



# KOVKLEEN™ UC A MEMBRANE CLEANER

## Section 1. Identification

GHS product identifier: KOVKLEEN UC A MEMBRANE CLEANER

**Other means of identification:** Not available.

**Product type:** Powder.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Specialty cleaners.

**Area of application** : Industrial applications.

**Supplier/Manufacturer** : John R. Hess & Company, Inc.  
400 Station Street  
Cranston, RI  
02910  
1-800-828-4377

E-mail address of person responsible for this SDS: [custserv@jrhes.com](mailto:custserv@jrhes.com)

### **Emergency telephone number**

Infotrac 1-800-535-5053 (Spill, Leak, Fire, Exposure, Accident)  
+1 (352) 323-3500 (Outside North America)

## 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**

: COMBUSTIBLE DUSTS

SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 70%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : May form combustible dust concentrations in air.  
Causes serious eye damage.  
Causes skin irritation.

### Precautionary statements

**Prevention** : Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.

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## Section 2. Hazards identification

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**Response** : IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

**Storage** : Not applicable.

**Disposal** : Not applicable.

Supplemental label elements: Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

**Hazards not otherwise classified:** Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

## Section 3. Composition/information on ingredients

Substance/mixture: Mixture

**Other means of identification:** Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.

**Product code** : Not available.

Ingredient name	Other names	%	CAS number
phosphoric acid, sodium salt	phosphoric acid, sodium salt	60-100	7632-05-5
Alcohols, C16-18, ethoxylated	Alcohols, C16-18, ethoxylated	10-30	68439-49-6
disodium hydrogenorthophosphate	disodium hydrogenorthophosphate	10-30	7558-79-4

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 and hence require reporting in this section.**

## 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.

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## Section 4. First aid measures

**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 effects**

**Eye contact** : Causes serious eye damage.  
**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : No known significant effects or critical hazards.

#### **Over-exposure signs/symptoms**

**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 medical 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 dry chemical powder. Use dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray (fog).

**Unsuitable extinguishing media:** Do not use water jet.

Specific hazards arising from the chemical: Fine dust clouds may form explosive mixtures with air.

**Hazardous thermal decomposition products:** Decomposition products may include the following materials:

carbon dioxide  
carbon monoxide  
nitrogen oxides  
phosphorus oxides  
metal oxide/oxides  
Ammonia.  
Cyanides

**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** : This material will not burn or burns with difficulty.

## 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe dust. 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 containment and cleaning up

**Small spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

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## Section 6. Accidental release measures

**Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and

## 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 dust. Do not ingest. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

## **Section 8. Exposure controls/personal protection**

### **Control parameters**

### **Occupational exposure limits**

None.

**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. The engineering controls also need to keep gas, vapor 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.

## **Section 8. Exposure controls/personal protection**

### **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.

#### **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** : Use a properly fitted, particulate filter 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.

## Section 9. Physical and chemical properties

### Appearance

Physical state : Solid. [Powder.]

Color: White.

**Odor:** Ammonia. [Slight]

**Odor threshold :** Not available.

**pH:** Not available.

**Melting point:** Not available.

**Boiling point** : Not available.

Flash point : Not available.

Evaporation rate: Not available.

**Flammability (solid, gas)** : This material will not burn or burns with difficulty.

Lower and upper explosive (flammable) limits: Not available.

**Vapor pressure :** Not available.

**Vapor density :** Not available.

**Relative density:** >1

**Solubility** : 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** :  $\geq 106^{\circ}\text{C}$  ( $\geq 222.8^{\circ}\text{F}$ )

SADT: Not available.

**Viscosity:** 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.

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

**Conditions to avoid** : Decomposition (°C): ≥106°C / 220°F

**Incompatible materials** : Can react with certain metals, such as aluminum, to produce flammable hydrogen gas.  
Reactive or incompatible with the following materials:  
oxidizing materials

**Hazardous decomposition products**

: 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
Alcohols, C16-18, ethoxylated disodium hydrogenorthophosphate	LD50 Oral	Rat	1260 mg/kg	-
	LD50 Oral	Rat	17000 mg/kg	-

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Alcohols, C16-18, ethoxylated disodium hydrogenorthophosphate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild 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.

**Information on the likely routes of exposure**

**Potential acute health effects**

: Routes of entry anticipated: Oral, Dermal, Inhalation.

**Eye contact** : Causes serious eye damage.

**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact** : Causes skin irritation.  
**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 effects**

Not available.

**General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** :

**Teratogenicity** :

No known significant effects or critical hazards. No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

Route	ATE value
Oral	3787.6 mg/kg

**Section 12. Ecological information**

**Toxicity**

Product/ingredient name	Result	Species	Exposure
disodium hydrogenorthophosphate	Acute LC50 3580000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours



### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
disodium hydrogenorthophosphate	-5.8	-	low

### Mobility in soil







Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

**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		IMDG	IATA
<b>UN number</b>	UN3077	UN3077	UN3077
<b>UN proper shipping name</b>	Environmentally hazardous substances, solid, n.o.s.. Marine pollutant RQ (ethylene oxide, disodium hydrogenorthophosphate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (urea, Alcohols, C16-18, ethoxylated). Marine pollutant (urea, Alcohols, C16-18, ethoxylated)	Environmentally hazardous substance, solid, n.o.s. (urea, Alcohols, C16-18, ethoxylated)
<b>Transport hazard class(es)</b>	9  	9  	9  
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	Yes.	Yes.	Yes.
<b>Additional information</b>	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	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.  <b>Emergency schedules (EmS)</b> F-A, S-F	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <b>Passenger and Cargo Aircraft</b> Quantity limitation: 400 kg Packaging instructions: 956 <b>Cargo Aircraft Only</b>

<p>required when transported on inland waterways in sizes of ≤5 L or ≤5 kg.</p> <p><b>Special provisions</b> 274, 335, 966, 967, 969</p> <p><b>Reportable quantity</b> 11111.1 lbs / 5044.4 kg Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.</p>	<p>Quantity limitation: 400 kg Packaging instructions: 956 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 30 kg Packaging instructions: Y956</p> <p><b>Special provisions</b> A97, A158, A179, A197</p>
<p><b>Limited quantity</b> Yes.</p> <p><b>Special provisions</b> 8, 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33</p>	

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 73/78 and the IBC Code:** Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 311:** disodium hydrogenorthophosphate

**Clean Air Act Section 112**

**(b) Hazardous Air Pollutants (HAPs) :** Not 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**

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ethylene oxide	0.1-1	Yes.	1000	-	10	-

**SARA 304 RQ** : 11111.1 lbs / 5044.4 kg

**SARA 311/312**

**Classification** : Fire hazard  
Immediate (acute) health hazard

**Composition/information on ingredients**

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
phosphoric acid, sodium salt	60-100	No.	No.	No.	Yes.	No.
Alcohols, C16-18, ethoxylated	10-30	No.	No.	No.	Yes.	No.
disodium hydrogenorthophosphate	10-30	No.	No.	No.	Yes.	No.

**SARA 313**

Not applicable.

**State regulations**

- Massachusetts** : The following components are listed: PHOSPHORIC ACID, DISODIUM SALT
- New York** : The following components are listed: Sodium phosphate, dibasic
- New Jersey** : The following components are listed: SODIUM PHOSPHATE, DIBASIC; PHOSPHORIC ACID, DISODIUM SALT
- Pennsylvania** : The following components are listed: PHOSPHORIC ACID, DISODIUM SALT

**California Prop. 65**

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

**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
ethylene oxide	Yes.	Yes.	Yes.	Yes.

**Section 16. Other information**

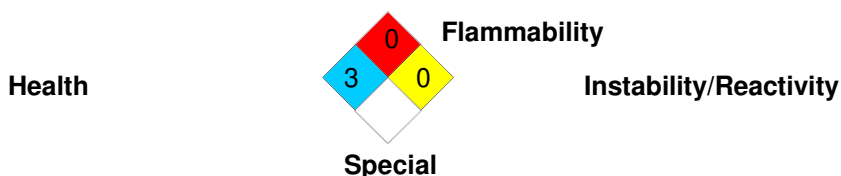
**Hazardous Material Information System (U.S.A.)**

Health	*	3
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings 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.)**



**Section 16. Other information**

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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.

### **History**

**Date of issue/Date of revision:** 12/28/2023

**Date of previous issue :** 7/16/2021

**Version:** 6

**Prepared by:** HSE DEPARTMENT

### **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 = Intermediate 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**

: HCS (U.S.A.)- Hazard Communication Standard  
International transport regulations

### **Disclaimer:**

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