

Conforms to HCS 2012 - United States

SAFETY DATA SHEET

Section 1. Identification

Product identifier(s)/

: B'LASTER PENETRATING GREASE

Other means of identification

: Part No. GR-14C-PB, GR-8J-PB, GR-3T-PB

Company

: B'laster Corporation

8500 Sweet Valeey Drive

Indentification:

: Valley View, OH 44125

(800) 858-6605 / (216) 901-5800

fax (216) 901-5801 www.blastercorp.com

Emergency telephone

: ChemTel: (800) 255-3924

Section 2. Hazards identification

DSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SKIN SENSITIZATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous

system (CNS)) - Category 1

AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

Classification of the substance or mixture





Signal word

: Danger

GHS label elements **Hazard pictograms** **Hazard statements**

: H317 - May cause an allergic skin reaction.

H372 - Causes damage to organs through prolonged or repeated exposure. (central

nervous system (CNS))

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements



Section 2. Hazards identification

Prevention : P280 - Wear protective gloves.

P273 - Avoid release to the environment.

P260 - Do not breathe dust.

P270 - Do not eat, drink or smoke when using this product.

P264 - Wash hands thoroughly after handling.

P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.

Response : P314 - Get medical attention if you feel unwell.

P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash

contaminated clothing before reuse.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

Storage

: Not applicable.

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazards not otherwise

: None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

CAS number/other identifiers

CAS number : Not applicable.

Product code : 59300

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light	≥10 - ≤16	64742-47-8
Distillates (petroleum), hydrotreated heavy naphthenic	≥5 - ≤10	64742-52-5
Solvent Naphtha (Petroleum), Heavy Arom.	≥5 - ≤10	64742-94-5
4-Ethyl-o-xylene	≥1 - ≤3	934-80-5
1,2,3,5-Tetramethylbenzene	≥1 - ≤3	527-53-7
5-Ethyl-m-xylene	≥0.3 - <1	934-74-7
Naphthalene	≥0.3 - ≤0.73	91-20-3
4-Propyltoluene	≤0.3	1074-55-1
2-Methylnaphthalene	≤0.14	91-57-6
	"""	10.0.0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention following exposure or if feeling unwell.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie, belt or waistband.

: Wash with plenty of soap and water, Wash contaminated clothing thoroughly with water Skin contact

before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.

Wash clothing before reuse. Clean shoes thoroughly before reuse.



Section 4. First aid measures

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eve contact

: No known significant effects or critical hazards.

Inhalation

: No known significant effects or critical hazards.

Skin contact

May cause an allergic skin reaction.

Ingestion

: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eve contact

: No known significant effects or critical hazards.

Inhalation

: No known significant effects or critical hazards.

Skin contact

: Adverse symptoms may include the following:

irritation redness

Ingestion

: No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments

: No specific treatment.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

: Use dry chemical, carbon dioxide, water spray (fog) or foam.

media

Unsuitable extinguishing

media

Specific hazards arising from the chemical

: This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:

carbon dioxide carbon monoxide

: None known.

halogenated compounds metal oxide/oxides



Section 5. Fire-fighting measures

Special protective actions for fire-fighters

: 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.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. 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.

Advice on general occupational hygiene

: 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.



Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States, 3/2017). Absorbed through skin.
Distillates (henoteant), try area area sign.	TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.
Distillates (petroleum), hydrotreated heavy naphthenic	OSHA PEL (United States, 6/2016).
Distincted (positionally, riyeres externally)	TWA: 5 mg/m³ 8 hours.
	ACGIH TLV (United States, 3/2017).
	TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction
	NIOSH REL (United States, 10/2016).
	TWA: 5 mg/m ³ 10 hours. Form: Mist
	STEL: 10 mg/m ³ 15 minutes. Form: Mist
Solvent Naphtha (Petroleum), Heavy Arom.	None.
4-Ethyl-o-xylene	None.
1,2,3,5-Tetramethylbenzene	None.
5-Ethyl-m-xylene	None. ACGIH TLV (United States, 3/2017). Absorbed through skin.
Naphthalene	
	TWA: 10 ppm 8 hours. TWA: 52 mg/m³ 8 hours.
	NIOSH REL (United States, 10/2016).
	TWA: 10 ppm 10 hours.
	TWA: 50 mg/m ³ 10 hours.
	STEL: 15 ppm 15 minutes.
	STEL: 75 mg/m³ 15 minutes.
	OSHA PEL (United States, 6/2016).
	TWA: 10 ppm 8 hours.
	TWA: 50 mg/m ³ 8 hours.
4-Propyltoluene	None.
2-Methylnaphthalene	NIOSH REL (United States, 10/2016).
2-iylettiyirtapittilaterie	TWA: 0.1 mg/m ³ 10 hours.
	OSHA PEL (United States, 6/2016).
	TWA: 0.2 mg/m3 8 hours, Form; Benzene soluble
	ACGIH TLV (United States, 3/2017). Absorbed through skin.
	TWA: 0.5 ppm 8 hours.

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.



Section 8. Exposure controls/personal protection

Eyelface protection : 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : 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.

Body protection

: 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.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by

a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Semi-solid.]

Color : Amber.

Odor : Mild.
Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : Open cup: 173.89°C (345°F) [Cleveland.]

Evaporation rate : Not available.

Flammability (solid, gas) : Flammable in the presence of the following materials or conditions: open flames, sparks

and static discharge.

Lower and upper explosive: Not available.

(flammable) limits

Vapor pressure : Not available.

Vapor density : Not available.
Relative density : 0.926 g/ml

Solubility : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n- : Not available. octanol/water

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.



Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid

: Do not heat above flash point.

Incompatible materials

: Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum),	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (perfoloam), hydrotreated heavy naphthenic 1,2,3,5-Tetramethylbenzene Naphthalene	LD50 Oral LD50 Dermal LD50 Oral	Rat Rabbit Rat	5157 mg/kg >20 g/kg 490 mg/kg	-
2-Methylnaphthalene	LD50 Oral	Rat	1630 mg/kg	

Irritation/Corrosion

ritation/Corrosion Product/ingredient name	Result	Species	Score	Exposure	Observation
-		Rabbit	-	24 hours 500 μl	-
Arom. 1,2,3,5-Tetramethylbenzene Naphthalene	Skin - Mild irritant Skin - Mild irritant	Rabbit Rabbit	-	24 hours 100 mg 495 mg	-

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

Classification

<u>C</u>	Classification							
[Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH	
Ì	Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.	A3	-	-	١
-		1	l		<u>. </u>	L	ł	J

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

	Specific target organ toxicity (single exposure)			
	Name	Category	Route of exposure	Target organs
****	4-Ethyl-o-xylene	Category 3	Not applicable.	Respiratory tract irritation
1		<u> </u>		



Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
4-Ethyl-o-xylene	Category 1	Not determined	central nervous system (CNS)

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated light Distillates (petroleum), hydrotreated heavy naphthenic Solvent Naphtha (Petroleum), Heavy Arom. 4-Ethyl-o-xylene	ASPIRATION HAZARD - Category 1

Information on the likely

: Ingestion.

routes of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Adverse symptoms may include the following:

: Adverse symptoms may include the following: irritation

redness

Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term

exposure Short term exposure

Potential immediate effects

: No known significant effects or critical hazards.

Potential delayed effects

: No known significant effects or critical hazards.

Long term exposure

Potential immediate

: No known significant effects or critical hazards.

Defended at a lat

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure. Once sensitized,

a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity



Section 11. Toxicological information

Acute toxicity estimates

 Route	ATE value
Oral	55990.3 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
	Acute LC50 2200 μg/L Fresh water	Fish - Lepomis macrochirus	4 days
light Naphthalene	Acute EC50 1600 µg/L Fresh water Acute LC50 2350 µg/L Marine water Acute LC50 213 µg/L Fresh water Chronic NOEC 0.5 mg/L Marine water Chronic NOEC 1.5 mg/L Fresh water	Daphnia - Daphnia magna - Neonate Crustaceans - Palaemonetes pugio Fish - Melanotaenia fluviatilis - Larvae Crustaceans - Uca pugnax - Adult Fish - Oreochromis mossambicus	48 hours 48 hours 96 hours 3 weeks 60 days

Persistence and degradability

There is no data available.

Bioaccumulative potential

1 Tourounig. Canonic	LogP _{ow} BCF		Potential
		99 to 5780	high
Arom. 4-Ethyl-o-xylene 1,2,3,5-Tetramethylbenzene 5-Ethyl-m-xylene Naphthalene 4-Propyltoluene 2-Methylnaphthalene	4.5 4.1 4.55 3.4 4.6 3.86	- - - 36.5 to 168 - 74.13	high high high low high low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 empty 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.



Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN3077	Not regulated.	Not regulated.
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Naphthalene)	-	-
Transport hazard class(es)	9	-	
Packing group	III	-	-
Environmental hazards	Yes.	No.	No.
Additional information	Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg. Reportable quantity 20000 lbs / 9080 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	-	The environmentally hazardous substance mark may appear if required by other transportation regulations.

AERG: 171

DOT-RQ Details

: Naphthalene

100 lbs / 45.4 kg

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 12(b) one-time export: None of the components are listed.

TSCA 12(b) annual export notification: None of the components are listed. United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: Naphthalene; 2-Methylnaphthalene; Antimony dialkyldithiocarbamate

Clean Water Act (CWA) 311: Naphthalene

Clean Air Act Section 112

: Listed

(b) Hazardous Air Pollutants (HAPs)

: Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances



Section 15. Regulatory information

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification

: Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated light 4-Ethyl-o-xylene 1,2,3,5-Tetramethylbenzene 5-Ethyl-m-xylene Naphthalene 4-Propyltoluene 2-Methylnaphthalene	Yes. Yes. No. No. Yes. No. No.	No. No. No. No. No. No.	No. No. No. No. No. No. No.	No. Yes. Yes. Yes. Yes. Yes. Yes.	No. Yes. No. No. Yes. No.

SARA 313

NA JIO	Product name	CAS number
Form R - Reporting	Naphthalene	91-20-3
requirements	Naphthalene	91-20-3
Supplier notification		

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

State regulations

Massachusetts

: The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Distillates (petroleum), hydrotreated heavy naphthenic; Residual oils (petroleum), solvent-devaxed heavy naphthenic

dewaxed; Distillates (petroleum), hydrotreated heavy naphthenic

New York New Jersev : The following components are listed: Naphthalene

: The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Distillates

(petroleum), hydrotreated heavy naphthenic; Naphthalene; Residual oils (petroleum),

solvent-dewaxed; Distillates (petroleum), hydrotreated heavy naphthenic

Pennsylvania

: The following components are listed: Naphthalene

California Prop. 65

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

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene	Yes.	No.	Yes.	-

International lists



Section 15. Regulatory information

National inventory

Canada

: At least one component is not listed in DSL but all such components are listed in NDSL.

Taiwan

: All components are listed or exempted.

1

Petroleum components contained in this product meet the IP 346 criteria of less than 3 percent DMSO-extractable components.

Section 16. Other information

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

Health:

1 * Flammability :

Physical hazards :

1

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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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

Health:

1 Flammability:

Instability:

1

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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.

Procedure used to derive the classification

Classification	Justification
SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method Calculation method Calculation method Calculation method

History

Date of issue mm/dd/yyyy: 09/30/2017

Version

: 1

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.

