

## SAFETY DATA SHEET

Conforms to the requirements of the:

United States Hazard Communication Regulation 29 CFR 1910.1200

### SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAME	FARMIN DM2470N
PRODUCT CASRN	68439-70-3
PRODUCT DESCRIPTION	TERTIARY FATTY AMINES
SDS DOCUMENT No.	K02231
RECOMMENDED USES	Product is intended for use as a raw material in chemical manufacturing

#### RESPONSIBLE PARTY

Kao Specialties Americas LLC  
243 Woodbine Street  
P. O. Box 2316  
High Point, NC 27261  
Telephone: 1-800-727-2214

Refer to SECTION 16 for information regarding the  
MANUFACTURER(s) of this product

**FOR ALL TRANSPORTATION ACCIDENTS, call Chemtrec at 1-800-424-9300 or +1-703-741-5970 for international collect calls (in Mexico, call 800-681-9531)**

### SECTION 2: HAZARD(S) IDENTIFICATION

#### PRODUCT CLASSIFICATION per 29 CFR 1910.1200

HAZARD CLASSIFICATION	Substance or mixture corrosive to metals Category 1 Skin Corrosion/Irritation Category 1B Serious Eye Damage/Eye Irritation Category 1 Acute Toxicity - Oral Category 4
SIGNAL WORD	Danger
HAZARD STATEMENTS	May be corrosive to metals Harmful if swallowed Causes severe skin burns and eye damage

#### HAZARD PICTOGRAMS



## RECOMMENDED SAFETY PRECAUTIONS

INJURY PREVENTION	Keep only in original container. Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
EMERGENCY RESPONSE	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor. Absorb spillage to prevent material damage.
PRODUCT STORAGE	Store locked up. Store in corrosive resistant container with a resistant inner liner.
PRODUCT DISPOSAL	Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

## HAZARDS NOT OTHERWISE CLASSIFIED

PYROPHORIC GASES	Not applicable
SIMPLE ASPHYXIANTS	Not applicable
COMBUSTIBLE DUST	Not applicable

Dust Classification	Minimum Ignition Energy (mJ)	Pmax (bar-g)	Rmax (bar/s)	Kst (bar-m/s)	Explosion Severity
Not Applicable					

Definitions for dust classifications are found in OSHA Instruction CPL 03-00-008 *Combustible Dust National Emphasis Program (reissued) March 11, 2008, Appendix E, Section 5*

Other Known Hazards	None
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**FOR INFORMATION REGARDING ENVIRONMENTAL GHS CLASSIFICATION, REFER TO SECTION 12 BELOW**

## SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration (%)
1-Dodecanamine, N,N-dimethyl-	Lauryl dimethylamine	112-18-5	69 - 71 %
1-Tetradecanamine, N,N-dimethyl-	Tetradecyl dimethylamine	112-75-4	24 - 26 %
1-Hexadecanamine, N,N-dimethyl-	Hexadecyl dimethylamine	112-69-6	4 - 6 %
1-Decanamine, N,N-dimethyl-	Decyl dimethylamine	1120-24-7	0 - 2 %
1-Octadecanamine, N,N-dimethyl-	Octadecyl dimethylamine	124-28-7	0 - 2 %

If any items in the table above are described as CONFIDENTIAL, Kao Specialties Americas LLC considers this information to constitute a Trade Secret.

## SECTION 4: FIRST-AID MEASURES

EYES	Flush immediately with water for at least 15 minutes. Do not rub eyes. Remove contact lens immediately, if present and easy to remove. SEEK IMMEDIATE MEDICAL ATTENTION ONCE THE EXPOSED PERSON IS SAFE TO TRANSPORT.
SKIN	Immediately take off all contaminated clothing. For small exposure, wash affected area with 2% acetic acid solution until the slimy feeling disappears. Follow acid wash with flushing the exposed area with copious amount of water. For large exposure, use safety shower to flush the affected area with heavy flow of water. SEEK MEDICAL ATTENTION IMMEDIATELY. If medical attention is not immediately available, contact POISON CONTROL CENTER (1-800-222-1222).
INGESTION	If the material is swallowed, get immediate medical attention or advice.
INHALATION	If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. If symptoms persist, get medical attention.
SYMPTOMS of EXPOSURE	Skin contact: exposure to this product will result in rash and irritation. Deep-tissue chemical burn will develop slowly over a period of hours if the material is not promptly removed from the affected area. Eyes: symptoms include itching, burning, redness and tearing. Respiratory: symptoms may include burning sensation in the upper respiratory system, shortness of breath, and choking/coughing.
NOTES to PHYSICIAN	Provide general supportive measures and treat symptomatically.

## SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES	Refer to SECTION 9: Physical and Chemical Properties
HAZARDOUS PRODUCTS of COMBUSTION	Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product may yield poisonous gases including oxides of nitrogen, hydrogen gas and ammonia.
PROPERTIES THAT COULD INCREASE FIRE or EXPLOSION HAZARD	No known hazards.
EXTINGUISHING MEDIA	Powder, alcohol-resistant foam, CO2 & sand
FIRE-FIGHTING INSTRUCTIONS	Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA ratings are found in SECTION 16

## SECTION 6: ACCIDENTAL RELEASE MEASURES

FOR ALL TRANSPORTATION ACCIDENTS, call Chemtrec at 1-800-424-9300 or +1-703-741-5970 for international collect calls (in Mexico, call 800-681-9531)

### RESPONSE TO SMALL SPILLS OF PRODUCT

SPILL CONTAINMENT	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
SPILL CLEANUP PROCEDURES	Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for disposal.
REQUIRED EQUIPMENT	Shovel the material into waste container.
ADDITIONAL INFORMATION	No other spill procedures necessary.

### RESPONSE TO LARGE SPILLS OF PRODUCT

SPILL CONTAINMENT	Dike the spilled material, where this is possible. Stop source of leak if possible. Prevent liquid from entering sewers. Keep out of drains and water courses.
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<b>SPILL CLEANUP PROCEDURES</b>	Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for disposal. Thoroughly wash the area with water after a spill or leak clean-up. For very large spills, activate company or local HAZMAT emergency response. Use of properly trained remediation company may be required to safely collect the spilled product.
<b>REQUIRED EQUIPMENT</b>	Wear appropriate protective equipment and clothing during clean-up.
<b>ADDITIONAL INFORMATION</b>	Dispose of product in accordance with all local, state, federal, and international regulations.

## SECTION 7: HANDLING AND STORAGE

<b>HANDLING REQUIREMENTS</b>	As with all chemicals, good industrial hygiene practices should be followed when handling this material. Use this product with adequate ventilation. Use a NIOSH-approved respirator if exposed to oil mist, and adequate ventilation is not available. Avoid getting this material into contact with your skin and eyes. Appropriate neutralizing solution should be immediately available whenever skin contact is possible (see SECTION 4: FIRST AID MEASURES). Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or promptly disposed of.
<b>STORAGE REQUIREMENTS</b>	Storage area should be protected by appropriately designed containment to prevent release to groundwater or sewers. Keep the container tightly closed and in a cool, well-ventilated place. Do not mix storage with incompatible materials. Store containers away from acids and strong oxidizing agents. If product is stored in bulk, nitrogen padding is recommended.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>ENGINEERING CONTROLS</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
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### PERSONAL PROTECTIVE EQUIPMENT

<b>EYE/FACE PROTECTION</b>	If handling procedure does not require respiratory protection, chemical splash goggles and full-face shield are recommended when handling this product.
<b>HAND PROTECTION</b>	Impervious gloves should be used at all times when handling this product.
<b>SKIN PROTECTION</b>	Use of protective coveralls and long sleeves is recommended. Impervious gloves should be used at all times when handling this product.
<b>RESPIRATORY PROTECTION</b>	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever there may be potential for airborne exposure.
<b>OTHER</b>	Eyewash fountains and emergency showers are required.

### EXPOSURE LIMITS

CHEMICAL	CASRN	PERCENT	LIMITS	AGENCY
<b>OSHA:</b>	No exposure limits established for this product			
<b>ACGIH:</b>	No exposure limits established for this product			

## SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

<b>APPEARANCE @ 20°C</b>	Clear, colorless liquid	<b>ODOR</b>	Amine odor
<b>ODOR THRESHOLD</b>	No data available	<b>pH</b>	No data available
<b>VAPOR DENSITY</b>	No data available	<b>VAPOR PRESSURE</b>	No data available
<b>EVAPORATION RATE</b>	No data available	<b>RELATIVE DENSITY</b>	0.79 @ 20°C
<b>MELTING POINT (°C)</b>	-8.9°C	<b>WATER SOLUBILITY</b>	Insoluble in water
<b>INITIAL BOILING POINT (°C)</b>	No data available	<b>BOILING RANGE (°C)</b>	No data available

<b>PARTITION COEFFICIENT (N-OCTANOL/WATER)</b>	No data available	<b>VISCOSITY</b>	No data available
<b>DECOMPOSITION TEMPERATURE</b>	No data available	<b>FLAMMABILITY CLASSIFICATION</b>	CLASS IIIB
<b>FLASH POINT (°C)</b>	136°C Cleveland Open Cup	<b>AUTO-IGNITION TEMPERATURE</b>	No data available
<b>UPPER EXPLOSIVE LIMIT</b>	No data available	<b>LOWER EXPLOSIVE LIMIT</b>	No data available
<b>OTHER DATA</b>	No data available		

## SECTION 10: STABILITY and REACTIVITY

<b>CHEMICAL STABILITY</b>	Stable under normal conditions.
<b>CONDITIONS to AVOID</b>	Use suitable technology and/or best work practices to prevent or minimize air emissions of this product.
<b>INCOMPATIBLE MATERIALS (Reactivity)</b>	This product reacts with acids.
<b>INCOMPATIBLE MATERIALS (Storage &amp; Transport)</b>	Avoid contact with acids, acid anhydrides, oxidizing agents, copper and copper alloys.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	None known.
<b>HAZARDOUS POLYMERIZATION</b>	Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE EFFECTS

<b>ORAL (LD50)</b>	Product: No data available for this product.
<b>COMMENT</b>	Not applicable
<b>DERMAL (LD50)</b>	Product: No data available for this product.
<b>COMMENT</b>	Not applicable
<b>INHALATION (LC50)</b>	Product: No data available for this product.
<b>COMMENT</b>	Not applicable

### OTHER TOXICOLOGICAL EFFECTS

<b>SERIOUS EYE DAMAGE &amp; IRRITATION</b>	Product: No data available for this product.
<b>SKIN CORROSION &amp; IRRITATION</b>	Product: No data available for this product.
<b>SKIN SENSITIZATION</b>	Product: No data available for this product.
<b>RESPIRATORY SENSITIZATION</b>	Product: No data available for this product.

<b>MUTAGENICITY</b>	No information available
<b>REPRODUCTIVE TOXICITY – MATERNAL</b>	Product: No data available for this product.
<b>REPRODUCTIVE TOXICITY – FERTILITY</b>	Product: No data available for this product.
<b>REPRODUCTIVE TOXICITY – DEVELOPMENAL</b>	Product: No data available for this product.
<b>TERATOGENICITY</b>	Product: No data available for this product.
<b>STOT – SINGLE EXPOSURE</b>	Product: No data available for this product.
<b>STOT – REPEATED EXPOSURE</b>	Product: No data available for this product.
<b>ASPIRATION HAZARD</b>	Product: No data available for this product.


### **CARCINOGENICITY**

CHEMICAL NAME	DATA	AGENCY	LIST
None of the components of this product are listed on the OSHA Possible or Select Carcinogens Lists.			
None of the components of this product are listed on the ACGIH Carcinogens List.			
No limits established for this product by the International Agency for Research on Cancer (IARC).			
None of the components of this product are listed on the NTP Known or Suspected Carcinogens List.			

<b>MEDICAL CONDITIONS AGGRAVATED by EXPOSURE</b>	No information available.
<b>ROUTES of ENTRY</b>	Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **UN GHS AQUATIC TOXICITY CLASSIFICATION INFORMATION**

<b>AQUATIC TOXICITY CLASSIFICATION</b>	Acute 1 Chronic 1
<b>SIGNAL WORD</b>	Warning
<b>HAZARD PICTOGRAM</b>	
<b>HAZARD STATEMENT</b>	Very toxic to aquatic life Very toxic to aquatic life with long lasting effects
<b>PREVENTION</b>	Avoid release to the environment.
<b>RESPONSE</b>	Collect spillage.
<b>DISPOSAL</b>	Dispose of contents/container in accordance with local/regional/national/international regulation for hazardous wastes.

### **ADDITIONAL ENVIRONMENTAL INFORMATION**

<b>AQUATIC TOXICITY (fish)</b>	No information available
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<b>AQUATIC TOXICITY (crustacean)</b>	No information available
<b>AQUATIC TOXICITY (algae)</b>	No information available
<b>AQUATIC TOXICITY (other data)</b>	No information available

<b>ECOTOXICITY INFORMATION</b>	None determined
<b>ENVIRONMENTAL FATE</b>	No data available for this product.
<b>BIOLOGICAL OXYGEN DEMAND (BOD5), g/g</b>	No data available
<b>CHEMICAL OXYGEN DEMAND (COD), g/g</b>	No data available
<b>PERSISTENCE &amp; DEGRADABILITY</b>	No information available.
<b>BIOACCUMULATION</b>	No information available.



## SECTION 13: DISPOSAL CONSIDERATIONS

<b>WASTE DESCRIPTION</b>	Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.
<b>GENERAL DISPOSAL CONSIDERATIONS</b>	Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations.
<b>DISPOSAL of EMPTY CONTAINERS</b>	Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

RCRA COMPONENT	CASRN	DATA
No limits established for this product.		

## SECTION 14: TRANSPORT INFORMATION

### US DOT CLASSIFICATION (49 CFR §172.101)

UN NUMBER	UN PROPER SHIPPING NAME	TECHNICAL NAME	HAZARD CLASS	PACKING GROUP	SHIPPING PLACARD
UN2735	Amines, liquid, corrosive, n.o.s.	containing alkyl(C12-C14) dimethylamine	8	II	 

<b>MARINE POLLUTANT</b>	This material is a MARINE POLLUTANT. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes. See 49 CFR 171.4 for more information about these exemptions.
<b>SPECIAL PROVISIONS (§172.102)</b>	B2, IB2, T11, TP1, TP27
<b>PACKAGING, BULK (§173.***)</b>	242
<b>PACKAGING, NON-BULK (§173.***)</b>	202

PACKAGING, EXCEPTIONS (§173.***)	154
QUANTITY LIMITATION, PASSENGER AIR/RAIL	1 L
QUANTITY LIMITATION, CARGO AIR	30 L
VESSEL STOWAGE, GENERAL	Material may be stowed "on deck" or "under deck" on a cargo vessel or on a passenger vessel.
VESSEL STOWAGE SPECIAL	Stow "separated from" acids.
REPORTABLE QUANTITY (RQ)	No reportable quantity for this product
EMERGENCY RESPONSE GUIDEBOOK (ERG) REFERENCE	153

## INTERNATIONAL BULK SHIPPING REQUIREMENTS (MARPOL 73/78)

SHIPPING NAME	No information available
SHIP TYPE	No information available
POLLUTION CATEGORY	No information available

## OTHER REGULATORY CLASSIFICATION INFORMATION

	IATA	IMDG
PROPER SHIPPING NAME	Amines, liquid, corrosive, n.o.s.	Amines, liquid, corrosive, n.o.s.
TECHNICAL NAME	containing alkyl(C12-C14) dimethylamine	containing alkyl(C12-C14) dimethylamine
UN NUMBER	UN2735	UN2735
HAZARD CLASS	8	8
PACKING GROUP	II	II

## SECTION 15: REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA)	This product is listed on the U.S. EPA TSCA Inventory.
TSCA 12b EXPORT NOTIFICATION (US)	This product is not subject to TSCA 12B Export Notification requirements. ()
SIGNIFICANT NEW USE RULE (US)	This material is not subject to a Significant New Use Rule under the US Toxic Substances Control Act.
TSCA 8b INVENTORY RESET STATUS (US)	All substances present in this product have been designated as commercially ACTIVE on the United States TSCA inventory {15 U.S.C. §2607(b)(4)}
DOMESTIC SUBSTANCE LIST (DSL - CA)	All components are listed on the Domestic Substances List (DSL) or are exempt from the requirements to notify.
HAZARDOUS MATERIALS INFORMATION REVIEW ACT (CA)	This product does not contain any materials for which a Confidential Business Information claim has been filed with Health Canada. Filing Date: Not applicable Reference Number: Not applicable
SIGNIFICANT NEW USE ACTIVITIES (CA)	The product contains no regulated components



## **INTERNATIONAL CHEMICAL INVENTORIES**

All of the components of this product are listed on the following inventories:

<b>ENCS</b>	Japan	Yes	Registry No. 2-176
<b>REACH</b>	Europe	Not evaluated	
<b>EINECS</b>	Europe	Yes	Registry No. 270-414-6
<b>ELINCS</b>	Europe	No	
<b>IECSC</b>	China	Yes	
<b>PICCS</b>	Philippines	Yes	
<b>ECL</b>	Korea	Yes	Registry No. KE-00789
<b>AICS</b>	Australia	Yes	
<b>TCSI</b>	Taiwan	Yes	

## **APPLICABLE UNITED STATES FEDERAL and STATE REGULATIONS**

### **EMERGENCY PLANNING and COMMUNITY RIGHT TO KNOW ACT (EPCRA) 40 CFR PART 355, APPENDIX A**

<b>EHS COMPONENTS</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>TPQ POUNDS and RQ</b>
The product contains no regulated components			

<b>313 COMPONENTS</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>REPORTING LIMIT</b>
The product contains no regulated components			

<b>CERCLA/SARA COMPONENTS</b>	<b>CASRN</b>	<b>PERCENT</b>	<b>REPORTING LIMIT</b>
The product contains no regulated components			

<b>EPCRA SECTION 311/312 CLASSIFICATION</b>	<b>ACUTE</b>	Yes
	<b>CHRONIC</b>	No
	<b>FIRE</b>	No
	<b>PRESSURE</b>	No
	<b>REACTIVE</b>	No

### **THE FOLLOWING COMPONENTS ARE IDENTIFIED UNDER THE US CLEAN AIR ACT HON-RULE FOR SOCMI CHEMICALS**

<b>COMPONENT NAME</b>	<b>CASRN</b>
The product contains no regulated components	

### **THE FOLLOWING COMPONENTS ARE IDENTIFIED UNDER THE US CLEAN AIR ACT (VOCs IN SOCMI CHEMICALS)**

<b>COMPONENT NAME</b>	<b>CASRN</b>
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The product contains no regulated components	
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**THE FOLLOWING COMPONENTS ARE IDENTIFIED UNDER THE US CLEAN AIR ACT AS HAZARDOUS AIR POLLUTANTS (HAP)**

COMPONENT NAME	CASRN
The product contains no regulated components	

**THE FOLLOWING COMPONENTS ARE IDENTIFIED UNDER THE US CLEAN AIR ACT HON-RULE HAZARDOUS AIR POLLUTANTS (HAP)**

COMPONENT NAME	CASRN
The product contains no regulated components	

**THE FOLLOWING COMPONENTS ARE IDENTIFIED UNDER THE US CLEAN WATER ACT**

COMPONENT NAME	CASRN	LIST NAME
No limits established for this product.		

**STATE RIGHT-TO-KNOW INFORMATION**

COMPONENT NAME	CASRN	STATE	List Name
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If the STATE RIGHT-TO-KNOW INFORMATION table above is empty than none of the components of this product are included on the state right-to-know regulatory lists for Florida, Massachusetts, Michigan, Pennsylvania, or New Jersey.

**CALIFORNIA SAFE WATER and TOXIC ENFORCEMENT ACT of 1986 (Proposition 65)**

COMPONENT NAME	CASRN	CONCENTRATION <sup>†</sup>	LIST DATA
This product contains no components which are listed on California's Proposition 65 lists.			

## SECTION 16: OTHER INFORMATION

To the best of the manufacturer's knowledge, the information contained herein is accurate. However, neither the manufacturer, nor any of its affiliates, make any representations or warranties (expressed or implied), nor assumes any liability (including liability for any direct, incidental, consequential, or other damages) with respect to the accuracy or completeness of the information contained herein. Such information may be (without limitation) invalid if the specified material is used in combination with another, in a particular process, or under unusual conditions. Determination of suitability of any material for any given purpose is the sole responsibility of the user who assumes all risk and responsibility therefore. All materials may present unknown hazards and should be used with appropriate caution. The manufacturer cannot and does not guarantee that the hazards described herein are the only ones that exist.

<b>SDS GENERATED BY</b>	PSIMCOX
<b>SDS VERSION DATE</b>	11/3/2021 9:38:41 AM
<b>SDS APPROVED BY</b>	Patrick B. Simcox Manager – Health, Safety, & Environmental e-mail: Patrick.Simcox@kao.com

<b>MANUFACTURER(S)</b>	PILIPINAS KAO, INC. Jasaan Misamis Oriental Ecozone 9003 Jasaan, Mis. Or. P.O. Box 15 Cagayan de Oro City PHILIPPINES Telephone: 63-88-890-5020
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**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS**

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0

**Hazardous Material Identification System (HMIS) Hazard Ratings**

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	D

**END OF DOCUMENT**