

MATERIAL SAFETY DATA SHEET

EC 3103 A

Latest Revision Date...07/19/06

Print Date.....09/07/06

SECTION 1

MANUFACTURER INFORMATION

HYDRO-ZONE, INC.
17800 Telegraph Road
Romulus, Michigan 48174
Ph. (734) 247-4488

EMERGENCY CONTACT:
(800) 255-3924

SECTION 2

PRODUCT IDENTIFICATION

PRODUCT NUMBER..... HZ 3103A
TRADE NAME OR CHEMICAL NAME... EC 3103 A
SYNONYMS..... Hydrochloric Acid
CHEMICAL FAMILY..... Acid Descaler
NFPA - HEALTH HAZARD..... 3
 FIRE HAZARD..... 0
 REACTIVITY HAZARD..... 0
NFPA SCALE..... 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant
KEY..... NA= Not Applicable ND= Not Determined

SECTION 3

HAZARDOUS INGREDIENTS

CHEMICAL NAME(S)	CAS NUMBER	% WT	TLV-TWA	PEL	SEC.313	CARCINOGEN?
Hydrochloric Acid	7647-01-0	<40	5 ppm	5 ppm	No	No

SECTION 4

SHIPPING DATA

D.O.T. PROPER SHIPPING NAME... Hydrochloric Acid, Solution
D.O.T. HAZARD CLASS..... Corrosive Material Class 8
D.O.T. LABELS REQUIRED..... Corrosive
UN/NA I.D. NUMBER..... UN 1789
PACKAGING GROUP..... II
NON-BULK SHIPPING NAME..... Hydrochloric Acid, Solution, 8, UN 1789, PG II
BULK SHIPPING NAME..... Hydrochloric Acid, Solution, 8, UN 1789, PG II, RQ (If 5,050 lbs. or more in one package)

SECTION 5

PHYSICAL DATA

BOILING/FREEZING POINT @760 mmHg... 150°F (66°C) / ND
pH..... <1
VAPOR PRESSURE mm Hg @20° C..... 30
VAPOR DENSITY (Air = 1)..... 1.3
PERCENT VOLATILE BY WEIGHT (%)..... 100
SPECIFIC GRAVITY @20°C..... 1.17
SOLUBILITY IN WATER..... Complete
EVAPORATION RATE..... (Water=1) ~1
APPEARANCE AND ODOR..... Light yellow liquid with biting pungent odor.

SECTION 6

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Test Method)..... NA
AUTOIGNITION TEMPERATURE..... NA
FLAMMABILITY LIMITS IN AIR (% V)... NA

SECTION 6FIRE AND EXPLOSION HAZARD DATA

CONT'D

EXTINGUISHING MEDIA..... Not Combustible
 SPECIAL FIRE FIGHTING PROCEDURES... Wear self-contained breathing apparatus.
 UNUSUAL FIRE & EXPLOSION HAZARDS... Contact with many metals liberates hydrogen gas that can form explosive environments.

SECTION 7REACTIVITY DATA

PRODUCT STABILITY..... Stable
 Conditions to Avoid..... Temperatures above 200°F (93°C)
 CHEMICAL INCOMPATIBILITY..... Strong alkalis, strong oxidizers, most metals and their oxides, cyanides, sulfides, amines, formaldehyde.
 HAZARDOUS DECOMPOSITION PRODUCTS... Hydrogen chloride, hydrogen gas, hydrogen sulfide, hydrogen cyanide
 HAZARDOUS POLYMERIZATION..... Will Not Occur

SECTION 8HEALTH HAZARD DATA

SKIN CONTACT... Direct contact with liquid will be corrosive to the skin, with the potential for scarring and ulceration.
 EYE CONTACT.... Will produce immediate irritation. Liquid is corrosive to eye tissues resulting in severe burns, potential visual impairment or loss of sight.
 INHALATION.... Vapors are extremely irritating. Breathing high concentrations will cause immediate irritation, symptoms of burning, choking and coughing.
 INGESTION..... May result in burns of the mouth, throat and stomach, pain, nausea, vomiting. Can be fatal.

SECTION 9EMERGENCY AND FIRST AID PROCEDURES

SKIN.....Remove contaminated clothing and flush exposed skin with soap and water for at least 15 minutes. Get medical attention promptly. Discard contaminated clothing and footwear.
 EYES.....Immediately flush eyes with large amounts of water for 15 minutes and get immediate medical attention. Speed in treatment is essential.
 INGESTION...If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately. Never give anything by mouth to an unconscious person.
 INHALATION...Move to fresh air. Aid in breathing, if necessary, and get medical attention.

SECTION 10ENVIRONMENTAL DATA

SPILL OR LEAK PROCEDURES... Avoid skin contact. Keep upwind. Neutralize with appropriate material and place in suitable container for proper disposal. Flush neutralized residues with water to sanitary sewer.
 WASTE DISPOSAL METHOD..... Corrosive. Dispose of in accordance with all federal, state and local regulations.
 HAZARDOUS WASTE 40CFR261... Yes. Hazardous Waste Number: D002
 CONTAINER DISPOSAL..... Empty containers may contain residuals. Thoroughly clean, then offer for recycling, reuse, or disposal in accordance with governmental regulations.

SECTION 11SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION.....NIOSH/MSHA approved can or cartridge respirator for gas and vapor as needed to maintain P.E.L.
 VENTILATION.....Local and/or mechanical exhaust to maintain exposure below P.E.L.
 PROTECTIVE CLOTHING.....Neoprene gloves, full chemical suit, boots - as necessary to prevent skin contact.
 EYE PROTECTION.....Chemical goggles and/or full face shield.
 OTHER PRECAUTIONS.....Safety shower and eyewash fountains should be easily accessible.

SECTION 12SUPPLIER INFORMATION

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of manufacturer. The data on this sheet relates only to the specific material designated herein. Manufacturer assumes no legal responsibility for use or reliance upon this data.