John R Hess & Company, Inc.

KOVKLEEN® 275

Section 1. Identification

Product Identifier	**KOVKLEEN 275**
General Use	Specialty Cleaner
Physical Description	Liquid

Manufacturer/Importer/Supplier/Distributor Information

Company Name	John R Hess & Company, Inc.
Address	400 Station St Cranston, RI 02910 USA
Telephone	(401) 785-9300 (800) 556-4377
E-mail	custerv@jrhess.com
Emergency Phone Numbers	Infotrac 1-800-535-5053 (Spill, Leak, Fire, Exposure, Accident)+1 (352) 323-3500 (Outside North America))

Section 2 Hazards Identification

Classification of the substance or mixture:

OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR §1910.1200).

Classification of the substance or mixture

Health hazards

Acute toxicity (Oral)	Category 4
Skin corrosion/irritation	Category 1A – 1C
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 2

Label Elements



Globally Harmonized System (GHS) Classification and Labeling GHS

Signal Word: DANGER

Hazard Statements

H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H371 - May cause damage to organs (kidney, liver, spleen).

Precautionary Statements

Prevention

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+311 - If exposed of concerned: Call a POISON CENTER/Doctor
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment see Response/First aid section on this label. P330 - Rinse mouth.
P363 - Wash contaminated clothing before reuse.

Storage & Disposal

P405 - Store locked up.

Disposal

Dispose of contents in accordance with local/regional/national/international regulations.

OSHA Regulatory Status

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic)

Chronic

None

Inhalation

Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Mist may be severely irritating to nose, throat and lungs depending on concentration and duration of exposure.

Skin Contact

Causes skin irritation.
Skin Absorption: May be harmful if absorbed through the skin. Corrosive, causes permanent skin damage (scarring).

Eye Contact

Causes severe eye irritation.
Corrosive. Will cause eye burns and permanent tissue damage.

Ingestion

Corrosive to mouth, esophagus and stomach.
Harmful if swallowed.
Low order of toxicity.

Section 3. Composition / Information on Ingredients

Hazardous Components

Chemical Name	CAS NO	Concentration	RTECS #
1 -Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	58 - 62%	SZ8562100
Phosphorous acid, Ortho	13598-36-2	<2.0 %	SZ6400000

Section 4. First Aid Measures

General Advice	Immediate medical attention is required.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen.
Skin Contact	Remove all contaminated clothes and shoes. Wash off IMMEDIATELY with plenty of water for at least 15 – 20 minutes. Call a physician. Wash contaminated clothing before reuse.
Eye Contact	Flush eyes immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses if present and easy to do so. Continue rinsing. Call a physician.
Ingestion	Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that the stomach content doesn't get into the lungs. Call a physician.
Signs and Symptoms of Exposure	The chemical, physical, and toxicological properties of this product have not been thoroughly investigated.
Note to Physician	Treat symptomatically and supportively.

Section 5. Fire-fighting Measures

Flammability Classification	Non-flammable
Flash Pt	NP
Explosive Limits	LEL: NA, UEL: NA
Autoignition Pt	NP
Suitable Extinguishing Media	Water spray
Unsuitable Extinguishing Media	Unknown
Protective Equipment and Precautions for Firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Firefighting equipment/instructions	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Flammable Properties and Hazards	Material will not burn.

Section 6. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled

Personal Precautions	Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
Methods & Materials for Containment and Cleaning Up	Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7. Handling and Storage

Precautions for Safe Handling	"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioned, or properly disposed of. Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing.
Storage Conditions	No special storage requirements.

Section 8. Exposure Controls / Personal Protection

Chemical Name	CAS NO	OSHA TWA	ACGIH TWA	Other Limits
1 -Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	PEL: Not available	TLV: Not available	Not available
Phosphorous acid, Ortho	13598-36-2	PEL: Not available	TLV: Not available	Not available

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear splash proof safety goggles
Skin protection:	
Hand protection	Wear compatible chemical-resistant gloves.
Other	Where splashing is possible, full chemically resistant protective clothing (e.g. acid suit) and boots are required.
Respiratory protection	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Respirator protection is not normally required.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Engineering Controls	Safety shower and eye bath. Mechanical exhaust required. There are no special ventilation requirements.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	None to slight odor
Odor	Clear to colorless light straw
pH	< 2
Melting point/freezing point	NA
Initial boiling point and boiling range	NA
Flash point	NP
Evaporation rate	NA
Heat value	NP

Specific Gravity	~ 1.444 at 25.0 C (77.0 F)
Explosive limit - lower (%)	NA
Explosive limit -upper (%)	NA
Saturated Vapor Concentration	NA
Vapor pressure (vs air or mm Hg) 1)	NA
Vapor density (vs air = 1)	NA
Solubility(ies):	
Solubility (water)	Complete
Partition coefficient (n-octanol/water)	NA
Auto-ignition temperature	NP
Decomposition Temperature	NA
Percent Volatile	~ 38.00 % by weight
VOC/Volume	NP
Density	~ 12.0 LB/GA
Bulk density	NA
Particle Size	NP
Corrosion Rate	NP
Molecular formula	C2H8O7P2
Molecular weight	206.028

Section 10. Stability and Reactivity

Reactivity	Substantial heat is evolved when mixed with alkali.
Chemical Stability	Material is stable under normal conditions.
Possible of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with common metals produces flammable hydrogen gas.
Incompatible materials	Strong oxidizing agents and strong alkali.
Hazardous decomposition products	Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine. Carbon dioxide.
Conditions to Avoid	No data available.
Hazardous Reactions	

Section 11. Toxicological Information

Epidemiology	No data available
Teratogenicity	No data available

Information on toxicological effects

Reproductive Effects:	Reproductive Effects: TDLo, Intraperitoneal, Mouse, 40.00 MG/KG, female 7 day(s) after conception. Result: Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of
Mutagenicity: Neurotoxicity: Other Studies	

1 -Hydroxyethylidene-1,1- diphosphonic acid CAS# 2809-21-4	implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). - Shika Igaku. Odontology., Vol/p/yr: 50,879, 1987 Reproductive Effects: TDLo, Intraperitoneal, Mouse, 200.0 MG/KG, female 7 day(s) after conception. Result: Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Blood and lymphatic system (including spleen and marrow). - Journal of Osaka Dental University., Vol/p/yr: 20,91, 1986 Reproductive Effects: TDLo, Subcutaneous, Mouse, 200.0 MG/KG, female 13 day(s) after conception. Result: Specific Developmental Abnormalities: Musculoskeletal system. -Teratology, The International Journal of Abnormal Development, Alan R. Liss, Inc., 41 E. 11th St., New York, NY 10003, Vol/p/yr: 26(1),16A, 1982 Reproductive Effects: TDLo, Subcutaneous, Mouse, 1400. MG/KG, female 11-17 day(s) after conception. Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system. - Senten Ijo. Congenital Anomalies., For publisher information, see CGANE7, Osaka Japan, Vol/p/yr: 22,47, 1982 Acute toxicity, LD50, Oral, Mouse, 1800. MG/KG. Result: Behavioral: Convulsions or effect on seizure threshold. Gastrointestinal: Hypermotility, diarrhea. Nutritional and Gross Metabolic: Changes in body temperature increase. - Angewandte Chemie, International Edition in English., VCH Pub., Inc., 303 NW 12th Ave., Deerfield Beach, FL 33441, Vol/p/yr: 14,94, 1975
Phosphorous acid, Ortho CAS # 13598-36-2	Acute toxicity, LD50, Oral, Rat, 1895. MG/KG. Result: Behavioral: Convulsions or effect on seizure threshold. Gastrointestinal: Hypermotility, diarrhea. Nutritional and Gross Metabolic :Changes in body temperature increase. Gigiena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow 113095 Russia, Vol/p/yr: 56(4),24, 1991 Acute toxicity, LD50, Oral, Mouse, 1700. MG/KG. Result: Behavioral: Tremor. Behavioral: Muscle contraction or spasticity.- Toksikologicheskii Vestnik., Vol/p/yr: (6),38, 1995

Chemical Name	CAS #	NTP	IARC	ACGIH	OSHA
1 -Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	NA	NA	NA	NA
Phosphorous acid, Ortho	13598-36-2	NA	NA	NA	NA

Section 12. Ecological Information

Product	Species	Test Results
1 -Hydroxyethylidene-1,1-diphosphonic acid		
Crustacea	LC50 Daphnia magna	527.0 mg/l, 48 hrs
Fish	LC50 Bluegill (Lepomis macrochirus)	868.0 mg/l, 96 hrs
	LC50 Rainbow Trout	368.0 mg/l, 96 hrs
Phosphorous acid, Ortho		
	Fathead Minnow (Pimephales promelas),	100.0 mg/lL, 96 hrs, Mortality Water temperature: 82.00 C (179.6 F) pH: 8.50
		10000. Mg/l 4 hrs, Mortality, Water temperature: 82.00 C (179.6 F) pH:8.50
	Toxicity of Photographic Processing Chemicals to Fish, Terhaar, C.J., W.S. Ewell, S.P. Dziuba, and D.W. Fassett, 1972	

Persistence and Degradability

Degrades after acclimatization.

Bioaccumulation

This material is not expected to bio-accumulate.

Mobility in soil

Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

Section 13. Disposal Considerations

Disposal instructions	Discarded product, as sold, would be considered a RCRA Characteristic Hazardous Waste as it meets the definition /characteristic of corrosivity (designated as D002). APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed
Hazardous waste code	D002

Section 14. Transport Information

Acute Toxicity	Oral, Category 4 - Warning! Harmful if swallowed
Skin Corrosion/Irritation	Category 1A-1C - Danger! Causes severe skin burns and eye damage
Serious Eye Damage/Eye Irritation	Category 1 - Danger! Causes serious eye damage
Specific Target Organ Toxicity (single exposure	Category 2 - Warning! May cause damage to organs (kidney, liver,spleen)

USA DOT	USA LAND TRANSPORT
UN Number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1, 1-diphosphonic acid)
Transport hazard class	8
Packing group	II
TDG	**CANADIAN LAND TRANSPORT**
TDG proper shipping name	No information available
Transport hazard class	8
Packing group	II
ADR/RID	**EUROPEAN LAND TRANSPORT**
UN Number	3265
ADR/RID shipping name	No information available
Transport hazard class	8
Packing group	II
IMDG/IMO	**MARINE TRANSPORT**
IMDG MFAG Number	
IMDG EMS Page	
IMDG proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1, 1-diphosphonic acid)
Transport hazard class	8
Packing group	II
Environmental hazards	Yes
Marine pollutant	Yes
EmS	F-A, S-B
ICAO/IATA	**AIR TRANSPORT**
ICAO proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1, 1-diphosphonic acid)

Section 15. Regulatory Information

EPA SARA Superfund Amendments and Reauthorization Act of 1986 (SARA)

Chemical Name	CAS #	S.302 (EHS)	S.304 (RQ)	S.313 (TRI)
1 -Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	No	No	No
Phosphorous acid, Ortho	13598-36-2	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312

Immediate Hazard	Yes
Delayed Hazard	Yes
Fire Hazard	No

Pressure Hazard	No
Reactive Hazard	No

Chemical Name	CAS #	Other US EPA or State Lists			
		CAA, HAP, ODC	CWA NPDES	CA PROP 65	TSCA
1 -Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	No	No - Inventory	No	Yes
Phosphorous acid, Ortho	13598-36-2	No	No - Inventory	No	Yes

International Regulatory Lists

Country(s) or Region	1 -Hydroxyethylidene-1, 1-diphosphonic acid	Phosphorous acid, Ortho
Australia (ICS)	Yes	Yes
Canada (DSL)	Yes	Yes
Canada (NDSL)	No	No
China (IECSC)	Yes	Yes
Europe (REACH) (R), (P)	Yes	Yes
Japan (ENCS)	Yes	Yes
Korea (ECL)	Yes	Yes
Mexico (INSQ)	Yes	Yes
Philippines (ICCS)	Yes	Yes
Taiwan (TCSCA)	Yes	Yes
United States and Puerto Rico (TSCA)	Yes	Yes

*"Yes" indicates this product complies with the inventory requirements administered by the governing country(ies).

*"No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16. Other Information

Hazard Rating System

HMIS



NFPA



Additional Information About This Product

NA- Not Available
NP- Not Applicable
NR- Not Required
PR- Proprietary
TS- Trade Secret

Prepared By:	HSE
Issue Date:	Department
Version:	7/30/2025
Precedes:	4
Disclaimer:	12/27/2023

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