SAFETY DATA SHEET



HP Gym Coat

Section 1. Identif	ication	
GHS product identifier	: HP Gym Coat	
Product code	: 655	
Other means of identification	: Not available.	
Product type	: Liquid.	
	the substance or mixture and uses advised against	
Not applicable.		
Supplier's details	: Betco Corporation 400 Van Camp Road Bowling Green, Ohio 43402 www.betco.com 888-462-3826	
Emergency telephone number (with hours of operation)	: Chemtrec (800) 424-9300 24 hour	
Section 2. Hazard	Is identification	
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	
Classification of the substance or mixture	: SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A	
GHS label elements		
Hazard pictograms		
Signal word	: Warning	
Hazard statements	: Causes serious eye irritation. Causes skin irritation.	
Precautionary statements		
Prevention	: Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.	
Response	: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.	
Storage	: Not applicable.	
Disposal	: Not applicable.	
Hazards not otherwise classified	: None known.	

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

- : Mixture
- : Not available.

Ingredient name	%	CAS number
N-methyl-2-pyrrolidone	≥10 - ≤25	872-50-4
1-methoxy-2-propanol	≤3	107-98-2
Surfactant	≤3	proprietary
triethylamine	<3	121-44-8

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 necess	ary 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 10 minutes. Get medical attention.
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 if adverse health effects persist or are severe. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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 if adverse health effects persist or are severe. 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 syn	nptoms/effects, acute and delayed
Potential acute he	alth effects
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure sig</u>	ans/symptoms
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.

Date of	issue/Date	of revision

Section 4. First aid measures		
Skin contact	: Adverse symptoms may include the following: irritation redness	
Ingestion	: No specific data.	
Indication of immediate me	dical attention and special treatment needed, if necessary	
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. 	
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.	

See toxicological information (Section 11)

Section 5. Fire-fighting measures

j		
Extinguishing media		
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	: None known.	
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.	
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides	
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. Avoid breathing vapor or mist. 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).
Methods and materials for co	nt	ainment and cleaning up
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

disposal contractor.

place in an appropriate waste disposal container. Dispose of via a licensed waste

Section 6. Accidental release measures

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). 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.
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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: 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

Ingredient name	Exposure limits
N-methyl-2-pyrrolidone	AIHA WEEL (United States, 10/2011). Absorbed through skin.
1-methoxy-2-propanol	TWA: 10 ppm 8 hours. ACGIH TLV (United States, 3/2017). TWA: 50 ppm 8 hours. TWA: 184 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 369 mg/m ³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 100 ppm 8 hours. TWA: 360 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 540 mg/m ³ 15 minutes. NIOSH REL (United States, 10/2016). TWA: 100 ppm 10 hours. TWA: 360 mg/m ³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 150 ppm 15 minutes. STEL: 150 ppm 15 minutes. STEL: 540 mg/m ³ 15 minutes.
Surfactant triethylamine	None. ACGIH TLV (United States, 3/2017). Absorbed through skin. TWA: 0.5 ppm 8 hours. STEL: 1 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 10 ppm 8 hours.

Section 8. Exposure controls/personal protection

	TWA: 40 mg/m ³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 60 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 25 ppm 8 hours. TWA: 100 mg/m ³ 8 hours.
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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.
Individual protection meas	ures
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.
Eye/face 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: chemical splash goggles.
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. Recommended: Chemical resistant gloves
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. Physic	al and chemical properties
Appearance	
Physical state	: Liquid.
Color	: Opaque. White.
Odor	: Characteristic.
Odor throshold	

Odor threshold	: Not avail	able.					
рН	: 7 to 9	o 9					
Melting point	: Not avail	Not available.					
Boiling point	: Not avail	: Not available.					
Flash point	: Closed c	: Closed cup: >100°C (>212°F) [Product does not sustain combustion.]					
Evaporation rate	: Not avail	able.					
Flammability (solid, gas)	: Not avail	able.					
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Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.0387
Solubility	: Partially soluble in the following materials: cold water.
Solubility in water	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

Section 10. Stability and reactivity

Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Incompatible materials	:
Conditions to avoid	: No specific data.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	: The product is stable.
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
N-methyl-2-pyrrolidone	LD50 Dermal	Rabbit	8 g/kg	-
	LD50 Oral	Rat	3914 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg ັ	-
	LD50 Oral	Rat	6600 mg/kg	-
triethylamine	LD50 Oral	Rat	460 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
N-methyl-2-pyrrolidone	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
triethylamine	Skin - Mild irritant	Rabbit	-	365 milligrams	-

Sensitization

Not available.

Mutagenicity

Section 11. Toxicological information

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
1-methoxy-2-propanol triethylamine	0,		Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	:	Routes of entry anticipated: Oral, Dermal. Routes of entry not anticipated: Inhalation.
Potential acute health effects		
Eye contact	÷	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation.
Ingestion	÷	No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

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

<u>Short term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	1	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
General	:	No known significant effects or critical hazards.

Date of issue/Date of revision : 4/3/2019 Date of previous issue : 3/12/2019 Version : 3

7/12

Section 11. Toxicological information

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

Acute toxicity estimates

Route	•	ATE value		
Oral		37420 mg/kg		

Section 12. Ecological information

Toxicity				
Product/ingredient name	Result	Species	Exposure	
N-methyl-2-pyrrolidone	Acute LC50 1.23 ppm Fresh water Acute LC50 832 ppm Fresh water	Daphnia - Daphnia magna Fish - Lepomis macrochirus	48 hours 96 hours	

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
N-methyl-2-pyrrolidone	-0.46	-	low
1-methoxy-2-propanol	<1	-	low
triethylamine	1.45	<0.5	low

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

of this prod requiremen regional loc via a licens the sewer u Waste pac when recyc safe way. cleaned or	ation of waste should be avoided or minimized wherever possible. Disposal luct, solutions and any by-products should at all times comply with the hts of environmental protection and waste disposal legislation and any cal authority requirements. Dispose of surplus and non-recyclable products hed waste disposal contractor. Waste should not be disposed of untreated to unless fully compliant with the requirements of all authorities with jurisdiction. kaging should be recycled. Incineration or landfill should only be considered cling is not feasible. This material and its container must be disposed of in a Care should be taken when handling emptied containers that have not been rinsed out. Empty containers or liners may retain some product residues.
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United States - RCRA Toxic hazardous waste "U" List

Ingredient			CAS #	Status	Reference number	
Triethylamine; Ethanamine,	N,N-diethyl-		121-44-8	Listed	U404	
Date of issue/Date of revision	: 4/3/2019	Date of previous issue	: 3/12/2019	Version	:3	8/12

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

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.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 4(a) final test rules: acetaldehyde
	TSCA 8(a) PAIR: tris(2-butoxyethyl) phosphate; acetaldehyde
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	TSCA 8(c) calls for record of SAR: tris(2-butoxyethyl) phosphate
	Clean Water Act (CWA) 307: benzene; toluene
	Clean Water Act (CWA) 311 : Formaldehyde, solution; triethylamine; benzene; toluene; xylene; methyl methacrylate; acetaldehyde; propylene oxide; cyclohexane
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed

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 302/304

Composition/information on ingredients

			RA 302 TPQ		SARA 304 RQ	
%	EHS	(lbs)	(gallons)	(lbs)	(gallons)	
<0.1 <0.1	Yes. Yes.	500 10000	73.9 1444.3	100 100	14.8 14.4	
	<0.1 <0.1	<0.1 Yes.	<0.1 Yes. 500 <0.1	<0.1 Yes. 500 73.9 <0.1	<pre><0.1 Yes. 500 73.9 100</pre>	

Section 15. Regulatory information

SARA 311/312

-				
C	lass	ITIC	atı	on

: SKIN IRRITATION - Category 2

EYE IRRITATION - Category 2A

Composition/information on ingredients

Name	%	Classification
N-methyl-2-pyrrolidone	≥10 - ≤25	FLAMMABLE LIQUIDS - Category 4
		EYE IRRITATION - Category 2A
1-methoxy-2-propanol	≤3	FLAMMABLE LIQUIDS - Category 3
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Narcotic effects) - Category 3
2-(2-ethoxyethoxy)ethanol	≤3	FLAMMABLE LIQUIDS - Category 4
Surfactant	≤3	SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
triethylamine	<3	FLAMMABLE LIQUIDS - Category 2
		ACUTE TOXICITY (oral) - Category 4
		SKIN CORROSION - Category 1A
		SERIOUS EYE DAMAGE - Category 1
		SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
		(Respiratory tract irritation) - Category 3

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	N-methyl-2-pyrrolidone	872-50-4	≥10 - ≤25
	2-(2-ethoxyethoxy)ethanol	111-90-0	≤3
	triethylamine	121-44-8	<3
Supplier notification	N-methyl-2-pyrrolidone	872-50-4	≥10 - ≤25
	2-(2-ethoxyethoxy)ethanol	111-90-0	≤3
	triethylamine	121-44-8	<3

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: 1-METHYL-2-PYRROLIDONE; TRIETHYLAMINE; PROPYLENE GLYCOL METHYL ETHER; PROPYLENE GLYCOL MONOMETHYL ETHER
New York	: The following components are listed: Triethylamine
New Jersey	: The following components are listed: 1-METHYL-2-PYRROLIDONE; 2-PYRROLIDINONE, 1-METHYL-; TRIETHYLAMINE; ETHANAMINE, N,N-DIETHYL-; PROPYLENE GLYCOL MONOMETHYL ETHER; 1-METHOXY-2-PROPANOL; GLYCOL ETHERS
Pennsylvania	The following components are listed: 2-PYRROLIDINONE, 1-METHYL-; ETHANAMINE, N,N-DIETHYL-; 2-PROPANOL, 1-METHOXY-

California Prop. 65

▲ WARNING: This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Cumene, Acetaldehyde, Formaldehyde, 1,4-Dioxane, Propylene oxide, which are known to the State of California to cause cancer, and N-methylpyrrolidone, Ethylene Glycol, Toluene, Methanol, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name			No signific level	ant risk Maximum acceptable level	dosage
Date of issue/Date of revision	: 4/3/2019	Date of previous issue	: 3/12/2019	Version : 3	10/12

Section 15. Regulatory information

N-methylpyrrolidone	-	Yes.
Ethylene Glycol	-	Yes.
Cumene	-	-
Toluene	-	Yes.
Benzene	Yes.	Yes.
Acetaldehyde	Yes.	-
Methanol	-	Yes.
Formaldehyde	Yes.	-
1,4-Dioxane	Yes.	-
Propylene oxide	-	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Europe	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: At least one component is not listed.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

Section 16. Other information

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

Health	1	2
Flammability		1
Physical hazards		0

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.

Section 16. Other information

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.)



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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.

Procedure used to derive the classification

Classification	Justification
	Calculation method Calculation method

<u>History</u>	
Date of printing	: 4/18/2019
Date of issue/Date of revision	: 4/3/2019
Date of previous issue	: 3/12/2019
Version	: 3
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: Not available.

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.