SAFETY DATA SHEET

COYOTE CHEMICAL COMPANY
1111 N. Norbeck Street, Vermillion, SD 57069
1-800-658-3438

SECTION 1. Identification of the Product and of the Company

Product Name: Alum-Anew
UN/ID Number: 2922
Recommended Use: Aluminum Cleaning
Restrictions on Use: Use only as directed on label
Date of Issue: 5/14/15

Emergency Telephone Numbers
PERS: 800-633-8253

SECTION 2. Hazards Identification

EMERGENCY OVERVIEW

** Hazard Determination System (HDS): Health, Flammability, Reactivity*

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Hazard Category /GHS - Classification

Signal Word: DANGER!

Acute Toxicity- Dermal	Category 1
Acute Toxicity- Oral	Category 1
Acute Toxicity- Inhalation	Category 1
Skin Corrosion	Category 1C
Serious Eye Damage	Category 1
Carcinogenicity	Category 1A
Specific Target Organ Toxicity (Single Exposure)	Category 1
Specific Target Organ Toxicity (Repeated or Prolonged Exposure)	Category 1
Corrosive To Metals	Category 1

Hazard Pictograms:

Hazard Statements:

Fatal in contact with skin
Toxic if swallowed
Toxic if inhaled
Causes severe skin burns and eye damage
Causes damage to organs(through prolonged or repeated exposure)
Causes serious eye damage
May cause cancer
Causes damage to organs
May be corrosive to metals

Precautionary Statements - Prevention:

Do not get in eyes, on skin, or on clothing
Wash thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective clothes, clothing, and eye protection
Do not handle until all precautions are in use
Avoid breathing fumes, vapors, mist or spray
Use only whit adequate ventilation
Follow instructions for use
Keep in original container

Precautionary Statements - Response:
Immediately call a POISION CENTER or doctor/physician
IF ON SKIN: Gently wash with plenty of soap and water. Immediately remove contaminated clothing.
seek medical attention if irritation persist.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
IF INHALED: Remove victim to fresh air. If trouble breathing persists seek medical attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persist: seek medical attention.

Precautionary Statements - Storage: Keep out of reach of children in a safe location. Keep container closed.
Precautionary Statements - Disposal: Dispose of contents and container according to state/local/ federal disposal regulations.
Hazards not otherwise classified (HNOC): This product can cause severe burns which may not be immediately visible or painful. May cause hypocalcemia (depletion of calcium in the body) which can be fatal. Special medical treatment is required.

SECTION 3. Composition/Information on Ingredients

NAME OF INGREDIENT	CAS NUMBER	% BY WEIGHT
Hydrofluoric Acid	6834-92-0	9%
Sulfuric Acid	111-76-2	6%
Alcohols, C9-11,ethoxylated	68439-46-3	2%

SECTION 4. First Aid Measures

First aid measures for different routes of exposure
Eye Contact: Immediate response is required. Rinse with plenty of water and seek medical attention.
Skin Contact: Immediate response is required. Immediately wash affected area with plenty of water and remove all contaminated clothing. Immerse the burned area in a .13% iced Benzalkonium Chloride , alternately apply a 2.5% topical calcium gluconate gel to the area. Seek medical attention.
Inhalation: Move to fresh air and call a physician. Physician may treat victim with oxygen nebulizer and calcium gluconate 2.5% in saline.
Ingestion: If swallowed immediate response is required. Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink several glasses of water or milk. If possible give several ounces of any antacid containing calcium.
Most important symptoms/effects, acute and delayed: The effects of hydrofluoric acid may not occur immediately upon contact or exposure.
Notes to Physicians: Treat symptomatically following guidelines for hydrofluoric acid listed above.

SECTION 5. Fire Fighting Measures

Suitable extinguishing media: Dry chemical, CO2, alcohol-resistant foam.
Unsuitable Extinguishing media: Do not use water spray.
Special Hazard: During fire hazardous gasses may form.
Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific hazards arising from the chemical: Thermal decomposition may lead to the release of toxic vapors which are not to be breathed. This product causes skin, eye and mucous membrane burns.

SECTION 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Personal precautions: Use proper protective equipment. Avoid contact with skin, eyes, clothing.
Advice for emergency responders: Use personal protective equipment as required.

Methods and materials for containment and cleaning up
Methods for containment: Absorb with earth, sand or other non combustible material and transfer to containers for later disposal.
Methods for cleaning up: Contain spillage, and then collect with noncombustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. Handling and Storage

Precautions for safe handling
Advice on safe handling: Use personal protective equipment as required. Keep container closed when not in use. Ensure all labels remain in good condition and adhered to the container. Keep out of reach of children

Conditions for safe storage, including incompatibilities
Storage Conditions: Keep containers tightly closed in a dry, cool and well ventilated place.
Incompatible products: Oxidizing agents, strong acids.

SECTION 8. Exposure Control / Personal Protection

Exposure Guidelines

Chemical	OSHA PEL	ACGIH TLV
Hydrofluoric Acid	2.5 mg/m3	2 ppm
Sulfuric Acid	1 mg/m3	.02 mg/m3
Alcohols, C9-11,ethoxylated	Not determined	Not determined

Appropriate engineering controls: Ensure adequate ventilation. Eye wash station and shower.

Personal Protective Equipment
Eye protection: Use appropriate eye protection goggles or face shield when handling material.
Hand protection: Chemical protective gloves required
Skin protection: Chemical resistant gloves. Avoid contact with skin.
Respiratory Protection: No special protective equipment required with adequate ventilation.

SECTION 9. Physical and Chemical Properties

Appearance

Physical state: Liquid
Form: Liquid
Color: clear

Odor: Strong acid
Odor threshold: Not Available
PH: 0-1 10% aqueous solution
Melting point/freeze point: No information available
Flash Point: Not applicable
Evaporation rate: No information available
Flammability (solid, gas): Not available
Upper/lower flammability or explosive limits

Flammability limit - lower %: Not available
Flammability limit - Upper %: Not applicable
Explosive limit- lower %: Not available
Explosive limit- upper %: Not available

Vapor pressure: Not determined or unknown
Relative density: Not available
Water solubility: No information available
Auto ignition temperature: Not available
Decomposition temperature: Not available
Specific gravity: 1.04

SECTION 10. Stability and Reactivity

Reactivity: The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Contact with incompatible materials
Conditions to avoid: Contact with incompatible materials.
Incompatible materials: Alkalis, carbonates, glass and silicate containing materials, oxidizing agents, sulfides.
Hazardous decomposition products: fire can lead to the release of toxic gases.

SECTION 11. Toxicological information

Chemical	LD 50 Oral	LD 50 Dermal	LC Inhalation
Hydrofluoric Acid	Not determined	Not determined	1278 ppm (rat) 1 hr.
Sulfuric Acid	2140 mg/kg (rat)	Not determined	347 ppm (rat) 1 hr.
Alcohols, C9-11,ethoxylated	Not determined	Not determined	Not determined

Information on likely routes of exposure

Ingestion: Harmful if swallowed. Corrosive to esophagus, mucous membrane and stomach.
Inhalation: Respiratory irritant.
Skin contact: Causes burns, redness, irritation and itching which may not be immediate.
Hydrofluoric acid may cause internal tissue damage and hypocalcemia when it penetrates the skin.
Eye contact: Direct contact to eyes causes serious eye damage, redness, watering and blurry vision.

Information on Physical, Chemical and Toxicological Effects

Symptoms: Please see section 4 of this SDS for symptoms

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity Note: The agencies below have listed strong inorganic acid mist, containing sulfuric acid as a known carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric Acid 7664-93-9	A2	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
IARC (International Agency for Research on Cancer)
Group 1- Carcinogenic to Humans
OSHA Occupational Safety and Health Administration of the US Department of Labor
X- Present
NTP (National Toxicology Program)
Known - Known Carcinogen

STOT - Single Exposure May cause damage to organs

STOT - Repeated Exposure Causes damage to organs through prolonged or repeated exposure

Numerical Measures of Toxicity Not Determined

SECTION 12. Ecological Information

Eco toxicity

Chemical	Toxicity to Fish	Toxicity to Invertebrates
Hydrofluoric Acid	60 mg/l freshwater fish	270 mg/l (48 h: Daphnia)
Sulfuric Acid	500 mg/l (96h: Brachydanio rerio)	29 mg/l (24 h: Daphnia)
Alcohols, C9-11,ethoxylated	Not determined	Not determined

Persistence and degradability: Readily biodegradable.

Bio accumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects are expected from this product.

SECTION 13. Disposal Considerations

Waste treatment

Disposal Instructions: Dispose of contents in accordance with local/regional/national/international regulations.

Waste from residues / unused products: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name		RCRA	RCRA- Basis for Listing	RCRA- D Series Waste	RCRA- U Series Wastes
Hydrofluoric Acid	7664-39-3	U134	N/A	N/A	U134

California Hazardous Waste Status

Chemical Name		California Hazardous Waste Status
Hydrofluoric Acid	7664-39-3	Toxic / Corrosive

SECTION 14. Transportation Information

DOT
Proper Name: Corrosive Liquid, Toxic, n.o.s. (Hydrofluoric and Sulfuric Acid)
Hazard Class: 8 **Subsidiary Hazard Class** (6.1)
UN Number: UN2922
Packing Group: II

IATA
Proper Name: Corrosive Liquid, Toxic, n.o.s. (Hydrofluoric and Sulfuric Acid)
Hazard Class: 8 **Subsidiary Hazard Class** (6.1)
UN Number: UN2922
Packing Group: II

IMDG
Proper Name: Corrosive Liquid, Toxic, n.o.s. (Hydrofluoric and Sulfuric Acid)
Hazard Class: 8 **Subsidiary Hazard Class** (6.1)
UN Number: UN2922
Packing Group: II

SECTION 15. Regulatory Information

International Inventories: Not determined

US Federal Regulations

SARA 313

Chemical Name	CAS NUMBER	% BY WEIGHT	SARA 313- Threshold Value%
Hydrofluoric Acid	6834-92-0	9%	1.0%
Sulfuric Acid	111-76-2	6%	1.0%

CWA (Clean Water Act)

Chemical Name	CAS NUMBER	CWA - Reportable Quantities	CWA - Hazardous Substances
Hydrofluoric Acid	6834-92-0	100 lbs.	X
Sulfuric Acid	111-76-2	1000 lbs.	X

CERCLA

Chemical Name	Hazardous Substances RQ	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrofluoric Acid 6834-92-0	100 lbs.	100 lbs.	RQ 100 lbs. final RQ RQ 45.4 kg. final RQ
Sulfuric Acid 111-76-2	1000 lbs.	1000 lbs.	RQ 1000 lbs. final RQ RQ 454 kg. final RQ

US Regulations

Chemical Name	California Proposition 65
Sulfuric Acid 111-76-2	Carcinogen

US State Right -to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrofluoric Acid 6834-92-0	X	X	X
Sulfuric Acid 111-76-2	X	X	X

SECTION 16. Other Information

Issue Date: 05-14-15
Revision Date: None
Version: #1

NFPA rating

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of this 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 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 SAFETY DATA SHEET