SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **Glass Etching Cream**

Substance name: **Glass Etching Cream**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance and mixture

Glass Etching Cream is used for creating permanently etched designs on windows, mirrors and household glassware.

Uses advised against

No data available.

Reference to relevant exposure scenarious

For an overview of the exact titles of the relevant exposure scenarious please refer to section 16 of this SDS

1.3 Details of the supplier of the safety data sheet

Address

Company name: **Berkland goods**

Address:

Telephone: +1 (415) 857-3055

1.4 Emergency telephone number

Within USA & Canada: 1.800.424.9300 CCN693143

Outside USA & Canada: +1.703.527.3887 (collect calls accepted)

24 Hour Emergency Response

American Association of Poison Control Centers

+1.800.222.1222 (Staffed 24/7)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with: US Regulation 29 CFR 1910.1200 (HazCom2012); Canadian Regulation WHMIS 2015, Regulation (EC) No 1272/2008 (CLP);

Acute toxicity	**(Category 3)**	**H301**
Skin corrosion/irritation	**(Category 1)**	**H314**
Acute toxicity	**(Category 4)**	**H332**
Germ cell mutagenicity	**(Category 1B)**	**H340**
Carcinogenicity	**(Category 1B)**	**H350**
Reproductive toxicity	**(Category 2)**	**H361**
Specific target organ toxicity after repeated exposure	**(Category 1)**	**H372**

2.2 Label elements

Hazard pictograms:

Product identifier: Glass Etching Cream

Signal word: DANGER

Hazard statements:

H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure

Precautionary statements:

Prevention:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.

Response:

P301+P340	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see Section 4 on this SDS).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.

Storage:

P405	Store locked up.

Disposal:

P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3 Other hazards

None.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name: **Glass Etching Cream**

3.2 Mixtures

Ingredients	Classification	Pictograms	CAS No	EC No	% (by weight)
Ammonium hydrogendifluoride	H301 Toxic if swallowed H314 Causes severe skin burns and eye damage		1341-49-7	215-676-4	49.5
Sodium hydrogendifluoride	H301 Toxic if swallowed H314 Causes severe skin burns and eye damage		1333-83-1	215-608-3	49.2
Acrylamide	H301 Toxic if swallowed H312 Harmful in contact with skin H315 Causes skin irritation H319 Causes serious eye irritation H317 May cause an allergic skin reaction H332 Harmful if inhaled H340 May cause genetic defects H350 May cause cancer H361 Suspected of damaging fertility or the unborn child H372 Causes damage to organs through prolonged or repeated exposure		79-06-1	201-173-7	0.3

*** The material consists of further ingredients determined not to be hazardous**

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

This product is extremely hazardous by all routes of exposure, especially when product is dissolved in water. Any contact with this product should be considered serious.

After inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

After skin contact

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell. After washing for at least 15 minutes, immerse the burned area in a solution of 0.135 iced aqueous benzalkonium chloride until the pain is relieved. As a alternative first aid treatment, 2.5% calcium gluconate gel may be massaged into the burn area until the pain is relieved.

After eye contact

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.

After ingestion

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. Give 1-2 glasses of water to dilute or a magnesium-containing (Milk of magnesium) or a calcium containing antacid for their soothing effect.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms / Effects
Inhalation:
Causes severe irritation and burns to upper respiratory tract including nose, throat, larynx and lungs. Can cause burning sensation, chest pain, wheezing, cough, difficulty breathing, shortness of breath and choking. Inhalation of strong concentration or aspiration of liquid product can cause fluids to accumulate in the lungs and larynx which can progress to airway obstruction, respiratory acidosis, shock, coma, and possible death. Symptoms may be delayed 12 to 36 hours after exposure. Some individuals may suffer from residual chronic lung disease. Pulmonary effects can result even from splashes on the skin.
Skin contact:
Can cause severe burns especially when wet. Effects may be delayed from 12 to 24 hours after initial exposure. The fluoride ion is capable of penetrating the skin where it will attack underlying tissues and bone. Repeated or prolonged skin contact may cause an allergic dermatitis.
Eye Contact:
Causes severe burns to eyes and surrounding areas. Permanent eye damage may occur.
Ingestion:
Causes burns to the mouth, throat, esophagus, and stomach. Can cause perforation of the esophagus and stomach. Can cause nausea, vomiting, bleeding, diarrhea, abdominal pain and shock. Damage to stomach and esophagus may progress for several weeks. Permanent damage in the form of constriction of the esophagus may occur. Can cause damage to kidneys and liver.

4.3 Indication of any immediate medical attention and special treatment needed
Exposure to fluorides over years may produce embrittlement and decalcification of bones and increased calcification of ligaments and vertebrae resulting in stiffness. Repeated ingestion of more than 6 mg of fluoride per day may result in mottling of the teeth of developing children, and osteosclerosis in adults and children.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO_2) to extinguish. Product itself does not burn. Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable extinguishing media
Water.

5.2 Special hazards arising from the substance or mixture
Closed containers may explode (due to build up of steam pressure). During fire conditions, product may evolve toxic and corrosive gasses of hydrofluoric acid and ammonia and oxides of carbon.

5.3 Advice for firefighters
Containers exposed to heat should be kept cool with water. Do not get material on skin or clothing. Avoid inhalation of fumes or mists. Stay upwind, out of low areas, and ventilate closed spaces before entering. Do not use water directly on leak or spill area. Keep combustibles away from spilled material. Protective clothing may not be effective if it becomes wet. Move containers away from fire, if possible to do so without risk.

SECTION 6: Accident release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Read label before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Wear chemical safety goggles and chemical resistant gloves. Handle product in a well ventilated area. Have eye wash fountain or emergency shower available. Avoid formation of dust/mist/vapours. Keep out of reach of children. Do not reseal if contamination is suspected. Employee education and training in safe handling of this product are required.

For emergency responders
See Section 5.3.

6.2 Environmental precautions
Normal use of material present no hazard to environment.

6.3 Methods and material for containment and cleaning up
For small spills: dilute 50 to 100 fold with water.
For larger spills: Eliminate all ignition sources (no smoking, flares, sparks or flames) from immediate area. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Do not get water inside containers.

6.4 Reference to other sections
Information regarding waste disposal, see Section 13 Disposal consideration.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Read SDS completely before use and follow all label instructions. Keep out of reach of children. Avoid contact with skin and eyes. Wear chemical safety goggles and chemical resistant gloves. Handle product in a well-ventilated area. Have eye wash fountain or emergency shower available. Avoid formation of dust/mist/vapours. Do not reseal if contamination is suspected.
General protective and hygiene measures
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before reuse.
Advice on protection against fire and explosion
Keep away from the sources of ignition, heat and fire.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions
Keep in the original packaging tightly closed when not in use. Store upright is sealed containers away from heat and flame.
Requirements for storage rooms and vessels
Storage at room temperature. Protect from heat and direct sun light. Keep from freezing. Protect from humidity and water. Do not store in glass, aluminum or porcelain containers.
Advice on storage assembly
Keep away from foodstuffs, beverages and animal feeding stuffs.

7.3 Specific end use(s)
Use clean, dry utensils. Do not mix this product with remnants of any other products. Such uses may cause a reaction. Contamination with moisture, organic matter or other chemicals may start a chemical reaction.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters - Occupational exposure limit values

Ammonium hydrogendifluoride TWA: 2.5 mg/m^3	CAS: 1341-49-7	EC: 215-676-4
Sodium hydrogendifluoride TWA: 2.5 mg/m^3	CAS: 1333-83-1	EC: 215-608-3
Acrylamide STEL: 0.3 mg/m^3	CAS: 6834-92-0	EC: 229-912-9

8.2 Exposure controls
Appropriate engineering controls
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate ventilation.

Personal protective equipment
Respiratory protection
Use NIOSH/MSHA approved respirator or EN14387 ABEK filters to avoid breathing fumes if ventilation is inadequate.
Eye / face protection
Safety glasses with side shields or chemical goggles are recommended. Do not wear contact lenses.
Hand protection
Butyl rubber or neoprene gloves are recommended to prevent contact exposure. Launder cloths before reuse.
Body protection
Use body protection appropriate for task. An apron or other impermeable body protection is suggested. Full-body chemical protective clothing is recommended for emergency response procedures. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection.
Other
No data available.
Environmental exposure controls
See Section 12 Ecological information.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance (physical state, color, etc.): Cream, White
Upper/lower flammability or explosive limits: N/A
Odor: Pungent odor
Vapor pressure: N/A
Vapor density: Heavier than air 3.8 (Air = 1)
pH: Acidic
Density: N/A
Melting point/freezing point: N/A
Solubility(ies): Infinitely Soluble
Initial boiling point and boiling range: 200-500° F
Flash point: N/A
Evaporation rate: Slower than ether
Flammability (solid, gas): N/A
Partition coeficient: N/A
Auto-ignition temperature: Product is not selfigniting
Decomposition temperature: N/A
Viscosity: N/A
VOC: 105 g/l <0.88 lb/gal
Percent Volatile: 68.9 % by Volume

9.2 Other information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
Stable.

10.2 Chemical stability
Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4 Conditions to avoid
Avoid contact with incompatible materials and excessive heat.

10.5 Incompatible materials
Alkalis, sulfides, cyanides, aluminum, amines, Corrodes Porcelain, Glass, Aluminum, carbides, chlorates, cyanides, metal powders, nitrates, acids, bases, aluminum, phosphorous, glass and most metals.

10.6 Hazardous decomposition products
If heated to decomposition, this product may produce sulfur oxides, nitric oxides, ammonia, barium oxides and hydrogen fluoride. This product may react with acids to liberate hydrogen fluoride and may react with basic materials to release ammonia. Solutions of the product can corrode glass, cement and most metals.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity
Toxic if swallowed, category 3.
Acute dermal toxicity
No data available.
Acute inhalation toxicity
Harmful if inhaled, category 4.
Skin corrosion/irritation
Causes severe skin burns, category 1.
Serious eye damage/irritation
Causes serious eye damage, category 1.
Respiratory or skin sensitization
Skin sensitising.
Germ cell mutagenicity
May cause genetic defects, category 1B.
Carcinogenicity
May cause cancer, category 1B.
Reproduction toxicity
Suspected of damaging fertility or the unborn child, category 2.
STOT – single exposure
No data available.
STOT – repeated exposure
Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure.
Aspiration hazard
Can cause burning sensation.
Additional information
This product is extremely hazardous by all routes of exposure, especially when product is dissolved in water. Any contact with this product should be considered serious.

SECTION 12: Ecological information

12.1 Toxicity
The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling. An ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

Aquatic toxicity
Not determined.

Bacteria toxicity
Not determined.

12.2 Persistence and degradability
This product is not expected to biodegrade.

12.3 Bioaccumulative potential
This product is not expected to bioconcentrate.

12.4 Mobility in soil
The product is soluble in water.

12.5 Results of PBT and vPvB assessment
Non-classified PBT substance, Non-classified vPvB substance.

12.6 Other adverse effects
Product can substantially lower the pH of an aquatic environment and can be extremely toxic to fish and aquatic plants.

12.7 Other information
Product's components will react with other substances in the environment to generate a variety of inorganic compounds over time. Due to the corrosive nature of this product, this solution can be harmful or fatal to plant and animal life if released into the environment, especially in large quantities.

SECTION 13: Disposal consideration

13.1 Waste treatment methods

Waste disposal recommendations
Disposal of waste and residues in accordance with local authority requirements. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR261).
Must not be disposed together with household garbage.
Do not allow product to reach sewage system.
Empty containers must be tripled rinsed prior to disposal. Do not reuse container. Disposeof in accordance with federal, state and local regulations.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

UN-No:	2922
Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S.(Ammonium hydrogendifluoride, Sodium hydrogendifluoride and Acrylamide)
Classification Code:	CT1
Hazard Class:	8
Packing Group:	II
Labels:	8+6.1
Limited and excepted Packaging quantities:	1l
ADR Tank code:	L4BN

14.2 Transport IMDG

UN-No:	2922
Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S.(Ammonium hydrogendifluoride, Sodium hydrogendifluoride and Acrylamide)
Hazard Class:	8
Labels:	8+6.1
Packing Group:	II
EmS:	F-A, S-B
Marine Polutant:	Yes

14.3 Transport ICAO-TI / IATA

UN-No:	2922
Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S.(Ammonium hydrogendifluoride, Sodium hydrogendifluoride and Acrylamide)
Hazard Class:	8
Packing Group:	II
Labels:	8+6.1
ERG Code:	BP

14.4 Other information
Product is not regulated as dangerous good.

14.5 Environmental hazards
Product is not regulated as dangerous to environment.

14.6 Special precautions for user
None.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
No data available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations
Dangerous Substances Directive 67/548/EEC or Dangerous Preparations Directive,1999/45/EC or classified as hazardous under the CLP Regulation (EC) No 1272/2008;

US Federal Regulations
29 CFR 1910.1200 (HazCom2012)

Canada regulations
Workplace Hazardous Materials Information System 2015
HSIS Consolidated List

15.2 Chemical safety assessment
No data available.

SECTION 16: Other information

Further information

The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation. This "Safety Information" is provided as a service to our customers. The details presented are in accordance with our present knowledge and experiences.

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP); EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU US Regulation 29 CFR 1910.1200 (HazCom2012); WHMIS 2015; National Threshold Limit Values of the corresponding countries; Transport regulations according to ADR, RID, IMDG, IATA; AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Data base: https://echa.europa.eu
OSHA quick card, Hazard Communication Safety Data Sheets