SAFETY DATA SHEET

Section 1 – Product And Company Identification

PRODUCT

PRODUCT NAME: **3408 ETCHCRETE**
PRODUCT DESCRIPTION: Preparation/Mixture
PRODUCT USE: For removing cementitious residue from concrete and masonry surfaces.

MANUFACTURER INFORMATION

INNOVATIVE MANUFACTURING INC
861 DERWENT WAY
DELTA, BC, CANADA, V3M 5R4
(604) 522-2811

EMERGENCY INFORMATION

INNOVATIVE MANUFACTURING CONTACT: 1-800-667-8246
24-HOUR EMERGENCY AND SDS HELP: CANUTEC: 613-966-6666

Section 2 – Hazards Identification

Classification of the substance or mixture

This product is considered hazardous according to the criteria of the Globally Harmonized System of Classification and labelling of Chemicals (GHS).

Corrosive to metal	Category 1
Skin corrosive/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity - single exposure	Category 3 (respiratory system)
Specific target organ toxicity - repeated exposure	Category 2 (kidney, liver)

Label elements

Hazard pictograms

Signal word Danger

Hazard statements:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statements

Prevention
P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response
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.
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.
P321 Specific treatment (see supplemental first aid on label).
P390 Absorb spillage to prevent material damage.

Storage
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P406 Store in corrosive resistant container with a resistant inner liner.

Disposal	P501 Dispose of contents/container: Follow the waste disposal requirements of your country, state, or local authorities.

Other hazards

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

Not applicable

Unknown acute toxicity

0% of the mixture consists of ingredients(s) of unknown toxicity

Section 3 – Composition/Information on Ingredients

COMPONENTS	CAS No.	% BY WEIGHT
Water	7732-18-5	35-40
Hydrochloric acid (31.4%)	7647-01-0	60-65

Section 4 – First Aid Measures

Description of First Aid Measures

Eye Contact	Immediately flush eyes with plenty of cool water for at least 15 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Remove contact lens(es) if able to do so during rinsing. Get medical attention if irritation persists. Protect unexposed eye.
Skin Contact	Rinse skin for 15 minutes with deluge of water or under shower. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give humidified air. Give oxygen, but only by a certified physician. Consult a physician.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.
Self-protection of the first aider	Pay attention to self-protection.

Indication of any immediate medical attention and special treatment needed

Immediately seek medical advice or attention if symptoms are signification or persist. If seeking medical attention, provide SDS document to physician.

Note to physicians	Treat symptomatically

Section 5 – Fire Fighting Measures

Extinguishing media

Suitable extinguishing media	Substance is nonflammable, use agent most appropriate to extinguish surrounding fire.
Unsuitable extinguishing media	No information available

Special hazards arising from the substance or mixture

Corrosive material. Causes burns by all expose routes. Thermal decomposition can lead to release of irritating gases and vapors. Hazardous combustion products may include hydrogen

Advice for fire-fighter

As in any fire, wear self-contained breathing apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

Further information No further information available.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use proper personal protective equipment as listed in Section 8. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental precautions

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and materials for containment and cleaning up

Methods for containment Contain spills with an inert absorbent material that does not react with spilled product. Prevent from spreading by covering, diking or other means. Provide ventilation.

Methods for cleaning up Clean up spills immediately observing precautions in the protective equipment section. Place into a suitable container for disposal. Provide ventilation. After removal, flush spill area with soap and water to remove trace residue.

Section 7 – Handling and Storage

Precautions for safe handling

Wear appropriate personal protective equipment. Do not get in eyes, on skin, on clothing. Do not breath mist or vapor. Observe good industrial hygiene practices. Do not empty into drains. Use caution when combine with water. DO NOT add water to acid, ALWAYS add acid to water while stirring to prevent release of heat, steam and fumes.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Store away from incompatible materials. Store closed containers in a clean, open or well-ventilated area. Keep out of sun.

Specific end use(s)

No information available

Section 8 – Exposure Controls / Personal Protection

Control Parameters

Exposure Guidelines Country specific exposure limits have not been established or are not applicable unless listed below.

Components	ACGIH TLV	OSHA PEL	NIOSH REL
Hydrochloric Acid 7647-01-0	TWA: 7.59 mg/m³	TWA: 7.59 mg/m³	IDLH: 50 ppm (as HCl, 2010)

Exposure controls

Appropriate engineering control Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Personal protective equipment

Eye/Face Protection Wear appropriate protective glasses or splash goggles as described by 20 CFR1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin/Body Protection Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Other Protective	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
General Hygiene Considerations	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/ mist/vapor/aerosols. Avoid contact with the eyes and skin.
Environmental exposure controls	Avoid release to the environment.

Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

	PRODUCT CRITERIA
PHYSICAL STATE	Liquid
APPEARANCE - COLOR	Colorless to light yellow liquid
ODOR	Pungent (irritating/strong)
ODOR THRESHOLD	No data available
PH	<1
MELTING POINT/FREEZING POINT	< 0°c
INITIAL BOILING POINT AND BOILING RANGE	> 100°C
FLASH POINT	No data available
EVAPORATION RATE	No data available
FLAMMABILITY (solid, gas)	No data available
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	No data available
VAPOR PRESSURE	84 mmHg @ 20°C
VAPOR DENSITY (AIR=1)	1.267
SPECIFIC GRAVITY(@25°C)	1.1
SOLUBILITY	Soluble in water
PARTITION COEFFICIENT: n-octanol/water	No data available
AUTO IGNITION TEMPERATURE	No data available
DECOMPOSITION TEMPERATURE	No data available
VISCOSITY	No data available
EXPLOSIVE PROPERTIES	No data available
OXIDISING PROPERTIES	No data available

Other information

VOC	0 g/L

Section 10 – Stability and Reactivity

Reactivity:	None known, based on information available.
Chemical Stability:	Stable under recommended storage and handling conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to Avoid:	Incompatible materials, metals, excess heat, bases
Incompatibility (Materials to Avoid):	Bases, amines, metals, permanganates (e.g. potassium permanganate), fluorine, metal acetylides, hexalithium disilicide.
Hazardous Decomposition Products:	Hydrogen chloride, chlorine, hydrogen gas.

Section 11 – Toxicological Information

Information on toxicological effects

This product has not been tested. The statement has been derived from substances / products of a similar structure or composition.

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 (Oral/Rat)	238-277 mg/kg		Hydrochloric acid 7647-01-0
	LC50 (Inhalation/Rat male)	1.68 mg/l		
	LD50 (Dermal/Rabbit)	>5010 mg/kg		
Skin corrosion/irritation	Causes severe skin burns.		Cat 1B	
Serious Eye Damage / Eye Irritation	Causes serious eye damage.		Cat 1	
Respiratory or Skin Sensitization	No information available			
Germ Cell Mutagenicity	No evidence of mutagenic effects			
Carcinogenicity	Not classified			
Reproductive Toxicity	No evidence of reproductive effects			
STOT - Single Exposure	May cause respiratory irritation		Cat 3	
STOT - Repeated Exposure	May cause damage to kidney and liver		Cat 2	
Aspiration Hazard	No additional information			

Section 12 – Ecological Information

Ecotoxicity Because of the low PH of this product, it would be expected produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

ECOTOXICITY DATA

Ecotoxicity	Chemical Name	
	Hydrochloric acid 7647-01-0	
Toxicity to algae	EC50 / 72 h	-
	NOEC / 96 h or 72 h	-
	M factor	-
Toxicity to fish	LC 50 / 96 h	282 mg/L Gambusia affinis
	NOEC / 21 days	-
	M factor	-
Toxicity to Daphnia	EC50 / 72 h	56 mg/L
	NOEC / 21 days	-
	M factor	-

Persistence and Degradability Not biodegradable. Hydrochloric acid will likely be neutralized to chloride by alkalinity present in natural environment.

Bioaccumulative potential

Product/Ingredient Name	Log P_{ow}	BCF	Potential

Mobility in Soil Hydrochloric acid will be neutralized by naturally occurring alkalinity. The acid will permeate soil, dissolving some soil material and will then neutralize.

Other Adverse Effects No other adverse environment effects. (e.g. ozone depletion, photochemical ozone creation).

Section 13 – Disposal Considerations

Waste Disposal Collect and reclaim or dispose in sealed containers at a properly licensed waste disposal site. This material, if not neutralized, must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used containers. Dispose of waste according to local, state/provincial, and federal requirements. Do not discharge into drains/surface waters/groundwater.

Contaminated Materials Disposal must be made in accordance with local, state and federal regulations.

Container Disposal Disposal must be made in accordance with local, state and federal regulations.

Recommended cleaning agent Water, if necessary with cleansing agents.

Section 14 – Transportation Information

Regulatory Information	UN number	UN proper shipping name	Transport Hazard Class(es)	Packing Group
DOT	UN 1789	Hydrochloric Acid Solution	8	II
TDG	UN 1789	Hydrochloric Acid Solution	8	II
IMDG	UN 1789	Hydrochloric Acid Solution	8	II

ICAO/IATA	UN 1789	Hydrochloric Acid Solution	8	II

Section 15 – Regulatory Information

Safety, Health and Environmental Regulations/Legislations Specific for the Chemical

Canada

WHMIS Classification: This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

US Federal Information

CERCLA Hazardous Substance List (40 CFR 302.4)

Hydrochloric Acid (CAS 7647-01-0) Listed

OSHA Specifically Regulated Substances (29CFR 1910.1001-1050) Not listed

SARA 304 Emergency Release Notification Not regulated

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt.D) Not regulated

SARA Hazard Categories

Immediate Hazard	Yes
Delayed Hazard	Yes
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

SARA 302 Extremely Hazard Substance Not listed

SARA 311/312 Hazardous Chemical Yes

SARA 313 (TRI reporting) Yes

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Listed

Clean Air Act (CAA) Section 112 Accidental Release Prevention (40 CFR 68.130) -

Safe Drinking Water Act (SDWA) Listed

US state regulations

US Massachusetts RTK - Substance List Listed

US New Jersey Worker and Community Right-to-Know Act Listed

US Pennsylvania Worker and Community Right-to-Know Law Listed

US Rhode Island RTK -

US California Proposition 65

Carcinogens & Reproductive Toxicity (CRT): Listed substance Not listed

International Inventories

Country	Inventory Name	On Inventory
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Europe	**European INventory of Existing Commercial chemical Substances (EINECS)**	**231-595-7**
Europe	**European List of Notified Chemical Substances (ENINCS)**	**No**
Japan	**Inventory of Existing and New Chemical Substances (ENCS)**	**Yes**
Korea	**Existing Chemical List (ECL)**	**Yes**
New Zealand	**New Zealand Inventory**	**Yes**
Philippines	**Philippine Inventory of Chemicals and Chemical Substances (PICCS)**	**Yes**
United States	**Toxic Substances Control Act (TSCA) Inventory**	**Yes**

Section 16 – Other Information

HMIS Rating:		**NFPA Rating:**	
Health	3	Health	3
Flammability	0	Flammability	0
Physical Hazard	0	Instability	0
Personal Protection	x	Special	-

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Prepared By: Joey Wang

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