


SAFETY DATA SHEET

FABRIKEM® Acid Wash

SECTION 01: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier:	Fabrikem® Acid Wash
Product Use:	Concrete Cleaner and Etching Compound
Manufacturer's Name:	Fabrikem Manufacturing Ltd. 20361 Duncan Way, Langley, BC V3A 7N3
Supplier's Name:	Fabrikem Manufacturing Ltd. 20361 Duncan Way, Langley, BC V3A 7N3
Preparation Date of SDS:	12 January 2017
Revision Date of SDS:	21 February 2020
SDS Prepared By:	WHMIS Committee
Phone Number of Preparer:	604-532-3883
CANUTEC Emergency Number:	613-996-6666

SECTION 02: HAZARDOUS IDENTIFICATION

GHS Classification:	Acute Toxicity – Oral Acute Toxicity – Inhalation (Dusts/Mists) Skin Corrosion/Irritation Serious eye damage/eye irritation Carcinogenicity Specific target organ systemic toxicity – single exposure	Category 3 Category 3 Category 1A Category 1 Category 1A Category 3
GHS Labelling:		
Signal Word:	Danger	
Hazard Statements:	H290 May be corrosive to metals H301 Toxic if swallowed H314 Causes severe skin burns and eye damage H331 Toxic if inhaled H335 May cause respiratory irritation H350 May cause cancer	
Precautionary Statements:	<p>Prevention:</p> P102 Keep out of reach of children. P103 Read label before use. P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233 Keep container tightly closed. P234 Keep only in original container P260 Do not breathe mist, vapours or spray. P264 Wash face, hands, and 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. <p>Response:</p> P301 + P310 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. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage <p>Storage:</p> P403 + P233 Store in a well-ventilated place. Keep container tightly closed. Keep cool. P405 Store locked up.	

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	Disposal: P501 – Dispose of contents/container in accordance with local regulations.
Other hazards	No information available.

SECTION 03: HAZARDOUS INGREDIENTS

Ingredients:	CAS#	%	Common Name/Synonyms	Other Identifiers
Hydrogen Chloride Anhydrous	7647-01-0	30-35	Hydrochloric Acid	Muriatic Acid

SECTION 04: FIRST AID MEASURES

General Advice:	Show this safety data sheet to the doctor in attendance. If exposed or concerned: Get medical advice/attention. Immediate medical attention is required.
Inhalation:	Remove victim to fresh air. Only give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.
Eye Contact:	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes, while holding the eyelid(s) open. If a contact lens is present, remove only if easy to do so. Neutral saline solution may be used as soon as it is available. Seek immediate medical attention.
Skin Contact:	Remove contaminated clothing. Wash affected area with lukewarm water for at least 30 minutes. If irritation persists, repeat flushing. Seek immediate medical attention. Double bag, seal, label and leave contaminated clothing, shoes and leather goods at the scene for safe disposal.
Ingestion:	NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim rinse mouth with water again. Seek immediate medical attention.
Self-protection of the first aider:	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.
Most important symptoms and effects, both acute and delayed:	May be fatal if swallowed. Corrosive causes burns to the mouth, throat and stomach. Corrosive to the respiratory passage. Causes vomiting, nausea, and diarrhea. Aspiration of the material into the lungs can cause chemical pneumonitis which can be fatal. Concentrated vapor, mist or splashed liquid can cause severe irritation, burns and permanent blindness. Low concentrations of vapour or mist (10 - 35 ppm) can be immediately irritating and result in redness. Recognition odor in air is 10 ppm. Vapour or mist at 35 ppm cause irritation of the throat, in the 50 to 100 ppm range can cause severe nasal irritation, sore throat, choking, coughing and difficulty breathing. Prolonged exposures can cause burns and ulcers to the nose and throat. Even brief exposures at 1000 to 2000 ppm can cause a life-threatening accumulation of fluid in the lungs called pulmonary edema. Symptoms of pulmonary edema such as shortness of breath may be delayed for 48 hours after exposure. Contact with liquid can cause severe irritation, burns, and permanent scarring or even death. Vapour or mist may cause redness, irritation and burns if contact is prolonged.
Immediate medical attention and special treatment :	Treatment based on sound judgment of physician and individual reactions of patient.

SECTION 05: FIRE FIGHTING MEASURES

Flammable:	Not flammable
Suitable Means of Extinction:	Extinguish fire using agent suitable for surrounding fire. Cool all affected containers with flooding quantities of water. Apply water from as far a distance as possible. Use water spray to knock-down vapours.
Unsuitable Means of Extinction:	Not Available
Specific Hazards Arising from the Product:	Contact with common metals produces extremely flammable hydrogen gas. When heated or in a fire, toxic and corrosive hydrogen chloride gas is released. Hydrogen chloride is thermally stable up to approximately 1500°C (2732°F). Above this temperature, hydrogen chloride begins to dissociate into extremely flammable hydrogen gas and very toxic and corrosive chlorine gas.
Hazardous Combustion Products:	When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.
Special Protective Equipment and Precautions Fire-Fighters:	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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SECTION 06: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.
Environmental Precautions:	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Do not allow to enter into soil/subsoil. Prevent product from entering drains.
Methods for Containment and Cleaning Up.	SMALL SPILLS: Contain and soak up spill with absorbent material which does not react with spilled chemical. Put material in suitable, covered, labeled containers. Flush area with water. Do not get water inside containers. Contaminated absorbent material may pose the same hazards as the spilled product. LARGE SPILLS: Contact fire and emergency services and supplier for advice.

SECTION 07: HANDLING AND STORAGE

Precautions for Safe Handling:	For industrial use only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. Empty containers may contain hazardous product residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personnel protective equipment. When diluting, add this product to water in small amounts to avoid spattering. Never add water to this material. When opening metal containers, use non-sparking tools because of possibility of the presence of hydrogen gas.
Conditions for Safe Storage:	Store in a cool, dry, well-ventilated area, out of direct sunlight and away from heat sources. Keep quantity stored as small as possible. Drums should be vented when received and then at least weekly to relieve internal pressure.

SECTION 08: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters				
Chemical Name	ACGIH TLV		OSHA PEL	
	TWA	STEL	TWA	STEL
Hydrogen Chloride Anhydrous	2 ppm	N/A	5 ppm	N/A
Appropriate Engineering Controls:	Local exhaust ventilation as necessary to maintain exposures to within applicable limits.			
Individual Protection Measures:	Eye/Face Protection:	Chemical safety goggles and/or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes.		
	Hand Protection:	Appropriate chemical resistant gloves should be worn. Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: Nitrile, Neoprene, Ethyl Vinyl Alcohol Lamine (EVAL), Natural Rubber, Polyvinyl Chloride (PVC), or Polyethylene gloves.		
	Skin and Body Protection:	Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Chemical/oil resistant clothing.		
	Respiratory Protection:	If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable.		

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		Types of respirators to be considered for this material include: Half-face filter respirator. For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.
	General Hygiene Considerations:	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colourless to yellow liquid
Odour:	Pungent, sharp odour
Odour Threshold:	N/E
pH:	< 1
Melting and Freezing Point:	-35°C
Initial Boiling Point and Boiling Range:	108°C
Flash Point:	No data available
Evaporation Rate (n-butyl acetate = 1):	No data available
Flammability (solid, gas)	No data available
Upper and Lower Flammability or Explosive Limit:	No data available
Vapour Pressure:	13.6 kPa (100 mm HG) @ 20°C
Vapour Density (air = 1):	1.268
Relative Density (water = 1):	1.18-1.19
Solubility in Water:	Soluble in water
Solubility in Other Liquids	Soluble in alcohol
Partition Coefficient n-Octanol/Water (Log Kow)	N/E
Auto-ignition Temperature:	N/E
Decomposition Temperature:	N/E
Viscosity:	

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Stable
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	No additional remark.
Conditions to Avoid:	Direct sunlight, heat.
Incompatible Materials:	Large amounts of heat can be generated when concentrated acid is mixed with water or organic solvents. Very corrosive to most metals, producing flammable hydrogen gas. Reacts violently with bases to produce heat. Reacts with reducing agents to produce heat, fire and flammable hydrogen gas. Reacts with oxidizing agents to produce heat and toxic or corrosive chloride gases. Contact with explosives may cause detonation. Reacts with cyanides to produce toxic cyanide gas, and sulphides to produce toxic hydrogen sulphide gas.
Hazardous Decomposition Products:	When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas..

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SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:										
Inhalation:	Corrosive to the respiratory passage. Recognition odour in air is 10 ppm. Vapour or mist at 35 ppm cause irritation of the throat, in the 50 to 100 ppm range can cause severe nasal irritation, sore throat, choking, coughing and difficulty breathing. Prolonged exposures can cause burns and ulcers to the nose and throat. Even brief exposures at 1000 to 2000 ppm can cause a life-threatening accumulation of fluid in the lungs called pulmonary edema. Symptoms of pulmonary edema such as shortness of breath may be delayed for 48 hours after exposure.									
Eye Contact:	Corrosive. Concentrated vapour, mist or splashed liquid can cause severe irritation, burns and permanent blindness. Low concentrations of vapour or mist (10 - 35 ppm) can be immediately irritating and result in redness.									
Skin Contact:	Corrosive. Contact with liquid can cause severe irritation, burns, and permanent scarring or even death. Vapour or mist may cause redness, irritation and burns if contact is prolonged.									
Ingestion:	May be fatal if swallowed. Causes burns to the mouth, throat and stomach. Corrosive. Causes vomiting, nausea, and diarrhea. Aspiration of the material into the lungs can cause chemical pneumonitis which can be fatal.									
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Hydrogen Chloride Anhydrous	238-277 mg/L (Rat 4 hour)	238-277 mg/kg (Rat)	>5,010 mg/kg (Rabbit)							
Skin Corrosion/Irritation:	Corrosive. Contact with liquid can cause severe irritation, burns, and permanent scarring or even death. Vapour or mist may cause redness, irritation and burns if contact is prolonged.									
Serious Eye Damage/Irritation:	Corrosive. Concentrated vapour, mist or splashed liquid can cause severe irritation, burns and permanent blindness. Low concentrations of vapour or mist (10 - 35 ppm) can be immediately irritating and result in redness.									
Specific Target Organ Toxicity (Single Exposure):	May cause respiratory irritation.									
Aspiration Hazard:	No information available.									
Specific Target Organ Toxicity (Repeated Exposure):	No information available.									
Respiratory and/or Skin Sensitization:	No information available.									
Carcinogenicity:										
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Hydrogen Chloride Anhydrous	Group 3	N/A	N/A							
Legend:	IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans									
Reproductive Toxicity:	No information available.									
Germ Cell Mutagenicity:	No information available.									
Interactive Effects:	No information available.									

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:				
Chemical Name	Ecotoxicity Freshwater Algae Data	Ecotoxicity Fish Species Data	Toxicity to Microorganisms	Crustacea
Hydrogen Chloride Anhydrous	Not Available	Not Available	Not Available	Not Available
Persistence and Degradability:		No information available.		
Bioaccumulation:		No information available.		
Component Information:		Chemical Name	Partition Coefficient	
		Hydrogen Chloride Anhydrous	Not Available	
Other Adverse Effects:	No information available.			

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SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods:	Dispose of waste in accordance with environmental legislation. Should not be released into the environment. Dispose of in accordance with local regulations. No not reuse empty containers. Empty containers retain product residue (liquid and/or vapour) and can be dangerous.
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SECTION 14: TRANSPORT INFORMATION

Shipping Name:	UN 1789 HYDROCHLORIC ACID, Class 8, P.G. II
PIN:	1789
TDG:	UN 1789 HYDROCHLORIC ACID, Class 8, P.G. II
DOT:	UN 1789 HYDROCHLORIC ACID, Class 8, P.G. II
IMO:	N/E
ICAO:	N/E
ERAP:	N/E

SECTION 15: REGULATORY INFORMATION

Safety, Health and Environmental Regulations											
U.S. Regulatory Rules											
<table border="1"><thead><tr><th>Chemical Name</th><th>CERCLA/SARA Section 302</th><th>SARA (311, 312) Hazard Class</th><th>CERCLA/SARA Section 313</th></tr></thead><tbody><tr><td>Hydrogen Chloride Anhydrous</td><td>Listed</td><td>Listed</td><td>Listed</td></tr></tbody></table>				Chemical Name	CERCLA/SARA Section 302	SARA (311, 312) Hazard Class	CERCLA/SARA Section 313	Hydrogen Chloride Anhydrous	Listed	Listed	Listed
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Hydrogen Chloride Anhydrous	Listed	Listed	Listed								
TSCA:	Complies										
DSL/NDSL:	Complies										
IARC Monograph:	Group 3										
NFPA Rating:	Health = 4, Fire = 0, Instability = 0										

SECTION 16: OTHER INFORMATION

Date of Latest Revision:	21 February 2020
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It is provided solely for the customer's consideration, and verification and Fabrikem Manufacturing Ltd. hereby specifically claims it shall not be held liable for any damage resulting from handling or from contact with the above products.

N/A = Not Applicable
N/E = Not Established