

PRODUCT: HYDROCHLORIC ACID 5%

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: T. DONOVAN & SON (1997) LTD.
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CANADA E2M 3V2
TOLL FREE: 1-888-799-2645 / LOCAL (506) 642-1500

PRODUCT NAME: Hydrochloric Acid 5%

PRODUCT CODE: 638098.

CHEMICAL FORMULA: HCl.

CHEMICAL FAMILY: Inorganic.

MOLECULAR WEIGHT: 36.46 (HCl).

MATERIAL USE: Industrial Applications.

EMERGENCY PHONE NUMBER: (613)-996-6666

SECTION 02: HAZARDS IDENTIFICATION



SIGNAL WORD: DANGER.

HAZARD CLASSIFICATION: Corrosive to Metals - Category 1.
Skin Corrosion - Category 1B.
Serious Eye Damage - Category 1.
Specific Target Organ Toxicity - Single Exposure - Category 3.

HAZARD STATEMENT: **H290:** May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENT: **P234:** Keep only in original container.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P301+P310: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician.
P303+P361+P353: IF ON SKIN (or hair): remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P363: wash contaminated clothing before reuse.
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.
P305+P351+P338: IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P390: Absorb spillage to prevent material damage.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents/container according to all applicable regulations.

OTHER HAZARDS: None.

DIRECTION FOR USE: General cleaner. Scale remover. For use in food plants. Avoid contact with food. Please contact company representative for use directions.

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SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS #	WT. %
Hydrochloric Acid	7647-01-0	5-7

Definitions:

CAS - Chemical Abstract Service registry number.

WT. % - Percent Weight.

SECTION 04: FIRST AID MEASURES

GENERAL ADVICE:	Move out of dangerous area. Consult a physician. Show the safety data sheet to the doctor in attendance.
IF INHALED:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
IN CASE OF SKIN CONTACT:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water for at least 20 minutes. Consult a physician.
IN CASE OF EYE CONTACT:	Irrigate eyes for at least 15 minutes with copious amounts of water, keeping eyelids apart and away from eyeballs during irrigation.
IF SWALLOWED:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Do not leave victim unattended.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABILITY:	Not combustible/not flammable.
SUITABLE EXTINGUISHING MEDIA:	Suitable for surrounding fire. Carbon dioxide, dry chemical, alcohol foam, water fog.
HAZARDOUS COMBUSTION PRODUCTS:	Hydrogen chloride gas.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:	No data available.
SPECIAL PROCEDURES:	Evacuate hazard area. Wear full protective equipment including a self-contained breathing apparatus.

SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe area.
ENVIRONMENTAL PRECAUTIONS:	Do not allow product to enter drains.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	Handle in accordance with good industrial hygiene and safety practices. Avoid contact with eyes, skin and clothing. Avoid breathing mist or vapour. Wear protective equipment during handling. Use adequate ventilation. Follow label warnings even after container is emptied.
CONDITIONS FOR SAFE STORAGE:	Protect container from physical damage. Keep the container tightly closed when not in use. Store away from incompatible materials. Store in a cool and well-ventilated area.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT(S)	ACGIH TLV		OSHA PEL		NIOSH REL
	TWA	STEL	PEL	STEL	
Hydrochloric Acid	5 ppm	-	-	-	50 ppm
	5 ppm	-	-	-	-

Definitions:

ACGIH - American Conference of Governmental Industrial Hygienists.

NIOSH - National Institute for Occupational Safety and Health.

OSHA - Occupational Safety and Health Administration.

PEL - Permissible Exposure Limit.

RELs - Recommended Exposure Limits.

STEL - Short-term Exposure Limit.

TLV - Threshold Limit Value.

TWA - Time Weighted Average.

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SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:	Good ventilation should be provided to keep vapour and mist concentrations below the exposure limits.
RESPIRATORY PROTECTION:	Use NIOSH approved supplied-air respirator.
SKIN AND BODY PROTECTION:	Acid-proof gauntlet gloves such as: polyvinyl chloride (PVC), neoprene or nitrile. Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Acid proof boots.
EYE/FACE PROTECTION:	Splash proof chemical goggles. Face shield.
OTHER/TYPE:	Eye wash station and safety shower should be located near the work station.
NOTE:	In case of emergency or where there is a strong possibility of considerable exposure, wear a complete acid suit with hood, boots, and gloves. If acid vapour or mist are present and exposure limits may be exceeded, wear appropriate NIOSH respiratory protection.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Colourless to Light Yellow. Liquid.
ODOUR:	Pungent. Irritating. Strong.
ODOUR THRESHOLD:	0.3 ppm (Can Cause Olfactory Fatigue).
PH:	<1.
MELTING POINT/FREEZING POINT:	-30°C (-22°F).
BOILING POINT:	>100°C (212°F).
FLASH POINT, METHOD:	Not Applicable.
EVAPORATION RATE:	No Data Available.
FLAMMABILITY (SOLIDS AND GASES):	Not Applicable.
UPPER FLAMMABLE LIMIT (% BY VOL):	No Data Available.
LOWER FLAMMABLE LIMIT (% BY VOL):	No Data Available.
VAPOUR PRESSURE:	84 mm Hg @20°C.
VAPOUR DENSITY (AIR=1):	1.267 @ 20°C.
SPECIFIC GRAVITY (WATER=1):	1.03 g/cm ³ .
SOLUBILITY IN WATER (% W/W):	100%.
AUTO IGNITION TEMPERATURE:	No Data Available.
PARTITION COEFFICIENT N-OCTANOL/WATER:	No Data Available.
DECOMPOSITION TEMPERATURE:	Not Available.
VISCOSITY:	Not Available.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Avoid Incompatibles.
CHEMICAL STABILITY:	Stable under recommended storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS:	No Data Available.
CONDITIONS TO AVOID:	Concentrated acid is strong oxidizing agent. May cause ignition of combustible material on contact with generation of toxic fumes. Avoid open flames and sparks.
INCOMPATIBLE MATERIALS:	Strong oxidizing agents, strong reducing agents, bases and certain metals.
HAZARDOUS DECOMPOSITION PRODUCTS:	Hydrogen Chloride Gas.

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SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENT(S)	LC50	LD50
Hydrochloric Acid	3124 ppm (1 Hour)	5010 mg/kg (<i>Leporidae sp.</i> (Rabbit) - Dermal)

ACUTE TOXICITY:

ORAL LD50: No Data Available.
INHALATION LC50: 3124 ppm (1 Hour).
DERMAL LD50: 5010 mg/kg (Rabbit-Dermal).

SKIN CORROSION / IRRITATION: Causes Burns.

SERIOUS EYE DAMAGE / EYE IRRITATION, RESPIRATORY, OR SKIN SENSITIZATION: Causes Serious Eye Damage.

GERM CELL MUTAGENICITY: No Data Available.

CARCINOGENICITY: This product does not contain any ingredient designated by International Agency for Research on Cancer (IARC), National Toxicology Program (NTP), ACGIH or OSHA as probable or suspected human carcinogens.

REPRODUCTIVE TOXICITY: No Data Available.

STOT- SINGLE EXPOSURE: No Data Available.

STOT - REPEAT EXPOSURE: No Data Available.

ASPIRATION HAZARD: No Data Available.

POTENTIAL HEALTH EFFECTS: Inhalation - may be harmful if inhaled. May cause respiratory tract irritation. Ingestion - may be harmful if swallowed. Eyes - causes severe eye burns. May cause eye irritation. Skin - may be harmful if absorbed through skin. Causes skin irritation.

SIGNS AND SYMPTOMS OF EXPOSURE: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonia, pulmonary edema, burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, effects may be delayed. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigate.

SECTION 12: ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY: No Data Available.
BIOACCUMULATIVE POTENTIAL: No Data Available.
TOXICITY: Toxicity To Fish - LC50 - *Gambusia affins* (Mosquito Fish) - 138 mg/kg - 96H.
MOBILITY IN SOIL: No Data Available.
OTHER ADVERSE EFFECTS: No Information Available.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: In accordance with municipal, provincial and federal regulations.
PRODUCT: Avoid Release To The Environment.

SECTION 14: TRANSPORT INFORMATION

TRANSPORTATION OF DANGEROUS GOODS (TDG): Regulated.
UNITED NATIONS (UN) NUMBER: 1789
TRANSPORT HAZARD CLASS: 8
PACKING GROUP: II
PROPER SHIPPING NAME: HYDROCHLORIC ACID.
SPECIAL SHIPPING INSTRUCTIONS: Refer to TDG regulations.

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SECTION 15: REGULATORY INFORMATIONWORKPLACE HAZARDOUS MATERIALS
INFORMATION SYSTEM (WHMIS)
CLASSIFICATION:

E.

HAZARDOUS PRODUCT REGULATIONS
(HPR) COMPLIANCE:

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

SECTION 16: OTHER INFORMATION

PREPARED BY:

T. Donovan & Son (1997) Ltd.

PREPARATION DATE:

March 2018.

DISCLAIMER:

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