

MALLINCKRODT INC SCIENCE PRODUCTS DIVISION -- HYDROCHLORIC ACID,37% --
6810-00-753-4786

===== Product Identification =====

Product ID:HYDROCHLORIC ACID,37%

MSDS Date:12/08/1995

FSC:6810

NIIN:00-753-4786

MSDS Number: CDMMR

=== Responsible Party ===

Company Name:MALLINCKRODT INC SCIENCE PRODUCTS DIVISION

Address:PARIS BYPASS

Box:M

City:PARIS

State:KY

ZIP:40361

Country:US

Info Phone Num:314-982-5000

Emergency Phone Num:314-982-5000

CAGE:62910

=== Contractor Identification ===

Company Name:MALLINCKRODT SPECIALTY CHEMICALS CO

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865

Country:US

Phone:908-859-2151

CAGE:62910

Company Name:SCIENCE KIT INC

Address:777 E PARK DR

Box:City:TONAWANDA

State:NY

ZIP:14150-6708

Country:US

Phone:716-874-6020

CAGE:57020

===== Composition/Information on Ingredients =====

Ingred Name:HYDROGEN CHLORIDE (HYDROCHLORIC ACID) (SARA

302/313)
(CERCLA)
CAS:7647-01-0
RTECS #:MW4025000
Fraction by Wt: 37%
Other REC Limits:NONE SPECIFIED
OSHA PEL:C 5 PPM
ACGIH TLV:C 5 PPM; 9596
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

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===== Hazards Identification =====

LD50 LC50 Mixture:LD50 (ORAL RABBIT) IS 900 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE-EYES:SEVERE IRRITATION,PAINFUL
BURNS
. SKIN:SEVERE BURNS. INHALATION:ULCERATION OF
NOSE,THROAT,LARYNX. INGESTION: SEVERE BURNS OF MUCOUS MEMBRANE OF
MOUTH,ESOPHAGUS,STOMACH. CHRONIC-EYES: PERMANENT VISUAL
IMPAIRMENT,TOTAL LOSS OF SIGHT. SKIN:DERMATITIS. INHALATION:EROSION
OF TEETH.EDEMA OF LUNGS.
Explanation of Carcinogenicity:NONE OF THE COMPOUNDS IN THIS PRODUCT IS
LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.
Effects of Overexposure:EYES:PAINFUL BURNS. SKIN:SEVERE BURNS.
INHALATION:COUGHING,BURNING OF TH
ROAT,CHOKING SENSATION.
INGESTION:LIPS AND MOUTH USUALLY TURN WHITE,AND LATER BROWN.PAIN IN
THE THROAT AND STOMACH, DIFFICULTY I N SWALLOWING,INTENSE
THIRST,NAUSEA AND VOMITING,FOLLOWED BY DIARRHEA,IN SEVERE CASES BY
COLLAPSE AND UNCONSCIOUSNESS.
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING DISEASE
INVOLVING SKIN, OR RESPIRATORY TRACT MAY BE AT INCREASED RISK FROM
EXPOSURE.

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===== First Aid Measures =====

First Aid:
NHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING.
GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER
FOR 15 MINUTES.GET MEDICAL ATTENTION. SKIN:REMOVE CONTAMINATED
CLOTHING .WASH WITH SOAP AND WATER.IF IRRITATIONPERSISTS,SEE
DOCTOR. INGESTION:DO NOT INDUCE VOMITING.GIVE LARGE QUANTITIES OF
WATER OR MILK.GET IMMEDIATE MEDICAL ATTENTION.NOTHING BY MOUTH IF
UNCONSCIOUS.

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===== Fire Fighting Measures =====

Flash P

oint:NONE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:USE WATER SPRAY.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. CONTAIN RUNOFF.

Unusual Fire/Explosion Hazard:CAN REACT WITH METAL TO RELEASE FLAMMABLE AND EXPLOSIVE HYDROGEN GAS. CONTAINERS MAY BURST ON HEAT OF FIRE.

===== Accidental Release Measures =====

Spill

Release Procedures:WEAR SCBA AND PROTECTIVE CLOTHING.NEUTRALIZE WITH LIME,SODA ASH OR LIMESTONE SOLUTIONS.NEUTRALIZATION WILL EVOLVE CARBON DIOXIDE.IN ENCLOSED SPACES,PROVIDE AMPLE VENTILATION.ABSORB IN INERT MATERIAL,AND PLACE IN APPROPRIATE DISPOSAL CONTAINER.

Neutralizing Agent:LIME(CALCIUM HYDROXIDE),SODA ASH(SODIUM CARBONATE), LIMESTONE(CALCIUM CARBONATE)

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL

DRY, WELL VENTILATED

AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT FROM PHYSICAL DAMAGE AND DIRECT SUNLIGHT.

Other Precautions:DO NOT TAKE INTERNALLY. DO NOT BREATHE MIST. AVOID PROLONGED OR REPEATED BREATHING OF VAPOR. AVOID CONTACT WITH EYES. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. FOR INDUSTRIAL USE ONLY.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:POWERED AIR-PURIFYING RESPIRATOR WITH AN ACID

GAS CARTRIDGE OR SELF-CONTAINED BREATHING APPARATUS AS REQUIRED FOR THE EXPOSURE OF CONCERN.

Ventilation:GENERAL (MECHANICAL) AND/OR LOCAL EXHAUST VENTILATION.

LOCAL EXHAUST IS PREFERRED.

Protective Gloves:RUBBER, NEOPRENE.

Eye Protection:CHEMICAL GOGGLES AND/OR FULL FACE SHIELD

Other Protective Equipment:IMPERVIOUS CLOTHING,FOOTWEAR AND HEAD GEAR. EYE WASH STATION AND SAFETY SHOWER.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED P

PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.

Supplemental Safety and Health

AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS.

===== Physical/Chemical Properties =====

HCC:C1

Boiling Pt:B.P. Text:127F,53C

Melt/Freeze Pt:M.P/F.P Text:-101F,-74C

Vapor Pres:190

Vapor Density:NOT GIVEN

Spec Gravity:1.18

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:INFINITE IN WATER

Appearance and Od

or:CLEAR, COLORLESS, FUMING LIQUID.

Percent Volatiles by Volume:100 %

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG BASES, METALS, METAL OXIDES, HYDROXIDES, AMINES, CARBONATES, CYANIDES, SULFIDES, SULFITES, FORMALDEHYDE.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES.

Hazardous Decomposition Products:HYDROGEN CHLORIDE FUMES WHEN HEATED.

WILL REACT WITH WATER TO PRODUCE HEAT AND TOXIC AND CORROSIVE FUMES.

===== Disposal Considerations =====

Waste Disposal Methods:NOTIFY YOUR LOCAL ENVIRONMENTAL OFFICER.DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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