Safety Data Sheet

Aluma Kleen

HMIS Ratings	
Health	4
Flammability	0
Reactivity	0
Protection	X

Section 1: Identification

Product Name: Aluma Kleen

Product Use: Automotive Reconditioning Product

Restrictions on Use: For automotive use only.

Manufacturer: Blue Ribbon Products, Inc.
8188 Allison Avenue
Indianapolis, IN 46268

Phone Number: (317) 972-7970 * (888) 274-2266

Emergency Phone: CHEMTREC
1-800-424-9300
For International Calls:
(703) 527-3887

Section 2: Hazard Identification

Hazard Class: Corrosion Category 1, Skin Corrosive Category 1, Eye Corrosive Category 1, Acute Oral Toxicity Category 3, Acute Dermal Toxicity Category 3, Acute Inhalation Toxicity Category 3, Germ Cell Mutagen Category 2, Reproductive Toxicity Category 2, Acute Target Organ Toxicity Category 1, Chronic Target Organ Toxicity Category 1, Acute Aquatic Toxicity Category 3.

Signal Word(s): Danger

Hazard Statement: May be corrosive to metals. Causes severe skin burns and serious eye damage. Ingestion may result in severe burns of the GI tract. Toxic if swallowed, inhaled, or in contact with skin. Suspected of causing genetic defects. May damage fertility or the unborn child. Causes damage primarily to the respiratory system, liver, kidneys, CNS, pancreas, pituitary system, thyroid, testis, and skeletal system through a combination of hypocalcemia, hypomagnesemia, hyperkalemia, pulmonary edema, metabolic acidosis, and fluorosis, all of which may not be immediately symptomatic and may develop up to several hours after exposure. Harmful to aquatic life.

Pictogram Classes:

Precautionary Measures: Store in corrosion resistant container, or keep in original packaging. Wear eye, skin, and respiratory protection. Do not breathe dusts or mists. Wash thoroughly after handling. Store tightly closed and locked up in well ventilated area. Use only outdoors or in well ventilated area. Do not allow to contaminate water sources or release to the environment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Miscellaneous Hazards: N/A

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Concentration (Wgt.%)
Sulfamic Acid	5329-14-6	0-5
Phosphoric Acid	7664-38-2	2-10
Hydrofluoric Acid	7664-39-3	2-10
Nonylphenol Ethoxylate	9016-45-9	1-5
Non-hazardous and other ingredients below reportable levels	Proprietary	70-95

Section 4: First Aid Measures

Skin Contact Immediately remove all contaminated clothes and rinse skin with water. As soon as possible, apply treatments described in Immediate Care (page 3). Contact a poison center or doctor and get immediate medical attention.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses if present/able. Continue rinsing. Seek medical attention at once.

Inhalation Move person to non-contaminated air and keep comfortable for breathing. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion If the material is swallowed, contact poison center and/or doctor and get **IMMEDIATE** medical attention – Give several glasses of water or milk.

	Rinse mouth out with water. Do not induce vomiting.
Notes for Immediate Care / Physician	This product contains hydrofluoric acid and is corrosive. If this product comes in contact with skin, consider use of a calcium gluconate or magnesium oxide/glycerin gel, or iced magnesium sulfate, iced alcohol, or benzalkonium chloride solution baths to mitigate the effects on deep tissue and to limit overall damage. These treatments are listed in order of effectiveness, with calcium gluconate as most effective. Avoid any gastric lavage or emesis.

Section 5: Fire Fighting Measures

Hazardous Combustion Products:
Carbon Monoxide, carbon dioxide, and other hydrocarbon fragments, along with halogenated compounds and hydrogen.

Extinguishing Media:
Any media suitable for surrounding fires.

General Fire Hazards:
Not a fire hazard. If dried out, a negligible fire hazard. Contact with metals may produce hydrogen gas, which is a fire hazard.

Fire Fighting Equipment and Instructions:
Firefighters should wear full protective gear including self contained breathing apparatus for protection against possible exposure.

Section 6: Accidental Release Measures

Personal Protection/PPE:
Wear mask capable of purifying out HF, gloves, safety glasses or goggles with a faceshield, and an apron to avoid inhalation and skin and eye contact. Be sure to use neoprene, PVC, or polyethylene materials to resist HF.

Emergency Procedures:
Ensure ventilation to avoid inhalation. Avoid skin contact to prevent corrosive burns. Do not allow to enter any water supplies to avoid aquatic toxicity. As contact with metal may produce hydrogen gas, remove all sources of ignition.

Containment Procedures:
Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand, diatomaceous earth, commercial sorbents, or recover using pumps.

Cleanup Procedures:
Absorb spill with inert material. Shovel material into appropriate container for disposal. Do not touch the material

Section 7: Handling and Storage

Handling Procedures:
Avoid any skin contact with this material. Be sure that gloves in use resist HF, as use of improper gloves may result in limited protection in case of spill or splash. Ensure ventilation and/or respiratory protection to avoid injury. Do not allow to contaminate any water sources. If in contact with metals, remove sources of ignition.

Storage Procedures:
Keep the container tightly closed. Do not store, incinerate, or heat this material above 120˚F. Do not freeze. Do not store in metal containers. Store in well-ventilated area.

Section 8: Exposure Controls/Personal Protection

			Exposure Limits	
Chemical	**CAS Number**	**PEL-OSHA**	**TLV-ACGIH**	**Carcinogen**
Sulfamic Acid	5329-14-6	15 mg/m^3 total 5 mg/m^3 respirable	10 mg/m^3 total 5 mg/m^3 respirable	No
Phosphoric Acid	7664-38-2	1 mg/m^3 (ST) 3 mg/m^3	1 mg/m^3	No
Hydrofluoric Acid	7664-39-3	3 ppm TWA	0.5 ppm TWA 2 ppm ceiling	No
Nonylphenol Ethoxylate	9016-45-9	N/A	N/A	No
Non-hazardous and other ingredients below reportable levels	Proprietary	N/A	N/A	N/A

Engineering Controls:
Use local exhaust ventilation.

Personal Protective Equipment:
Eyes/Face:
Wear splash-resistant chemical goggles. A faceshield is recommended in case of splashing.

Skin:
Use impervious gloves. Use of impervious apron and boots are strongly recommended.

Respiratory:
If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.

General:
Use good hygiene practices when handling this material, including changing and laundering work clothes after use. Discard contaminated shoes and leather goods.

Section 9: Physical and Chemical Properties

Appearance:	Pink liquid
Flammability Limits:	Not applicable.
Explosive Limits:	Not applicable.
Odor:	Pungent, acrid odor. Do not inhale.
Odor Threshold:	Not available.
Vapor Density:	>1
Vapor Pressure:	< 20 mm/Hg
pH:	3
Relative Density:	1.05
Melting Point:	32˚F
Solubility:	Soluble in water.
Initial Boiling Point/Boiling Range:	212˚F
Flash Point:	Not applicable.
Autoignition Temperature:	Not available.
Evaporation Rate:	Slower than ether
Partition Coefficient (n-octanol/water):	Not available.
Decomposition Temperature:	Not available.
Viscosity:	Not available.

Section 10: Stability and Reactivity

Reactivity:
Will react with strong oxidizing agents, strong reducing agents, metal oxides/salts/surfaces, cyanides, and strong bases. Product contains acid.

Chemical Stability:
This is a stable material.

Hazardous Decomposition:
Hazardous combustion products may include carbon monoxide, carbon dioxide, and other hydrocarbon fragments, along with halogenated compounds and hydrogen. Contact with metal surface may result in decomposition to produce hydrogen gas.

Hazardous Polymerization:
Will not occur.

Incompatible Materials:
Strong oxidizing agents (peroxides, chlorine, strong acids), strong reducing agents, metals, cyanides, strong bases.

Conditions Leading to Hazard:
Storage at temperatures approaching or exceeding 120˚F, allowing product to freeze, storage with strong oxidizers or acids, storage in metal containers.

Section 11: Toxicological Information

Acute Toxicity Estimate – Oral: 154 mg/kg
Acute Toxicity Estimate – Dermal: 582 mg/kg
Acute Toxicity Estimate – Inhalation: 500-2500 ppmV
Reproductive Toxicity/Germ Cell Mutagenicity: This product contains compounds demonstrated to produce mutagenic effects and reproductive toxicity in laboratory animals in excess of the classification limit.
Skin/Inhalation Sensitization: There is very limited evidence of sensitization from HF exposure, however there is an insufficient weight of evidence to classify this product as a sensitizer.
Carcinogenicity: No carcinogenic components. However, strong inorganic acid fumes containing sulfuric acid are carcinogenic. Do not concentrate this product and breathe its fumes.

Section 12: Ecological Information

Existing Structure Activity Relationship (SAR) and Experimental data on the components of this product indicate Acute Category 3, but no Chronic categorization. Bioaccumulation and other routes of aquatic contamination have insufficient data to be considered, but it is expected that the fluoride from HF may bioaccumulate into plant life according to previous EPA studies.

None of the components of this product are listed in the Montreal Protocol or its Amendments.

Section 13: Disposal Concerns

Dispose of waste material in accordance with Local, State, Federal, and Provincial Environmental Regulations.

Section 14: Transport Information

US and International DOT HMR Information

Proper Shipping Name:	Corrosive liquids, Toxic, N.O.S. (Hydrofluoric Acid, Phosphoric Acid, Sulfamic Acid)
Identification Number:	UN2922
Packaging Group:	II
Hazard Class:	8
Secondary Hazard Class:	6.1

Section 15: Regulatory Information

US Federal Regulations

CERCLA/SARA – Section 313 – Emission Reporting
Hydrofluoric Acid

State Regulations

California – Proposition 65 – Carcinogens List
None.

Section 16: Other Information

Disclaimer:
NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

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