

SAFETY DATA SHEET

Issue Date 2/15/2018

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Version 0.09

Section 1. Identification

Product Name

AQUA AMMONIA, 26° Be'

Other means of identification	
Product Code	1459
UN/ID No.	UN2672
Synonyms	None

Recommended use of the chemical and restrictions on use

Reco	mmende	d Use
Uses	advised	against

No information available. No information available

Manufacturer Address

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number Chemtrec 1-800-424-9300

Section 2. Hazards 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 CORROSION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 May displace oxygen and cause rapid suffocation. Causes severe skin burns and eye damage. May cause respiratory irritation. Very toxic to aquatic life.
Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling.
Response	: Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Other means of identification	1	Aqua Ammonia, Ammonium Hydroxide
Product code	:	001195

Ingredient name	%	CAS number
	100 70 - 80 20 - 30	1336-21-6 7732-18-5 7664-41-7

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	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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 eff	<u>ects</u>					
Eye contact	: No knowr	n significant effects or critic	al hazards.			
Inhalation	: May caus	se respiratory irritation.				
Skin contact	: Causes s	evere burns.				
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Section 4. First aid measures

Frostbite	: Try to warm up the frozen tissues and seek medical attention.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	<u>ptoms</u>
Eye contact	: Adverse symptoms may include the following:, pain, watering, redness
Inhalation	: Adverse symptoms may include the following:, respiratory tract irritation, coughing
Skin contact	: Adverse symptoms may include the following:, pain or irritation, redness, blistering may occur
Ingestion	: Adverse symptoms may include the following:, stomach pains
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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 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. This material is very toxic to aquatic life. 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: 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, protect	:tiv	e equipmen	it and emergene	<u>cy procedu</u>	<u>ires</u>				
For non-emergency personnel	:	Evacuate s entering. D Provide ade	hall be taken inv urrounding areas to not touch or w equate ventilation . Put on appropr	s. Keep un alk through n. Wear ap	necessa spilled i propriate	ry and unprotect material. Do not e respirator whe	ted perso t breathe n ventilat	onnel from vapor or mis	st.
For emergency responders	:	Section 8 o	ed clothing is req n suitable and ur personnel".						
Environmental precautions	:	and sewers pollution (se	ersal of spilled ma b. Inform the rele ewers, waterway ment if released	evant autho s, soil or aiı	rities if th r). Wate	ne product has c er polluting mate	aused er rial. May	nvironmental	I
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Section 6. Accidental release measures

Methods and materials for containment 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.
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 get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid release to the environment. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Do not breathe vapor or mist.
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. Store locked up. 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				
Aqua Ammonia			None.				
WATER			None.				
ammonia			California PEL for	r Chemical Contamina	nts (
			Table AC-1) (Unite	ed States).	-		
			PEL: 25 ppm 8 ho	ours.			
			STEL: 35 ppm 15	i minutes.			
			ACGIH TLV (Unite				
			TWA: 25 ppm 8 h	nours.			
			TWA: 17 mg/m ³ 8	3 hours.			
			STEL: 35 ppm 15	i minutes.			
			STEL: 24 mg/m ³	15 minutes.			
			OSHA PEL 1989 (United States, 3/1989).			
			STEL: 35 ppm 15	i minutes.			
			STEL: 27 mg/m ³	15 minutes.			
			NIOSH REL (Unite	ed States, 10/2016).			
			TWA: 25 ppm 10	hours.			
			TWA: 18 mg/m ³ 1	10 hours.			
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Section 8. Exposure controls/personal protection

	STEL: 35 ppm 15 minutes. STEL: 27 mg/m ³ 15 minutes. OSHA PEL (United States, 6/2016). TWA: 50 ppm 8 hours. TWA: 35 mg/m ³ 8 hours.
Appropriate engineering controls	: Use only with adequate ventilation. 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. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measured	res
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 and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
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

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Flash point	: Not availa	able.				
Critical temperature	: Not availa	able.				
Boiling point	: Lowest k	nown value: 38°C (100.4°F) (ammonia). Weight	ed average: 65	5.56°C (15	0°F)
Melting point	: -35ºF (20	0% solution) to _115ºF(30%	6 solution)			
рН	: Approx. 1	1.6 for 1 N Sol'n. in water				
Odor threshold	: 5 ppm					
Odor	: Pungent.					
Color	: Clear.					
Physical state	: Liquid.					
Appearance						

Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Flammability (solid, gas)	: Extremely flammable in the presence of the following materials or conditions: Oxidizing
Lower and upper explosive (flammable) limits	: Lower: 16% Upper: 25%
Vapor pressure	: 3-10 PSI @ 16 ∘C
Vapor density	: Vapor density 0.6 (Air = 1) (ammonia)
Specific Volume (ft ³ /lb)	: 20.79
Gas Density (lb/ft ³)	: 0.0481
Relative density	: 0.6
Solubility	: Soluble in water. Soluble in alcohol and ether.
Solubility in water	: Complete 540 g/l
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: 651°C (1203.8°F)
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.
Conditions to avoid	: No specific data.
Incompatible materials	: Yellow Metals (brass & copper)
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

Section 11. Toxicological information

Information on toxicological effects

Product/ingredient name	Result		Species		Dose		Exposure	
Aqua Ammonia ammonia	LD50 Oral LC50 Inhalation Gas.				350 mg/kg 7338 ppm		- 1 hours	
rritation/Corrosion								
Product/ingredient name	Result	Spec	ies	Score		Exposure	Observation	
Aqua Ammonia	Eyes - Severe irritant	Rabb	bit	-		250 Micrograms	-	
	Eyes - Severe irritant	Rabb	bit	-		0.5 minutes 1 milligrams	-	

Section 11. Toxicological information

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Aqua Ammonia	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely : Not available. routes of exposure

Potential acute health effects

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Eye contact	: No known significant effects or critical hazards.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes severe burns.
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, watering, redness
Inhalation	: Adverse symptoms may include the following:, respiratory tract irritation, coughing
Skin contact	: Adverse symptoms may include the following:, pain or irritation, redness, blistering may occur
Ingestion	: Adverse symptoms may include the following:, stomach pains

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

Short term exposure	
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 eff	ects
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.

Section 11. Toxicological information

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

Product/ingredient name	Result	Species	Exposure
Aqua Ammonia ammonia	Acute LC50 37 ppm Fresh water Acute EC50 29.2 mg/l Marine water Acute LC50 2080 µg/l Fresh water Acute LC50 0.53 ppm Fresh water Acute LC50 300 µg/l Fresh water Chronic NOEC 0.204 mg/l Marine water	Fish - Gambusia affinis - Adult Algae - Ulva fasciata - Zoea Crustaceans - Gammarus pulex Daphnia - Daphnia magna Fish - Hypophthalmichthys nobilis Fish - Dicentrarchus labrax	96 hours 96 hours 48 hours 48 hours 96 hours 62 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
WATER	-1.38	-	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	TDG	Mexico	IMDG	ΙΑΤΑ
UN number	UN2672	UN2672	UN2672	UN2672	UN2672
UN proper shipping name	Ammonium Hydroxide or Ammonia solutions	AMMONIA SOLUTION	AMMONIA SOLUTION	AMMONIA SOLUTION	Ammonia solution
Transport hazard class(es)	8 CORRECTOR	8	8	8	8
Packing group	111	111	111	111	III
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Additional information		
DOT Classification	:	This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤ 5 L or ≤ 5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. Reportable quantity 1000 lbs / 454 kg [2493.4 gal / 9438.7 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
TDG Classification	:	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.
IMDG	:	The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg.
ΙΑΤΑ	:	The environmentally hazardous substance mark may appear if required by other transportation regulations.
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 to Annex II of MARPOL and the IBC Code	:	Not available.

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	Clean Water Act (CWA) 311: ammonia; ammonia
	Clean Air Act (CAA) 112 regulated toxic substances: ammonia
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed

Section 15. Regulatory information

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		۲Q	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
ammonia	20 - 30	Yes.	500	-	100	-

SARA 304 RQ

: 333.3 lbs / 151.3 kg [831.1 gal / 3146.2 L]

SARA 311/312

Classification

: Refer to Section 2: Hazards Identification of this SDS for classification of substance.

SARA 313

	Product name	CAS number	%
Form R - Reporting	ammonia	1336-21-6	100
requirements	ammonia	7664-41-7	20 - 30
Supplier notification	ammonia	1336-21-6	100
	ammonia	7664-41-7	20 - 30

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: AMMONIUM HYDROXIDE; AMMONIUM WATER; AMMONIA; AMMONIA, ANHYDROUS
New York	: The following components are listed: Ammonium hydroxide; Ammonia
New Jersey	: The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

: The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

: The following components are listed: AMMONIUM HYDROXIDE; AMMONIA

Pennsylvania

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.

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): Not determined.

Section 15. Regulatory information

-	-
Malaysia	: All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
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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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 SKIN CORROSION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 AQUATIC HAZARD (ACUTE) - Category 1		JustificationExpert judgment Calculation methodCalculation method	
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Section 16. Other information

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 = International Air Transport Association 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.

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.