

AcidKleanTM LF Preparation Date: 05-Jun-2018

Revision Date: 08-Sep-2021

Revision Number: 2

SAFETY DATA SHEET

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

<u>Product Identifier</u> Product Name	AcidKlean™ LF
<u>Other means of identification</u> Item#: Synonyms	2080 None
Recommended use of the chemical Recommended use Uses advised against	Acid detergent
Details of the supplier of the safety Supplier	<u>data sheet</u> DeLaval Cleaning Solutions 11100 N. Congress Ave.
	Kansas City, MO 64153 : 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)

Skin Corrosion/Irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label Elements

DANGER

Emergency Overview

Hazard Statements

Causes severe skin burns and eye damage May be corrosive to metals



Appearance Colorless to slightly yellow

Physical state Liquid

Odor No information available

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Keep only in original container

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.

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Phosphoric acid	7664-38-2	20 - 30
Methane sulfonic acid	75-75-2	10 - 20

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of 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. Get medical attention immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

The product is not flammable. 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

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

Sensitivity to static discharge None.

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.

NFPA Health hazards 3 Flammability 0 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. For personal protection see section 8.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage

Avoid storing above 85°F for extended periods. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Store in corrosive resistant container with a resistant inner liner.

Incompatible Materials

bases, light metals (e.g. aluminum, copper, brass, zinc galvanized), bleach

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid	TWA: 1 mg/m ³	TWA: 1 mg/m ³	1000 mg/m ³
7664-38-2	STEL: 3 mg/m ³	STEL: 3 mg/m ³	-

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Goggles.

Skin and body protection	Wear protective gloves and protective clothing.
Respiratory Protection	In case of inadequate ventilation wear respiratory protection.
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 Appearance	Liquid Colorless to slightly yellow	Odor Odor Threshold	No information available No information available
Property pH Melting point/freezing point Boiling Point/Range Flash Point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit Lower flammability limit Vapor Pressure Vapor Density Specific Gravity Water Solubility	Values <2 No information available No information available	<u>Remarks/ Method</u>	
Partition coefficient: n-octanol/water Autoignition Temperature Decomposition temperature Viscosity of Product Dynamic viscosity <u>Other information</u>	No information available No information available No information available No information available No information available		
Liquid Density	11 lb/gal		

10. STABILITY AND REACTIVITY

Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability

Stable under normal conditions. Exposure to light may cause fading of dyed products.

Possibility of hazardous reactions

May spatter and release heat if mixed with bases (alkalis). Mixing with chlorinated products may release deadly chlorine gas. May react with and cause damage to soft metals such as aluminum, copper, brass or zinc (galvanized) to produce flammable, potentially explosive, hydrogen gas.

Conditions to Avoid

Product may degrade if exposed to long-term high temperature.

Incompatible Materials

bases, light metals (e.g. aluminum, copper, brass, zinc galvanized), bleach

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION		
Principal Routes of Exposure	Eye contact, Skin contact, Ingestion	
Information on likely routes of expo	osure	
Eyes Skin Ingestion Inhalation	Corrosive to the eyes and may cause severe damage including blindness. Extremely corrosive and destructive to tissue. Ingestion causes burns of the upper digestive and respiratory tracts. May cause irritation of respiratory tract.	
Delayed and immediate effects as well as chronic effects from short and long-term exposure		
Skin Corrosion/Irritation Serious eye damage/eye irritation Sensitization Mutagenic effects Carcinogenicity	Causes burns. Causes eye burns. Product is not identified as a sensitizer according to OSHA regulations. Product is not identified as a mutagen according to OSHA regulations. Product is not identified as a carcinogen according to OSHA regulations.	
Reproductive Effects STOT - single exposure STOT - repeated exposure	Product is not identified as having reproductive effects according to OSHA regulations. Product is not identified as having single target organ toxicity (single exposure) according to OSHA regulations. Product is not identified as having single target organ toxicity (repeated exposure) according to OSHA regulations.	
Aspiration Hazard	Product is not identified as an aspiration hazard according to OSHA regulations.	

<u>Numerical measures of toxicity</u> If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	2730 mg/kg (Rabbit)	850 mg/m³ (Rat)1 h
Methane sulfonic acid 75-75-2	= 200 mg/kg (Rat)= 380 mg/kg (Rat)	= 200 mg/kg (Rabbit)	= 330 ppm (Rat)6 h

40.25% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Phosphoric acid	No data available	3 - 3.5: 96 h Gambusia	No data available	4.6: 12 h Daphnia magna
7664-38-2		affinis mg/L LC50		mg/L EC50
Methane sulfonic acid	No data available	No data available	No data available	12: 48 h Daphnia pulex mg/L
75-75-2				EC50

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method	Contact your local waste disposal authority for advice, or pass to a chemical disposal company.	
Contaminated Packaging	Triple rinse containers. Avoid contamination of any water supply with product or empty packaging. Empty containers should be taken for local recycling, recovery or waste disposal.	

14. TRANSPORT INFORMATION

DOT

Proper Shipping NameCorrosive liquid, acidic, inorganic, n.o.s (Phosphoric acid, Methanesultonic acid)Hazard Class8Packing GroupII		3264 Corrosive liquid, acidic, inorganic, n.o.s (Phosphoric acid, Methanesulfonic acid) 8 II
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15. REGULATORY INFORMATION

Any ingredients on State Right-to-Know lists are listed below – if applicable

C	Chemical name	New Jersey	Massachusetts	Pennsylvania
F	Phosphoric acid 7664-38-2	Х	Х	X
Met	thane sulfonic acid 75-75-2	Х	Not Listed	Not Listed

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

Preparation Date:	05-Jun-2018
Revision Date:	08-Sep-2021
Revision Note:	None
Disclaimer	

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of SDS