

KOVKLEEN™ KLD II MEMBRANE CLEANER

Section 1. Identification

GHS product identifier: KOVKLEEN KLD II MEMBRANE CLEANER

Other means of identification: Not available.

Product type: Liquid.

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@jrhess.com

Emergency telephone number (with hours of operation):

Infotrac 1-800-535-5053 (Spill, Leak, Fire, Exposure, Accident)

+1 (352) 323-3500 (Outside North America)

Section 2. Hazards identification

OSHA/HCS status

Classification of the substance or mixture

- : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- : ACUTE TOXICITY (oral) Category 4 SKIN CORROSION Category 1 SERIOUS EYE DAMAGE Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 3%

GHS label elements

Hazard pictograms





Signal word : Danger

Hazard statements: Harmful if swallowed.

Causes severe skin burns and eye damage.

Precautionary statements

Prevention : W ear protective gloves. Wear eye or face protection. Wear protective clothing. Do not

eat, drink or smoke when using this product. Wash hands thoroughly after handling.

: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for Response

breathing. Immediately call a POISON CENTER or physician. IF SWALLOW ED: 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.

Supplemental label elements: Do not taste or swallow. Wash thoroughly after handling.

Hazards not otherwise classified: Causes digestive tract burns.

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
Fatty acids, C12-18, Me esters, sulfonated, sodium salts	Not available.	10-30	149458-07-1
tetrasodium ethylene diamine tetraacetate	tetrasodium ethylenediaminetetraacetate	5-10	64-02-8
trisodium nitrilotriacetate	trisodium nitrilotriacetate	0.1-1	5064-31-3

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.

: Get medical attention immediately. Call a poison center or physician. Remove victim to Inhalation 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 effects

Eye contact: Causes serious eye damage.

Inhalation: No known significant effects or critical hazards.

Skin contact: Causes severe burns.

Ingestion: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

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 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)

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Use dry chemical, CO₂, alcohol-resistant foam or water spray (fog).

Unsuitable extinguishing media: Do not use water jet.

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products: Decomposition products may include the following

materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides hydrogen sulfide Ammonia.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency 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

: 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. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. 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 between the following temperatures: 7 to 44°C (44.6 to 111.2°F). 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. Separate from acids. 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: 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 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, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be

Section 9. Physical and chemical properties

Appearance

Physical state Liquid. [Clear.]

Color: Colorless. Slightly coloured Yellow.

Odor: Coconut. [Slight]

Odor threshold:: Not available. pH: >13 (10.7 in 1% H2O) Melting point: Not available.

Boiling point : Not available.

Flash point Closed cup: 99°C (210.2°F) [Pensky-Martens.]: Not available.

Evaporation rate: Not available.

Flammability (solid, gas) : Not applicable.

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

Vapor pressure Vapor density: Not available **Relative density:** 1.08 to 1.1 [at 20°C / 68°F]

Solubility.: Easily soluble in the following materials: cold water and hot water.

Solubility in water : Not available.

Partition coefficient: n- octanol/water: Not available.

Auto-ignition temperature: Not available. **Decomposition temperature:** Not available.

Viscosity: Not available.

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 : Keep away from heat, sparks and flame.

Incompatible materials: Can react with certain metals, such as aluminum, to produce flammable hydrogen gas.

Reactive or incompatible with the following materials:

acids

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
tetrasodium ethylene diamine tetraacetate	LD50 Oral	Rat	10 g/kg	-
trisodium nitrilotriacetate	LD50 Oral	Rat	1100 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
tetrasodium ethylene diamine tetraacetate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
trisodium nitrilotriacetate	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
tetrasodium ethylene diamine tetraacetate	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

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

Teratogenicity: No known significant effects or critical hazards.

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

Numerical measures of

toxicity

Acute toxicity estimates

Route	ATE value
Oral	1858.5 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
tetrasodium ethylene diamine tetraacetate	Acute LC50 1030000 μg/l Fresh water	Fish - Lepomis macrochirus	96 hours
trisodium nitrilotriacetate	Acute LC50 185000 μg/l Fresh water Acute LC50 560000 to 1000000 μg/l Fresh water	Algae - Navicula seminulum Daphnia - Daphnia magna	96 hours 48 hours
	Acute LC50 98000 μg/l Fresh water Chronic NOEC 100000 μg/l Fresh water	Fish - Oncorhynchus mykiss Algae - Algae - Exponential	96 hours 96 hours
	Chronic NOEC 100000 µg/l Fresh water	growth phase Daphnia - Daphnia magna	21 days

Persistence and degradability

Pı	oduct/ingredient name	Test	Result	Dose	Inoculum	

tetrasodium ethylene diamine	302B Inherent	1 to 15 % - 14 days	-	-
tetraacetate	Biodegradability:			
	Zahn-W ellens/			
	EMPA Test			
trisodium nitrilotriacetate	302B Inherent	99 % - 28 days	-	-
	Biodegradability:			
	Zahn-W ellens/			
	EMPA Test			
	301F Ready	92 % - 28 days	-	-
	Biodegradability -			
	Manometric			
	Respirometry			
	Test			

Section 12. Ecological information				
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
tetrasodium ethylene diamine tetraacetate	-	-	Not readily	
trisodium nitrilotriacetate	-	-	Readily	

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
tetrasodium ethylene diamine	5.01	1.8	low
tetraacetate trisodium nitrilotriacetate	-2.62	-	low

Mobility in soil

Soil/water partition coefficient (Koc): 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
UN3267	UN3267	UN3267

UN proper shipping name	Corrosive liquid, basic, organic, n.o.s. (tetrasodium ethylene diamine tetraacetate)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (tetrasodium ethylene diamine tetraacetate)	Corrosive liquid, basic, organic, n.o.s. (tetrasodium ethylene diamine tetraacetate)
Transport hazard class(es)	8	8	8
Packing group	III	III	III
Environmental hazards	No.	No.	No.

Section 1	4. Transport inform	ation	
Additional information	<u>Limited quantity</u> Yes.	Emergency schedules (EmS) F-A, S-B	Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 852
	Packaging instruction Passenger aircraft Quantity limitation: 5 L	Special provisions 223, 274	Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 856 Limited Quantities -
	Cargo aircraft Quantity limitation: 60 L		Passenger Aircraft Quantity limitation: 1 L Packaging instructions: Y841
	Special provisions IB3, T7, TP1, TP28		Special provisions 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 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 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

No products were found.

SARA 304 RQ: Not applicable.

SARA 311/312

Classification: Immediate (acute) health hazard

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Fatty acids, C12-18, Me esters, sulfonated, sodium salts	10-30	No.	No.	No.	Yes.	No.
tetrasodium ethylene diamine tetraacetate	5-10	Yes.	No.	No.	Yes.	No.
trisodium nitrilotriacetate	0.1-1	Yes.	No.	No.	Yes.	Yes.

SARA 313

Not applicable.

State regulations

Massachusetts: None of the components are listed.

New York: None of the components are listed.

New Jersey: None of the components are listed.

Pennsylvania: None of the components are listed.

California Prop. 65

None of the components are listed.

Section 16. Other information

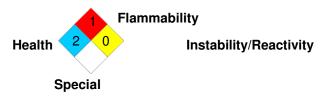
Hazardous Material Information System (U.S.A.)



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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Section 16. Other information

History

Date of issue/Date of revision: 12/27/2023

Date of previous issue 7/14/2021

Version::6

Prepared by: IHS

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

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