

Acid Klean-N

Preparation Date: 01-Oct-2014

Revision Date: 22-May-2015

Revision Number: 1

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name Acid Klean-N

Other means of identification

Item#: 2101

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Acid for scale removal. Restricted to professional users.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier DeLaval Cleaning Solutions
11100 N. Congress Ave.
Kansas City, MO 64153

Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Gases)	Category 3
Skin Corrosion/Irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1B

Sulfuric acid and other mineral acids mist statement

The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric or other strong mineral acids (such as Hydrochloric and Nitric acid) as a known human carcinogen, (IARC category 1). This classification applies only to mists containing such mineral acids and not to the specific acids or their solutions, unless otherwise noted.

Corrosive to metals	Category 1
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Label Elements

Emergency Overview

DANGER

Hazard Statements

Toxic if inhaled

Causes severe skin burns and eye damage

May cause cancer

May be corrosive to metals

**Appearance** Light brown**Physical state** Liquid**Odor** No information available**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/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 doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information**

- May be harmful if swallowed
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown Acute Toxicity 0.3% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Phosphoric acid	7664-38-2	30 - 40%	*
Nitric acid	7697-37-2	0 - 10%	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

FIRST AID MEASURES

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.

Inhalation	Move to fresh air.
Ingestion	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment.
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Environmental Precautions

Environmental Precautions	Prevent further leakage or spillage if safe to do so.
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Methods and material for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.
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7. HANDLING AND STORAGE**Precautions for Safe Handling**

Handling	Avoid contact with skin, eyes and clothing.
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Conditions for safe storage, including any incompatibilities

Storage	Keep containers tightly closed in a dry, cool and well-ventilated place.
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Incompatible Materials	bases, organic materials, light metals
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8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Keep out of the reach of children

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid 7664-38-2	TWA: 1 mg/m ³ STEL: 3 mg/m ³	TWA: 1 mg/m ³ STEL: 3 mg/m ³	1000 mg/m ³
Nitric acid 7697-37-2	TWA: 2 ppm STEL: 4 ppm	TWA: 2 ppm TWA: 5 mg/m ³ STEL: 4 ppm STEL: 10 mg/m ³	25 ppm

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side-shields.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	No information available
Appearance	Light brown	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	2	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Specific Gravity	1.27	
Water Solubility	soluble	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition Temperature	No information available	
Decomposition temperature	No information available	
Viscosity of Product	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other information

Softening Point	No information available
Molecular Weight	No information available
VOC Content	No information available

Density No information available
Bulk Density No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Gives off hydrogen by reaction with some metals (e.g. aluminum).

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

bases, organic materials, light metals

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No data available.
Eye contact No data available.
Skin contact No data available.
Ingestion No data available.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	2730 mg/kg (Rabbit)	850 mg/m ³ (Rat) 1 h
Nitric acid 7697-37-2	-	-	= 67 ppm (Rat) 4 h = 130 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Nitric acid 7697-37-2	-	Group 2A	-	-

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Reproductive Effects No information available.
STOT - single exposure No information available.
STOT-repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.3% of the mixture consists of ingredient(s) of unknown toxicity
 The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0.3% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
Phosphoric acid 7664-38-2	-	3 - 3.5: 96 h <i>Gambusia affinis</i> mg/L LC50	-	4.6: 12 h <i>Daphnia magna</i> mg/L EC50
Nitric acid 7697-37-2	-	72: 96 h <i>Gambusia affinis</i> mg/L LC50	-	-

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Nitric acid 7697-37-2	-2.3

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste Disposal Method**

Dispose of in accordance with local regulations. Should not be released into the environment.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION**DOT**

UN-No 3264
Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s (Phosphoric acid, Nitric Acid)
Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION**International Inventories**

TSCA TSCA
DSL/NDSL DSL/NDSL

EINECS/ELINCS	Complies
ENCS	Does not Comply
CHINA	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric acid 7664-38-2	5000 lb	-	-	X
Nitric acid 7697-37-2	1000 lb	-	-	X
Chemical Name	RQ	CERCLA EHS RQs		RQ
Phosphoric acid 7664-38-2	5000	-		RQ 5000 lb final RQ RQ 2270 kg final RQ
Nitric acid 7697-37-2	1000	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

NFPA **Health** 3 **Flammability** 0 **Instability** 1 **Physical Hazard** -

Preparation Date: 01-Oct-2014
Revision Date: 22-May-2015

Revision Note
 No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS