# QUIMI KAO, S.A.

Member of KAO CHEMICALS EUROPE



# **SAFETY DATA SHEET**

Conforms to the requirements of the United States Hazard Communication regulation 29 CFR 1910.1200

# **QUARTAMIN 2M2HTE**

# 1. Product and company identification

Product name		QUARTAMIN 2M2HTE
i foddet fidille		
Chemical name	:	Proprietary mixture
Code		190530
Validation date		18/12/2015.
Product type		Liquid.
Supplier	:	QUIMI KAO, S.A. DE C.V. Km. 22.5 Carretera de Guadalajara El Salto CP. 45680 El Salto - Jalisco (MEXICO). Tel. +52 33-3284-1000 FAX. +52 33-3688-0861

### E-mail:

: jcvaladez@quimikao.com.mx / jhernandez@qknet.quimikao.com.mx

### In case of emergency

For ALL TRANSPORT ACCIDENTS related with USA, call CHEMTREC at 800-424-9300 or 703-527-3887 for international collect calls.

For ALL TRANSPORT ACCIDENTS related with Mexico, call SETIQ at 01-800-00-214-00 or (55) 5575-0838 or (55) 5575-0842

Other countries Emergency telephone	: +34 93 739 9445	Multi-language
number (24h)		

# 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	: FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Flammable liquid and vapour. Causes severe skin burns and eye damage.
Precautionary statements	
Prevention	: Wear protective gloves: > 8 hours (breakthrough time): butyl rubber. Wear eye or face protection: Recommended: splash goggles , face shield. Wear protective clothing: Recommended: overall. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Wash hands thoroughly after handling.
Date of issue/Date of revision	: 18/12/2015. Date of previous issue : No previous validation. Version : 1 1/13

# Section 2. Hazards identification

# Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Chemical name	: Proprietary mixture
Other means of identification	: Quaternary ammonium salts; Dimethyl di-hydrogenated tallow ammonium chloride

CAS number/other identifiers		
CAS number	:	Not applicable.

Product code : 190530		
Ingredient name	%	CAS number
Dialkyl dimethyl ammonium chloride ethanol		 61789-80-8 64-17-5

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.
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.

Section 4. First-a	aid measures
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.
	/effects, acute and delayed
Potential acute health eff	
Eye contact	: Causes serious eye damage.
Inhalation	<ul> <li>May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.</li> </ul>
Skin contact	: Causes severe burns.
Ingestion	: May cause burns to mouth, throat and stomach.
<u>Over-exposure signs/syn</u>	<u>nptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
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 m	edical attention and special treatment needed, if necessary
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>
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 dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
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# Section 5. Fire-fighting measures

Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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.
Remark	: iron steel copper

# Section 6. Accidental release measures

Personal precautions, protec	tive 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised 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 spilt 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 material for con	tainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into

Stop leak it without risk. Move containers from spin area. Use spark-proof tools and explosion-proof equipment. Approach the 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 spill 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. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

# Section 7. Handling and storage

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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

### **Control parameters**

### **Occupational exposure limits**

Ingredient name	Exposure limits
ethanol	ACGIH TLV (United States, 3/2015).
	STEL: 1000 ppm 15 minutes.
	NIOSH REL (United States, 10/2013).
	TWA: 1900 mg/m <sup>3</sup> 10 hours.
	TWA: 1000 ppm 10 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 1900 mg/m <sup>3</sup> 8 hours.
	TWA: 1000 ppm 8 hours.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 1900 mg/m <sup>3</sup> 8 hours.
	TWA: 1000 ppm 8 hours.

Appropriate engineering : controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
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 measures	
Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. 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. Recommended: splash goggles, face shield
Skin protection	

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# Section 8. Exposure controls/personal protection

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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. > 8 hours (breakthrough time): butyl rubber
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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: overall
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. Recommended: Boots.
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Personal protective equipment (Pictograms)	

# Section 9. Physical and chemical properties

Ap	pea	arar	<u>ice</u>

Physical state	: Liquid.		
Colour	: Transparent Slightly Yellowish. @35°C		
Odour	Alcohol-like.		
Odour threshold pH	: Not available. : 6.8 (Conc. (% w/w): 5)		
Melting point	Not available.		
Initial boiling point and boiling range	: Not available.		
Flash point	: Closed cup: >25°C		
Evaporation rate (butyl acetate = 1)	: Not available.		
Flammability (solid, gas)	: Not applicable.		
Upper/lower flammability or explosive limits	: Lower: 2,5% Upper: 12,7%		
Vapour density	÷		
Density	: 0.93 g/cm3 (20 °C)		
Solubility(ies)	: Soluble in the following materials: cold water.		
Partition coefficient: n-octanol/ water	: Not available.		
Decomposition temperature	: Not available.		
Viscosity ( Dynamic )	: Not available.		
Explosive properties	: Not available.		
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# Section 9. Physical and chemical properties

**Oxidising properties** 

: Not available.

# Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients.
: The product is stable.
: Under normal conditions of storage and use, hazardous reactions will not occur.
: iron steel copper
: Strong oxidising materials
: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Other information	: iron
	steel
	copper

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Dialkyl dimethyl ammonium chloride	LD50 Dermal	Rat	>2000 mg/kg	-
ethanol	LD50 Oral LC50 Inhalation Vapour	Rat Rat	>2000 mg/kg 38 mg/l	- 10 hours
	LD50 Oral	Rat	7060 mg/kg	-

# Irritation/Corrosion

Not available.

## Conclusion/Summary

Skin

: Corrosive to the skin.

Eyes : Causes serious eye damage.

### Sensitisation

• • • • • • • • • • • • • • • • • • • •	Route of exposure	Species	Result
Dialkyl dimethyl ammonium chloride	skin	Guinea pig	Not sensitizing

### **Mutagenicity**

Not available.

### **Carcinogenicity**

Not available.

### **Classification**

# Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
ethanol	-	1	-

### **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.

#### Information on the likely : Not available. routes of exposure

### Potential acute health effects

Eye contact	: Causes serious eye damage.
Inhalation	: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin contact	: Causes severe burns.
Ingestion	: May cause burns to mouth, throat and stomach.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
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 effec	ts a	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>5</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.

# Section 11. Toxicological information

Teratogenicity Developmental effects Fertility effects

- : No known significant effects or critical hazards.
- : No known significant effects or critical hazards.
- : 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
Dialkyl dimethyl ammonium chloride	Acute EC50 0,1 to 1 mg/l	Daphnia	48 hours
	Acute IC50 0,1 to 1 mg/l	Algae	72 hours
	Acute LC50 21,3 mg/l	Fish	96 hours
ethanol	Acute LC50 >100 mg/l	Fish	96 hours
Conclusion/Summary	: Very toxic to aquatic organisms environment.	, may cause long-term adverse	effects in the aquatic

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Dialkyl dimethyl ammonium chloride	-	-	Inherent
ethanol	-	-	Readily

### **Bioaccumulative potential**

Not available.

### 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 minimised 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

# Section 14. Transport information

	DOT Classification	ADR/RID	IMDG	IATA
UN number	UN2924	UN2924	UN2924	UN2924
UN proper shipping name	Flammable liquids, corrosive, n.o.s. (ethanol, Dialkyl dimethyl ammonium chloride)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ethanol, Dialkyl dimethyl ammonium chloride)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ethanol, Dialkyl dimethyl ammonium chloride)	Flammable liquid, corrosive, n.o.s. (ethanol, Dialkyl dimethyl ammonium chloride)
Transport hazard class(es)	3 (8)	3 (8)	3 (8)	3 (8)
Packing group	111	111	III	
Environmental hazards	Yes.	No.	No.	No.
Additional information	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. Limited quantity Yes. Packaging instruction Passenger aircraft Quantity limitation: 5 L Cargo aircraft Quantity limitation: 60 L Special provisions B1, IB3, T7, TP1, TP28	Hazard identification         number       38         Limited quantity       5 L         Special provisions       274         Tunnel code       (D/E)	Emergency schedules (EmS) F-E, S-C Special provisions 223, 274	The environmentally hazardous substance mark may appear if required by other transportation regulations. <b>Passenger and</b> <b>Cargo Aircraft</b> Quantity limitation: 5 L Packaging instructions: 354 <b>Cargo Aircraft Only</b> Quantity limitation: 60 L Packaging instructions: 365 <b>Limited Quantities -</b> <b>Passenger Aircraft</b> Quantity limitation: 1 L Packaging instructions: Y342 <b>Special provisions</b> A3, A803

**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 73/78 and the IBC Code

# Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a) PAIR: a-chlorotoluene
	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
	All components are listed or exempted.
	Clean Water Act (CWA) 311: a-chlorotoluene
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed

Class II Substances	
DEA List I Chemicals (Precursor Chemicals)	: Not listed

**Clean Air Act Section 602** 

DEA List II Chemicals	: Not listed
(Essential Chemicals)	

### SARA 302/304

**Composition/information on ingredients** 

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
a-chlorotoluene	0 - 0.1	Yes.	-	-	-	-

# **SARA 304 RQ**

: Not applicable.

: Not listed

SARA 311/312

**Classification** 

: Fire hazard

Immediate (acute) health hazard

### **Composition/information on ingredients**

Name	%	Fire hazard	Sudden release of pressure	Reactive	(acute)	Delayed (chronic) health hazard
Dialkyl dimethyl ammonium chloride ethanol		No. Yes.		No. No.	Yes. No.	No. Yes.

### **State regulations**

Μ	ass	ach	านร	etts

: The following components are listed: ETHYL ALCOHOL

**New York** : None of the components are listed.

: The following components are listed: ETHYL ALCOHOL; ALCOHOL

**New Jersey** Pennsylvania

: The following components are listed: DENATURED ALCOHOL

### California Prop. 65

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

Ingredient name	Cancer		level	Maximum acceptable dosage level
a-chlorotoluene	Yes.	No.	Yes.	No.

### **International regulations**

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

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

Date of issue/Date of revision

# Section 15. Regulatory information

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not listed.

### International lists

### Registration status

This refers to country inventory status or Kao notifications to specific country inventories. Some countries may have additional importation requirements.

Australia - (AICS) China - (IECSC) Canada (DSL) European Union - (EINECS or ELINCS) Republic of Korea - (KECI) Philippines - (PICCS) United States - (TSCA) New Zealand - (NZIOC) Taiwan - (CSNN)

# 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 are not required on SDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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.

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# Section 16. Other information

Date of issue/Date of revision	: 18/12/2015.
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 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 73/78 = 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

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

The editing and update is the responsability of: Departamento de Seguridad, Higiene y Medio Ambiente. ING. Juan Carlos Valadez Tel +(52) 33-3284-1000 ext. 1009