SAFETY DATA SHEET



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Top Flite

GHS product identifier	: Top Flite	
Product code	: 150	
Other means of identification	: Not available.	
Product type	: Liquid.	
	f the substance or mixture and use	es advised against
Identified uses		
General/Multi-Purpose Clea	aner	
Uses advised against		Reason
For Industrial and Institution	al Use Only	-
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. Hazar	ds identification	
OSHA/HCS status	: This material is considered ha (29 CFR 1910.1200).	zardous by the OSHA Hazard Communication Standard
Classification of the substance or mixture	: EYE IRRITATION - Category 2	2A
GHS label elements		
UNU IANCI CICIIICIILO		
Hazard pictograms		
	: Warning	
Hazard pictograms	: Causes serious eye irritation.	
Hazard pictograms Signal word Hazard statements	: Causes serious eye irritation.	Wash hands thoroughly after handling.
Hazard pictograms Signal word Hazard statements Precautionary statements	 Causes serious eye irritation. Wear eye or face protection. IF IN EYES: Rinse cautiously 	Wash hands thoroughly after handling. with water for several minutes. Remove contact lenses, i nue rinsing. If eye irritation persists: Get medical attentior
Hazard pictograms Signal word Hazard statements <u>Precautionary statements</u> Prevention	 Causes serious eye irritation. Wear eye or face protection. IF IN EYES: Rinse cautiously 	with water for several minutes. Remove contact lenses, in
Hazard pictograms Signal word Hazard statements <u>Precautionary statements</u> Prevention Response	 Causes serious eye irritation. Wear eye or face protection. IF IN EYES: Rinse cautiously present and easy to do. Contin 	with water for several minutes. Remove contact lenses, i

Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

- : Mixture
- : Not available.

Ingredient name	%	CAS number
disodium dihydrogen ethylenediaminetetraacetate	≤5	139-33-3
sodium dodecylbenzenesulfonate	≤5	25155-30-0
Alcohols, C9-11, ethoxylated	≤3	68439-46-3
Benzenesulfonic acid, C10-16-alkyl derivs.	≤3	68584-22-5
tetrasodium ethylene diamine tetraacetate	≤3	64-02-8

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 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 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. Get medical attention if symptoms occur. 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.
	ns/effects, acute and delayed
Potential acute health e	<u>iffects</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/s</u>	<u>/mptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering

 Inhalation
 : No specific data.

 Date of issue/Date of revision
 : 12/13/2019
 Date of previous issue
 : No previous validation
 Version
 : 1

redness

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Section 4. First aid measures		
Skin contact	: No specific data.	
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

-	
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 sulfur oxides metal oxide/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	ont	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
	place in an appropriate waste disposal container. Dispose of via a licensed waste
	disposal contractor.

Section 6. Accidental release measures

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.

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

Occupational exposure limits

Ingredient name	Exposure limits	
disodium dihydrogen ethylenediaminetetraacetate	None.	
sodium dodecylbenzenesulfonate	None.	
Alcohols, C9-11, ethoxylated	None.	
Benzenesulfonic acid, C10-16-alkyl derivs.	None.	
tetrasodium ethylene diamine tetraacetate	None.	

Appropriate engineering controls Environmental exposure controls		Good general ventilation should be sufficient to control worker exposure to airborne contaminants. 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 measure	<u>es</u>	
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.

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Section 8. Exposure controls/personal protection

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	: Liquid.
Color	: Clear. Green.
Odor	: Minty.
Odor threshold	: Not available.
рН	: 10 to 11
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: Not applicable. [Product does not sustain combustion.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.024
Solubility	: Easily soluble in the following materials: cold water and hot 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

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.

Section 10. Stability and reactivity

Conditions to avoid	: No specific data.
Incompatible materials	: Not available.
Hazardous decomposition products	: Under normal cond not be produced.

position : 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
disodium dihydrogen ethylenediaminetetraacetate	LD50 Oral	Rat	2 g/kg	-
sodium dodecylbenzenesulfonate	LD50 Oral	Rat	438 mg/kg	-
Alcohols, C9-11, ethoxylated	LD50 Oral	Rat	1378 mg/kg	-
Benzenesulfonic acid, C10-16-alkyl derivs.	LD50 Dermal	Rabbit	2000 mg/kg	-
-	LD50 Oral	Rat	775 mg/kg	-
tetrasodium ethylene diamine tetraacetate	LD50 Oral	Rat	10 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sodium dodecylbenzenesulfonate	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
-	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
tetrasodium ethylene diamine tetraacetate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity Not available.

Specific target organ toxicity (single exposure) Not available.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

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	1	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	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	: No specific data.
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	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	<u>cts</u>
Not available.	
General	: No known significant effects or critical hazards.
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

Not available.

Section 12. Ecological information

Toxicity

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Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
sodium dodecylbenzenesulfonate	Acute EC50 29000 µg/l Fresh water	esh water Algae - Chlorella pyrenoidosa - Exponential growth phase	
	Acute EC50 7.81 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 0.15 ppm Fresh water	Daphnia - Daphnia pulex	48 hours
	Acute IC50 112.4 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth	72 hours
	Acute LCE0 1 10 ppm Erech water	phase	OC hours
	Acute LC50 1.18 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
Alcohols, C9-11, ethoxylated	Acute EC50 5.36 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 2686 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 8500 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Benzenesulfonic acid, C10-16-alkyl derivs.	Acute EC50 5.65 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
tetrasodium ethylene diamine tetraacetate	Acute LC50 486000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
disodium dihydrogen ethylenediaminetetraacetate	-4.3	1.8	low
sodium dodecylbenzenesulfonate	1.96	-	low
tetrasodium ethylene diamine tetraacetate	5.01	1.8	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

Disposal methods : 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.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	ΙΑΤΑ			
UN number	UN3082	UN3082	UN3082	UN3082	UN3082	UN3082			
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sodium dodecylbenzenesulfonate, Alcohols, C9-11, ethoxylated)								
Transport hazard class(es)	9	9	9	9	9	9			
Packing group	Ш	Ш	111	Ш	III	111			
Environmental hazards	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.			

Additional information

DOT Classification	:	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 $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$. Reportable quantity 31139.7 lbs / 14137.4 kg [3647.2 gal / 13806.1 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.			ay. sizes		
TDG Classification	:	Goods Regu Non-bulk pa	ulations: 2.43-2.45 (Cla	ing sections of the Transports ss 9), 2.7 (Marine pollutant are not regulated as dange	: mark).	U U	
Mexico Classification	:	The environ sizes of ≤5 L		ostance mark is not require	ed when tr	ansported in	۱
ADR/RID	:	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.				L or	
IMDG	:		ded the packagings me	angerous good when trans et the general provisions c			L or
ΙΑΤΑ	:			angerous good when trans et the general provisions c			
Special precautions for user	:	upright and		always transport in close sons transporting the proc			n the
Transport in bulk according to Annex II of MARPOL and the IBC Code	:	Not available	e.				
Date of issue/Date of revision	: 12	/13/2019	Date of previous issue	: No previous validation	Version	:1	9/12

Section 15. Regulatory information

J-			
U.S. Federal regulations	TSCA 8(a) CDR Exempt/Partial exemption: Not determined		
	Clean Water Act (CWA) 311 : sodium dodecylbenzenesulfonate; sulphuric acid; sodium hydroxide; Formaldehyde, solution		
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed		
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

			SARA 302 TPQ SARA 304 RQ		RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
sulphuric acid formaldehyde	≤0.1 ≤0.1	Yes. Yes.	1000 500	66.3 73.9	1000 100	66.3 14.8

SARA 304 RQ

: 3333333.3 lbs / 1513333.3 kg [390410.5 gal / 1477864.6 L]

SARA 311/312 Classification

: EYE IRRITATION - Category 2A

Composition/information on ingredients

Name	%	Classification
disodium dihydrogen ethylenediaminetetraacetate	≤5	EYE IRRITATION - Category 2A
sodium	≤5	ACUTE TOXICITY (oral) - Category 4
dodecylbenzenesulfonate		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
Alcohols, C9-11, ethoxylated	≤3	EYE IRRITATION - Category 2A
Benzenesulfonic acid,	≤3	ACUTE TOXICITY (oral) - Category 4
C10-16-alkyl derivs.		SKIN CORROSION - Category 1C
		SERIOUS EYE DAMAGE - Category 1
		RESPIRATORY SENSITIZATION - Category 1
tetrasodium ethylene diamine	≤3	ACUTE TOXICITY (oral) - Category 4
tetraacetate		SERIOUS EYE DAMAGE - Category 1

State regulations

Massachusetts	: The following components are listed: SODIUM DODECYLBENZENE SULFONATE
New York	 The following components are listed: Sodium dodecylbenzene sulfonate; Dodecylbenzene sulfonate
New Jersey	 The following components are listed: SODIUM DODECYLBENZENE SULFONATE; BENZENESULFONIC ACID, DODECYL-, SODIUM SALT
Pennsylvania	 The following components are listed: BENZENESULFONIC ACID, DODECYL-, SODIUM SALT

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals						
Not listed.						
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Section 15. Regulatory information

Montreal Protocol

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

Section 16. Other information

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



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.)



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Section 16. Other information

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
EYE IRRITATION - Category 2A		Expert judgment
History		•
Date of printing	: 12/13/2019	
Date of issue/Date of revision	: 12/13/2019	
Date of previous issue	: No previous validation	
Version	: 1	
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coe MARPOL = International Convention for the Prevention as modified by the Protocol of 1978. ("Marpol" = marin UN = United Nations	fficient on of Pollution From Ships, 1973
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.