

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)

KL 1050

Powder 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.

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 BIFLOURIDE | 2.5mg/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 |
|--|-------------|---|--------------------------|---|
|  | Warning | 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: May cause burns. Skin contact: May cause severe irritation. Ingestion: May cause nausea, vomiting and diarrhea. Inhalation: May cause irritation of mucous membranes of nose and 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.

Medical Conditions
Generally Aggravated by Exposure **Asthma, exposed wounds.**

Emergency and First Aid Procedures
Eyes and skin - flush eyes with excess water for 15 min. 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) Not Flammable | (Flammable Limits) Not Flammable | LEL NA | UEL 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
Sweep up spilled materials. Flush ground or surfaces with water.

Waste Disposal Method
Follow normal chemical waste disposal procedure either as a powder or dissolved in water and disposed as a liquid.

Section 7 - Handling and Storage

Precautions to Be Taken in Handling and Storing
Store in cool location away from sunlight.

Other Precautions
Avoid dust and contact. Wear protective equipment if possible.

Respiratory Protection (*Specific Type*)
Use NIOSH approved respirator if conditions warrant.

| | | |
|-------------|---|--------------------|
| Ventilation | Local Exhaust Use in well-ventilated areas. | Special |
| | Mechanical (<i>General</i>) NA | Other NA |

Section 8 - Exposure controls/personal protection

| | |
|---|---|
| Protective Gloves Water impenetrable gloves that can be washed. | Eye Protection Chemical safety goggles. |
|---|---|

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 NA | Specific Gravity (H ₂ O=1) NA |
| Vapor Pressure (mm Hg.) NA | Melting Point >125⁰C |
| Vapor Density (AIR= 1) NA | Evaporation Rate (Butyl Acetate= 1) NA |

Solubility in Water
Completely Soluble.

Appearance and Odor

Colorless to slightly tan powder with slight odor.

Section 10 - Stability and reactivity

| | | | |
|-----------|----------|----------|--------------------------------------|
| Stability | Unstable | | Conditions to Avoid |
| | | | Avoid moisture, heat and direct sun. |
| | Stable | X | |

Incompatibility (*Materials to Avoid*)

Glass, and acid-sensitive chemicals.

Hazardous Decomposition or Byproducts

Sulfur oxides 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.

Section 12 - Ecological Information

This powder cleaner is water soluble to give a mildly acidic solution. In natural waters and soil, it will be neutralized to harmless fluoride and other salts.

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-

Classification for this product as corrosive material is given as follows:

Corrosive Solid, Acidic, Inorganic, N.O.S. (Contains Ammonium Hydrogen Difluoride) 8, UN3260, III

TDG Canadian Transportation-

Classification for this product as corrosive material is given as follows:

Corrosive Solid, Acidic, Inorganic, N.O.S. (Contains Ammonium Hydrogen Difluoride) 8, UN3260, III

International Transportation-

Classification for this product as corrosive material is given as follows:

Corrosive Solid, Acidic, Inorganic, N.O.S. (Contains Ammonium Hydrogen Difluoride) 8, UN3260, 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 offline cleaners.

HMIS: Health=3 Fire=0 Reactivity=0 P=None

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.