



I - PRODUCT IDENTIFICATION AND USE

MSDS ID: 1283

PRODUCT NAME: MURIATIC ACID

USE: Acid Descaling

SUPPLIER:

JohnsonDiversey Canada, Inc.
2401 Bristol Circle
Oakville Ontario, L6H 6P1, Canada

EMERGENCY PHONE:

1-800-668-7171

WHMIS CLASSIFICATION: D1B E

CHEMICAL FAMILY: mineral acid

TRADE NAME / SYNONYMS: not applicable

CHEMICAL NAME: not applicable

II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENT	% w/w	CAS #	LD50 / LC50	Route / Species
Hydrochloric acid	15-40	007647-01-0	LD50 900 mg/kg	oral/rab

III - HANDLING AND DISPOSAL PROCEDURES

PERSONAL PROTECTIVE EQUIPMENT:

Gloves: neoprene or nitrile

Eye: safety goggles

Footwear: not required

Respiratory: If mists are generated, use NIOSH approved mask

Other: rubber apron

SPECIAL HANDLING PROCEDURES AND EQUIPMENT: Do not breathe mist, spray or vapours. Avoid eye and skin contact.

VENTILATION REQUIREMENTS: mechanical exhaust

INCOMPATIBILITY (Material to Avoid): Alkaline and chlorinated materials.

SPILL PROCEDURES: Contain the spill. Do not allow the spilled product to go to drain. Mop up or soak up with absorbent clay for disposal. Wash spill area with large volumes of water. Ventilate area well. Neutralize with lime or soda ash.

WASTE DISPOSAL: Dispose according to municipal, provincial, and federal regulations.

STORAGE / SHIPPING REQUIREMENT: Store in a cool dry area in a closed container. UN1789

IV - PHYSICAL PROPERTIES

APPEARANCE / ODOUR: Clear, colourless liquid

S.G. / BULK DENSITY(g/cc): 1.16

pH: < 1.0

VAPOUR PRESSURE (mmHg): 24

VAPOUR DENSITY (air=1): 1.3 (HCl gas)

ODOUR THRESHOLD: not available

BOILING POINT: 100°C

FREEZING POINT: -40°C

PERCENT VOLATILE: 99%

SOLUBILITY IN WATER: soluble

EVAPORATION RATE (water=1): not available

V - TOXICOLOGICAL PROPERTIES

EFFECTS OF ACUTE EXPOSURE TO MATERIAL:

EYES: Corrosive. May cause severe irritation. May cause permanent damage if not treated promptly.

SKIN: Corrosive. May cause severe irritation. May cause temporary or permanent damage if not treated promptly.

INGESTION: Corrosive. May cause severe irritation of the digestive tract. Nausea, vomiting, diarrhea, circulatory collapse and death may occur.

INHALATION: May cause irritation of respiratory tract, coughing and choking. Inflammation and ulceration of respiratory tract may occur.

LD50 (calculated): 900 mg/kg

LC50 (calculated): 1562 ppm/4H

OTHER TOXIC EFFECTS: Breathing vapours may cause delayed lung injury. TLV: 5 ppm (7 mg/m3)	
EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: not available	
VI - FIRST AID MEASURES	
EYES:	Flush eyes with plenty of water for at least 15 minutes. Hold eyelids open while rinsing. Contact a physician immediately.
SKIN:	Flush affected area thoroughly with water. If irritation develops, contact a physician.
INGESTION:	Drink large volumes of water . Never give anything by mouth to an unconscious patient. Do not induce vomiting. Contact a physician immediately.
INHALATION:	Remove patient to fresh air. Get medical attention for any breathing difficulty.
VII - FIRE AND EXPLOSION DATA	
FLAMMABLE: No. Will generate explosive hydrogen gas on contact with metals.	
FLASH POINT, °C: not applicable	AUTO IGNITION TEMPERATURE, °C: N/Ap
EXTINGUISHING MEDIA: Water [x] Dry Chemical [x] Carbon Dioxide [x] Foam [x] Other []	
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus.	
HAZARDOUS COMBUSTION PRODUCTS: Hydrogen chloride gas released when heated. Hydrogen gas released on contact with soft metals.	
EXPLOSIVE SENSITIVITY TO: not applicable	
VIII - REACTIVITY DATA	
STABILITY: Stable [x] Unstable []	
CONDITIONS TO AVOID: not applicable.	
INCOMPATIBILITY (Material to Avoid) : Alkaline and chlorinated materials. Aluminum, brass, copper, iron, mild steel. Organic amines, oxides, and polymerizable monomers.	
HAZARDOUS DECOMPOSITION PRODUCTS: Contact with chlorinated materials will release chlorine gas. Contact with alkali will generate heat and release hydrogen chloride gas. Contact with soft metals forms flammable hydrogen gas.	
REACTIVITY: not dangerously reactive	
IX - MSDS PREPARATION	
SOURCES USED: RTECS, Cheminfo	PREPARED BY: JohnsonDiversey Canada. Inc. Regulatory Department Food Division Phone (905) 829-1200
PREPARATION DATE: April 15, 2003	
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