


SAFETY DATA SHEET

FABRIKEM® DEGREASER & ETCH

SECTION 01 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier	Fabrikem® Degreaser & Etch
Recommended Use	Concrete Cleaning 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
Phone Number	604-532-3883 (Monday to Friday; 0800-1600 Pacific Time)
Preparation Date of SDS	21 November 2017
Revision Date of SDS	21 February 2020
SDS Prepared By	WHMIS Team
CANUTEC Emergency Number	613-996-6666 (Transport Emergencies)

SECTION 02 HAZARD IDENTIFICATION

Hazard Classification	SKIN CORROSION/IRRITATION – Category 1B SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) – Category 3 (Respiratory tract irritation) CORROSIVE TO METALS – Category 1
Label Elements	
Symbols	
Signal Words	Danger
Hazard Statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.
Precautionary Statements	P234 Keep only in original container. P260 Do not breathe mist, vapours or spray. P264 Wash hands thoroughly after handling. 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. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves, protective clothing, eye protection, and face protection. P390 Absorb spillage to prevent material damage. P363 Wash contaminated clothing before reuse. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P310 Immediately call a POISON CENTER or doctor/physician. P405 Store locked up. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
Other Hazards	

SAFETY DATA SHEET

FABRIKEM® DEGREASER & ETCH

SECTION 03 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	%	CAS#	OSHA PEL	ACGIH TLV
Hydrochloric Acid	10 - 25	7647-01-0	5 ppm (7mg/m ³)	2 ppm (2.98 mg/m ³)
Ethylene Glycol Monobutyl Ether	10 - 25	111-76-2	50 ppm (240 mg/m ³)	20 ppm (97 mg/m ³)

SECTION 04 FIRST AID MEASURES

Route of Exposure	
Inhalation	Remove victim to fresh air. Only give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Seek 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.
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.
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.
Most Important Symptoms & Effects	Symptoms/effects: Causes severe skin burns and eye damage. Symptoms/effects after inhalation: Possible inflammation of the respiratory tract. Symptoms/effects after skin contact: Caustic burns/corrosion of the skin. Symptoms/effects after eye contact: Causes serious eye damage. Symptoms/effects after ingestion: Nausea. Vomiting. Irritation of the gastric/intestinal mucosa. Diarrhoea. Chronic symptoms: Affection/discolouration of the teeth.
Immediate Medical Attention & Special Treatment	Obtain medical assistance.

SECTION 05 FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable Extinguishing Media	Do not use a heavy water stream.
Hazardous Combustion Products	Not flammable. Thermal decomposition generates corrosive vapours. 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.
Special Fire Fighting Procedures	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

SAFETY DATA SHEET

FABRIKEM® DEGREASER & ETCH

SECTION 06 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures	Wear appropriate personal protective equipment (impervious gloves, safety glasses, protective clothing, face shield). Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so.
Methods and Materials 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	This material is VERY TOXIC and CORROSIVE. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
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. Incompatible Products: Metals, sodium, bases, formaldehyde, oxidizing agents, reducing agents, perchloric acid, sulfuric acid, potassium permanganate, aldehydes, epoxides, fluorine, acetylides, borides, carbides, phosphide, silicides, hexalithium disilicide.

SECTION 08 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	ACGIH TLV	2.98 mg/m ³ (2 ppm)
	OSHA PEL	7 mg/m ³ (5 ppm)
	Other	
Engineering Controls	General	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements.
	Local Exhaust	Supply sufficient replacement air to make up for air removed by exhaust systems.
	Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.
Personal Protective Equipment	Gloves	Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
	Respirator	NIOSH/OSHA RECOMMENDATIONS FOR HYDROGEN CHLORIDE (GAS) CONCENTRATIONS IN AIR: Up to 50 ppm: Chemical cartridge respirator with cartridge(s) to protect against hydrogen chloride; or gas mask with canister to protect against hydrogen chloride; or powered air purifying respirator with cartridge(s) to protect against hydrogen chloride; or

SAFETY DATA SHEET

FABRIKEM® DEGREASER & ETCH

		powered air purifying respirator with cartridge(s) to protect against hydrogen chloride; or SAR; or full face piece SCBA. Above this level, a full face self-contained breathing apparatus is required.
	Eye	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.
	Footwear	Impervious footwear of chemically resistant material (rubber or PVC) should be worn at all times.
	Clothing	RECOMMENDED (resistance to breakthrough longer than 8 hours): Butyl rubber, Neoprene rubber, Viton™, Viton™/Butyl rubber, Barrier (PE/PA/PE), Trelchem™ HPS, Trelchem™ VPS, Tychem™ SL (Saranex™), Tychem™ CPF 3, Tychem™ F, Tychem™ BR/LV, Tychem™ Responder™, Tychem™ TK. CAUTION: use for short periods only (resistance to breakthrough within 1 to 4 hours): Polyethylene NOT RECOMMENDED for use (resistance to breakthrough less than 1 hour): Polyvinyl alcohol
	Other	

SECTION 09 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Fuming liquid, slightly yellow to amber
Odour	Pungent odour
Odour Threshold	1 – 5 ppm
pH	<1
Melting/Freezing Point	-35°C
Initial Boiling Point/Range	62° – 90°C
Flash Point	N/A
Evaporation Rate (n-butyl acetate = 1)	<1
Flammability	Non-flammable
Lower Flammable/Explosive Limit	N/A
Upper Flammable/Explosive Limit	N/A
Vapour Pressure	84 mm Hg (at 20°C)
Vapour Density (air = 1)	1.268 @ 20°C
Relative Density	1.1 – 1.2
Solubility	Completely miscible
Partition Coefficient (n-octanol/water)	Log P _{ow} = 0.3
Auto-Ignition Temperature	N/A
Decomposition Temperature	>1500°C
Viscosity	1.71 – 2.11 cSt

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Contact with hypochlorites liberates chlorine gas. May react violently with incompatible substances. Large amounts of heat can be released when concentrated hydrochloric acid is mixed with water or with organic solvents.
Chemical Stability	Stable, heat and contamination could cause decomposition.
Possibility of Hazardous Reactions	Hazardous polymerization does not occur.

SAFETY DATA SHEET

FABRIKEM® DEGREASER & ETCH

Conditions to Avoid	High temperatures. Incompatibles.
Incompatible Material	Metals, sodium, bases, formaldehyde, oxidizing agent, reducing agents, perchloric acid, sulfuric acid, potassium permanganate, aldehydes, epoxides, fluorine, acetylides, borides, carbides, phosphide, silicides, hexalithium disilicide.
Hazardous Decomposition Products	Contact with hypochlorites liberates chlorine gas. May react violently with incompatible substances. May release toxic and/or flammable gases such as hydrogen and phosphine gas. Considerable amounts of heat may be evolved.

SECTION 11 TOXICOLOGICAL INFORMATION

Routes of Exposure	Inhalation, Skin, Eyes, Ingestion		
Symptoms of Acute Exposure	<p>Skin Corrosion/Irritation Corrosive. Contact may produce severe irritation or corrosive skin damage. Effects range from dermatitis, photo sensitization, redness, swelling, pain, permanent scarring, to death.</p> <p>Ingestion Causes severe burns of the mouth, esophagus, and stomach, with consequent pain, nausea, vomiting, diarrhea, circulatory collapse, and possibly death.</p> <p>Inhalation Hydrochloric acid solutions can readily release high concentrations of hydrogen chloride gas, which is very toxic and corrosive and poses a serious inhalation hazard. Inhalation of even low concentrations is irritating and can cause coughing, pain, inflammation and swelling in the upper respiratory tract. A severe exposure can result in a potentially fatal accumulation of fluid in the lungs (pulmonary edema). Symptoms of pulmonary edema can be delayed for up to 24 or 48 hours after exposure.</p> <p>Serious Eye Damage/Irritation Hydrochloric acid is corrosive to the eyes. Low concentrations of vapour or mist can be irritating, causing redness. Concentrated vapour, mist or splashed liquid can cause severe irritation and damage, burns and permanent blindness.</p> <p>Respiratory or Skin Sensitization Hydrochloric acid is not considered an occupational respiratory or skin sensitizer.</p>		
Symptoms of Chronic Exposure	Affection/discolouration of the teeth.		
Irritancy of Product	Respiratory tract, skin and eye irritant.		
Other Toxicological Information			
Ingredient	LD ₅₀	LC ₅₀	TLV
Hydrochloric Acid	2,121 mg/kg	1,106 ppm	2.98 mg/m ³
Ethylene Glycol Monobutyl Ether	1,230 mg/kg (Rat – Oral)	450 ppm/4hr (Rat)	20 ppm (97 mg/m ³)

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity	<p>Hydrochloric Acid:</p> <p>Toxicity to Algae EC₅₀ (Green Algae, 72 hr) = 0.0492 mg/L</p> <p>Toxicity to Fish LC₅₀ (Cyprinus Carpio, 96 hr) = 4.92 mg/L</p> <p>Toxicity to Daphnia & Aquatic Invertebrates LC₅₀ (Shrimp, 48 hr) = 100-300 ppm</p>
Persistence & Degradability	Not Applicable - hydrochloric acid disassociates in water.
Bioaccumulative Material	Hydrogen chloride does not accumulate in the food chain.

SAFETY DATA SHEET

FABRIKEM® DEGREASER & ETCH

Mobility in Soil	Hydrogen chloride dissociates into chloride and hydronium ions in moist soil.
Other Adverse Effects	Extremely toxic to aquatic life by lowering the pH below 5.5. Dissociates in water and will be neutralized by naturally occurring alkalinity and carbon dioxide. Acid will permeate soil, dissolving soil material and will be neutralized somewhat.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
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SECTION 14 TRANSPORT INFORMATION

Shipping Name	Proper Shipping Name: Corrosive Liquid, N.O.S. (Contains Hydrochloric Acid) Hazard Class: 8 ID Number: UN 1760 Packing Group: II
TDG	UN 1760 Corrosive Liquid, N.O.S. (Contains Hydrochloric Acid), Class 8, PG II
DOT	UN 1760 Corrosive Liquid, N.O.S. (Contains Hydrochloric Acid), Class 8, PG II

SECTION 15 REGULATORY INFORMATION

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.
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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 Available
N/E = Not Established