

Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard. 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupation Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) HIGH FLUX CLEANER A™ Membrane Cleaner	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.
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Section 1 - Identification		
Manufacturer's Name King Lee Technologies	Emergency Telephone Number 1-800-424-9300 (Chemtrec)	Emergency Telephone Number International 001-703-527-3887 (Chemtrec)
Address (Number, Street, City, State and ZIP Code) 8949 Kenamar Drive Bldg. 107 San Diego, California 92121	Telephone Number for Information (858) 693-4062	
	Date Prepared January 1, 2017	
Signature of Preparer (Optional)		


Section 2 - Hazard(s) identification

Other Limits

Hazardous Components (Specific Chemical Identity: Common Name(s)) OSHA PEL ACGIH TLV Recommended % (optional)

This product is a proprietary formulation of generally available chemical ingredients. Complying with 29 CFR 1910.1200 (d), each ingredient in this formulation has been reviewed with the "Guide to Occupational Exposure Values - 2012" published by ACGIH. Only the following ingredients have listed occupational exposure values, and can be considered potentially hazardous:

	OSHA-PEL	ACGIH-TLV
Ammonium Bifluoride	2.5 mg/M ³ as F 35 ppm as NH ₃	2.5 mg/M ³ as F 25 ppm as NH ₃

Label elements	Signal Word	Hazard(s) not otherwise classified (HNOC)	Supplemental Information	Hazardous Statement
	Danger.	None Known.	None.	Causes skin irritation. Causes serious eye damage.

Section 3 - Composition/information on ingredients

Hazardous Components (Specific Chemical Identity: Common Name(s)) OSHA PEL ACGIH TLV Recommended % (optional)

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Section 4, First-aid measures

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
Health Hazards (Acute and Chronic) Eye Contact: Causes burns. Skin contact: May cause severe irritation. Ingestion: May cause nausea, vomiting and diarrhea. Inhalation: May cause irritation of airways.			
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	NO

Signs and Symptoms of Exposure

Irritation and burning of eyes, skin, digestive or respiratory tract, nausea, vomiting and transient disorientation.

Medical Conditions

Generally Aggravated by Exposure Exposed wounds, asthma.

Emergency and First Aid Procedures

Eyes and skin - flush eyes with excess water. Wash from skin with soap and water. Inhaled - Remove subject to fresh air. Ingestion - rinse mouth and throat. Drink water or milk. In all cases, call or see a physician.

Section 5 - Fire-fighting measures

Flash Point (Method Used)	(Flammable Limits)	LEL	UEL
Not Flammable	Not Flammable	NA	NA

Extinguishing Media

No Restrictions

Special Fire Fighting Procedures

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards

None known.

Section 6 - Accidental release measures

Steps to Be Taken in Case Material is Released or Spilled

Stop spill/release if possible with minimal risk. Sweep up spilled material. Flush ground or surfaces with water.

Waste Disposal Method

Spilled materials may be recovered absorbed into an appropriate absorbent material and swept up for disposal by licensed incinerator. Residual spill can be flushed with water.

Section 7 - Handling and Storage

Precautions to Be Taken in Handling and Storing

Store in cool location away from direct sunlight.

Other Precautions

Avoid contact. Wear protective equipment if possible.

Respiratory Protection (*Specific Type*)

Use NIOSH approved respirator if conditions warrant.

Ventilation	Local Exhaust	Special
	Use in well-ventilated area.	Additional ventilation for handling large volumes.
	Mechanical (<i>General</i>)	Other
	NA	NA

Section 8 - Exposure controls/personal protection

Protective Gloves

Water impervious gloves that can be washed.

Eye Protection

Chemical safety goggles recommendable.

Other Protective Clothing or Equipment

Work overalls would prevent contamination of street clothes.

Work/Hygienic Practices

Wash gloves and hands before touching anything else.

Section 9 - Physical and chemical properties

Boiling Point	Specific Gravity (H ₂ O=1)	1.07
Vapor Pressure (mm Hg.)	Melting Point	-6°C
		as water
Vapor Density (AIR= 1)	Evaporation Rate (Butyl Acetate= 1)	as water
		water

Solubility in Water

Completely Soluble.

Appearance and Odor

Clear and colorless solution.

HIGH FLUX A

Section 10 - Stability and reactivity

Stability	Unstable		Conditions to Avoid
			Avoid heat and direct sun.
	Stable	X	

Incompatibility (Materials to Avoid)

Avoid contact with glass and acid-sensitive chemicals.

Hazardous Decomposition or Byproducts

Ammonia and hydrogen fluoride.

Hazardous Polymerization	May Occur		Conditions to Avoid
			NA
	Will Not Occur	X	

Section 11 - Toxicological information

Poses no acute toxicological properties that would require special handling, other than good hygienic practices. See above for exposure limits for ammonium bifluoride.

Section 12 - Ecological Information

This cleaner is water soluble. Fish toxicity unknown.

Section 13 - Disposal considerations

Poses no acute toxicological properties that would require special handling, other than good hygienic practices.

Section 14 - Transportation information**DOT Hazardous Classification**

Corrosive Liquid, Toxic, N.O.S. (Contains Ammonium Hydrogen Difluoride) 8, 6.1, UN2922, III

TDG Canadian Transportation-

Corrosive Liquid, Toxic, N.O.S. (Contains Ammonium Hydrogen Difluoride) 8, 6.1, UN2922, III

International Transportation

Corrosive Liquid, Toxic, N.O.S. (Contains Ammonium Hydrogen Difluoride) 8, 6.1, UN2922, III

Section 15 - Regulatory Information

This product is certified under ANSI-NSF Standard 60 for the production of drinking water with reverse osmosis membranes as off-line cleaner. Ratings under Hazard Materials Identification System (H.M.I.S.): Health=3; F=0; R=0; P=0.

Section 16 - Other Information

This SDS is provided as an information resource only. The buyer assumes all responsibility for using and handling the product. In accordance with applicable federal, state and local regulations.