



Flinn Scientific Canada Inc.
175 Longwood Road South
Hamilton, Ontario L8P 0A1 Canada
1-844-200-1455

PRODUCT: Hydrochloric Acid, 6M

CODE: J395.006

SECTION 01: IDENTIFICATION

MANUFACTURER..... Flinn Scientific Inc.
PO Box 219
Batavia, Illinois 60510 USA
Tel: 1-800-452-1261

PRODUCT NAME..... Hydrochloric Acid, 6M

PRODUCT USE..... This product is intended for use in a laboratory. The use of this product is restricted for use in a laboratory only.

SYNONYMS..... Hydrogen chloride; Muriatic acid.

EMERGENCY NUMBER:..... CHEMTREC Emergency Phone Number: 703-527-3887 .

SECTION 02: HAZARD IDENTIFICATION



SIGNAL WORD..... DANGER.

HAZARD CLASSIFICATION..... Skin Corrosion — Category 1. Acute Toxicity (Inhalation) — Category 4. Acute Toxicity (Oral) — Category 4. Corrosive to Metals — Category 1 . Serious Eye Damage — Category 1.

HAZARD STATEMENT(S)..... H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled.

PRECAUTIONARY STATEMENT(S)..... P264 Wash thoroughly after handling. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves, protective clothing, eye protection and face protection. P270 Do not eat, drink or smoke when using this product. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area.

RESPONSE..... P310 IMMEDIATELY call a POISON CONTROL center or a doctor. 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. P363 Wash contaminated clothing before reuse.

STORAGE..... Flinn Suggested Chemical Storage Pattern: Inorganic #9. Store with acids, except nitric acid. P405 Store locked up.

DISPOSAL..... P501 Dispose of contents/container in accordance with local regulations.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	WT. %
Hydrochloric acid	7647-01-0	18.5
Water	7732-18-5	81.5

SECTION 04: FIRST AID MEASURES

MEDICAL ATTENTION AND SPECIAL TREATMENT Immediately call a POISON CENTER or physician .

INHALATION..... Remove victim to fresh air and keep at rest in a position comfortable for breathing.

INGESTION..... Rinse mouth. Call a POISON CENTER or physician if you feel unwell. Do NOT induce vomiting .

SKIN CONTACT..... Immediately remove all contaminated clothing. Rinse cautiously with water for several minutes. Wash contaminated clothing before reuse .

EYE CONTACT..... Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

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SECTION 05: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA..... Use a tri-class dry chemical fire extinguisher .
 HAZARDOUS COMBUSTION PRODUCTS. Nonflammable, noncombustible solution.
 SPECIAL FIRE FIGHTING PROCEDURES. When heated to decomposition, emits toxic fumes of hydrogen chloride.
 NFPA CODE..... H:3 F:0 R:1.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PROTECTIVE EQUIPMENT AND Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly
 EMERGENCY PROCEDURES after handling.
 METHODS AND MATERIALS FOR Ventilate area and contain the spill with sand or other inert absorbent material, neutralize
 CONTAINMENT AND CLEANING UP with sodium bicarbonate or calcium hydroxide, and deposit in a sealed bag or container.
 Absorb spills to prevent material damage . See Sections 8 and 13 for further information.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES..... Use only in a hood or well-ventilated area.
 STORAGE NEEDS..... Store with acids, except nitric acid. Store in a dedicated acid cabinet and away from any
 source of water; if an acid cabinet is not available, store in Flinn Saf-Cube™. Keep
 container tightly closed. Keep only in original container .
 FLINN SUGGESTED CHEMICAL STORAGE INORGANIC #9.
 PATTERN

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
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Hydrochloric acid	2 ppm	Not established	5 ppm (7 mg/m ³)	Not established	5 ppm (7 mg/m ³)	
Water	Not established	Not established	Not established	Not established	Not established	

PROTECTIVE EQUIPMENT..... Wear protective gloves, protective clothing, and eye protection.
 EYE/TYPE..... Safety goggles.
 RESPIRATORY/TYPE..... Respiratory device if needed. Use only in a hood or well-ventilated area.
 GLOVES/ TYPE..... Protective gloves.
 CLOTHING/TYPE..... Protective clothing.
 FOOTWEAR/TYPE..... Protective footwear.
 BODY/TYPE..... General personal protective equipment.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE..... Colourless to pale yellow liquid.
 ODOUR..... Pungent odour.
 ODOUR THRESHOLD..... No data available.
 pH..... <1.
 SPECIFIC GRAVITY..... Not available.
 MELTING POINT (°C)..... Not available.
 BOILING POINT (°C)..... Not available.
 EVAPORATION RATE..... Not applicable .
 FLASH POINT (°C), METHOD..... Not available.
 UPPER FLAMMABLE LIMIT (% VOL)..... Not available.
 LOWER FLAMMABLE LIMIT (% VOL)..... Not available.
 VAPOUR PRESSURE (mm Hg)..... Not applicable.
 VAPOUR DENSITY (AIR=1)..... Not applicable.
 SOLUBILITY..... Water and alcohol.
 PARTITION COEFFICIENT — Not available.
 (N-OCTANOL/WATER)
 FLAMMABILITY (SOLIDS AND GASES)..... Not applicable .
 AUTO IGNITION TEMPERATURE (°C)..... Not available.
 DECOMPOSITION TEMPERATURE..... Not available.
 VISCOSITY..... Not available.

SECTION 10: STABILITY AND REACTIVITY

STABILITY..... Shelf life: Good, if stored properly.
 POSSIBILITY OF HAZARDOUS REACTIONS Avoid contact with strong oxidizers, bases, metals, metal oxides, hydroxides, amines, and
 other alkaline materials.
 CONDITIONS TO AVOID..... See incompatible materials.
 INCOMPATIBLE MATERIALS..... Hydroxides, amines, alkalis, copper, brass, zinc, cyanides, sulfides and formaldehyde
 [Note: Hydrochloric acid is highly corrosive to most metals.].

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SECTION 10: STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS Decomposes upon heating to produce corrosive and/or toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Hydrochloric acid	3124 ppm 1 hour rat	900 mg/kg oral rabbit
Water	Not established	Not established
ROUTE OF ENTRY:.....	Inhalation, ingestion, skin and/or eye contact.	
ACUTE EFFECTS:.....	Eye and skin corrosion. Respiratory irritation, coughing, ulceration of nose and throat.	
CHRONIC EFFECTS	Pulmonary edema. Corrosive to teeth.	
TARGET ORGANS.....	Eyes, skin, respiratory system.	

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY..... Data not yet available.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS..... Please review all Federal, Provincial and Local Regulations that may apply before proceeding.

SECTION 14: TRANSPORT INFORMATION

SHIPPING NAME..... UN1789 - HYDROCHLORIC ACID - Class 8 - Packing group III.
 PROOF OF CLASSIFICATION..... This product has been classified in accordance with Part 2 of the Transportation of Dangerous Goods Regulations.

SECTION 15: REGULATORY INFORMATION

U.S. TSCA INVENTORY STATUS..... Listed. RCRA code D002.
 CEPA STATUS..... DSL - The substance is specified on the public Portion of the Domestic Substances List.
 EINECS STATUS..... Listed (231-595-7).

SECTION 16: OTHER INFORMATION

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PREPARED BY: Flinn Scientific Inc.
 DATE OF LATEST REVISION..... DEC 21/2015