-	
	ON 7/2015	-	5	-	-	-	-	-	-	-	
	QC 1/2014	-	5	-	-	-	-	-	-	-	
	SK	-	5	-	-	10	-	-	-	-	

Form: [a]Inhalable [b]Total dust [c]Inhalable fraction and vapor

Consult local authorities for acceptable exposure limits.

HP Epoxy-Finish Asphalt Protector

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Recommended: natural rubber (latex) .
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: Safety glasses.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Overall.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Not available.
- Auto-ignition temperature** : Not available.
- Flammable limits** : Not available.
- Color** : Black.
- Odor** : Latex. [Slight]
- pH** : 8 to 9
- Boiling/condensation point** : 100°C (212°F)
- Melting/freezing point** : -3.5°C (25.7°F)
- Density** : 1.1 to 1.2 g/cm³

HP Epoxy-Finish Asphalt Protector

Vapor pressure	: Not available.
Vapor density	: Not available.
Odor threshold	: Not available.
Evaporation rate	: Not available.
Viscosity	: Dynamic (room temperature): 460 to 575 mPa·s (460 to 575 cP)
Solubility	: Miscible in water.
LogK _{ow}	: Not available.

10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials and alkalis. halogenated compounds .
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Diethylene glycol monobutyl ether	LD50 Dermal	Rabbit	2700 mg/kg	-
dibutyl phthalate	LD50 Oral	Rat	4500 mg/kg	-
	LD50 Dermal	Rabbit	>25000 mg/kg	-
	LD50 Oral	Rat	7499 mg/kg	-

Chronic toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Diethylene glycol monobutyl ether	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-

Sensitizer

Not available.

Carcinogenicity

Classification

Not available.

Mutagenicity

Not available.

Teratogenicity

HP Epoxy-Finish Asphalt Protector

Not available.

Conclusion/Summary : Classification is based on animal data.

Reproductive toxicity

Not available.

Conclusion/Summary : Classification is based on animal data.

12. Ecological information

Ecotoxicity : This material is very toxic to aquatic life. This material is harmful to aquatic life with long lasting effects.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Diethylene glycol monobutyl ether dibutyl phthalate	Acute LC50 1300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute EC50 3.4 µg/l Marine water	Algae - Gymnodinium breve	96 hours
	Acute EC50 2990 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 480 µg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 210 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 500 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 25 µg/l Fresh water	Fish - Danio rerio - Embryo	5 weeks

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Diethylene glycol monobutyl ether	301D Ready Biodegradability - Closed Bottle Test	76 % - 28 days	-	-
	OECD 301 301C Ready Biodegradability - Modified MITI Test (I)	58 % - Readily - 28 days	-	100 mg/l Activated sludge





13. Disposal considerations



Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.					
TDG Classification	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyl phthalate). Marine pollutant (dibutyl phthalate)	9	III	 	<p>Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).</p> <p>Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.</p> <p><u>Explosive Limit and Limited Quantity Index</u> 5</p> <p><u>Special provisions</u> 16, 99</p>
IMDG Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dibutyl phthalate). Marine pollutant (dibutyl phthalate)	9	III	 	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p> <p><u>Emergency schedules (EmS)</u> F-A, S-F</p> <p><u>Special provisions</u> 274, 335, 969</p>

HP Epoxy-Finish Asphalt Protector						
IATA-DGR Class	UN3082	Environmentally hazardous substance, liquid, n.o.s. (dibutyl phthalate)			 	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.</p> <p>Passenger and Cargo Aircraft Quantity limitation: 450 L Packaging instructions: 964</p> <p>Cargo Aircraft Only Quantity limitation: 450 L Packaging instructions: 964</p> <p>Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y964</p> <p>Special provisions A97, A158, A197</p>

PG* : Packing group

15. Regulatory information

United States

- HCS Classification** : Irritating material
Target organ effects
- U.S. Federal regulations** : **TSCA 8(a) PAIR**: Poly(oxy-1,2-ethanediyl), α-[(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-; Siloxanes and Silicones, di-Me, reaction products with silica
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.
SARA 302/304: No products were found.
SARA 311/312 Hazards identification: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: dichloromethane; dibutyl phthalate; 1,3-dichloropropene
Clean Water Act (CWA) 311: dibutyl phthalate; ammonia; 1,3-dichloropropene
Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act Section 112 : Listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 313

HP Epoxy-Finish Asphalt Protector

	Product name	CAS number	Concentration
Form R - Reporting requirements	Diethylene glycol monobutyl ether	112-34-5	1-5
Supplier notification	Diethylene glycol monobutyl ether	112-34-5	1-5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

- Massachusetts** : None of the components are listed.
New York : None of the components are listed.
New Jersey : The following components are listed: GLYCOL ETHERS
Pennsylvania : The following components are listed: GLYCOL ETHERS

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Diethyl phthalate	No.	Yes.	No.	Yes.
dichloromethane	Yes.	No.	200 µg/day (inhalation)	No.
1,3-dichloropropene	Yes.	No.	No.	No.

Canada

- WHMIS (Canada)** : Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

- Canadian NPRI** : The following components are listed: Diethylene glycol butyl ether
CEPA Toxic substances : None of the components are listed.
Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

- International lists** : **Australia inventory (AICS):** Not determined.
China inventory (IECSC): Not determined.
Japan inventory (ENCS): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory: Not determined.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Turkey inventory: Not determined.

- Chemical Weapons Convention List Schedule I Chemicals** : Not listed
Chemical Weapons Convention List Schedule II Chemicals : Not listed

HP Epoxy-Finish Asphalt Protector

Chemical Weapons : Not listed
Convention List Schedule
III Chemicals

16. Other information

Label requirements : CAUSES EYE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. BIRTH DEFECT HAZARD - CAN CAUSE BIRTH DEFECTS. DEVELOPMENTAL HAZARD - CAN CAUSE ADVERSE DEVELOPMENTAL EFFECTS. REPRODUCTIVE HAZARD.

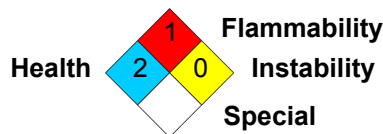
Hazardous Material Information System (U.S.A.) :

Health	*	2
Flammability		1
Physical hazards		0
Personal protective equipment		B

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of issue : 4/13/2016

Date of previous issue : 4/11/2013

Version : 3

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.