

FISHER SCIENTIFIC, CHEMICAL DIV. -- HYDROCHLORIC ACID,MURIATIC ACID,A-144 --  
6810-01-145-8100

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

Product ID:HYDROCHLORIC ACID,MURIATIC ACID,A-144

MSDS Date:05/10/1991

FSC:6810

NIIN:01-145-8100

MSDS Number: BLMWK

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:

201-796-7100

Emergency Phone Num:201-796-7100 OR 201-796-7523

CAGE:1B464

=== Contractor Identification ===

Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

Address:1 REAGENT LANE

Box:City:FAIRLAWN

State:NJ

ZIP:07410-2802

Country:US

Phone:201-796-7100

CAGE:1B464

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

Ingred Name:HYDROGEN CHLORIDE (HYDROCHLORIC ACID) (SARA III)

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; 9192  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 63%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:NOT RELEVANT  
ACGIH TLV:NOT RELEVANT

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===== Hazards Identification =====  
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LD50 LC50 Mixture:LC50 INHALATION-RAT 4701 PPM/30 MINUTES  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE-INHALATION:  
ION:MAY CAUSE IRRITATION,  
BURNING,COUGHING,CHOKING,HEADACHE,PULMONARY EDEMA,LIVER DAMAGE &  
DEATH. EYES:CAN CAUSE SEVERE IRRITATION,BURNS,LOSS OF  
VISION.SKIN:SEVERE IRRITATION,NECROSIS & BURNS.INGESTION:MAY CAUSE  
SEVERE BURNS TO MOUTH, THROAT & STOMACH.DEATH MAY  
OCCUR.CHRONIC-BRONCHITIS,GASTRITIS,DERMATITIS  
Effects of Overexposure:INHALATION MAY CAUSE IRRITATION, BURNING,  
COUGHING, CHOKING, HEADACHE, PULMONARY EDEMA, LIVER DAMAGE & DEATH.  
CAN CAUSE SEVERE EYE IRRITATION,  
ON, BURNS, LOSS OF VISION. MAY RESULT  
IN SEVERE IRRITATION, NECROSIS, ULCERATION & BURNS OF SKIN.  
INGESTION MAY CAUSE SEVERE BURNS TO MOUTH, THROAT & STOMACH. DEATH  
MAY OCCUR.  
Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN DISORDERS

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===== First Aid Measures =====  
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First Aid:GET MEDICAL CARE IN ALL CASES.EYES/SKIN: IMMEDIATELY FLUSH  
WITH WATER FOR AT LEAST 15 MINUTES.KEEP EYELIDS OPEN.  
INHALATION:REMOVE TO FRESH AIR.GIVE CPR/OXYGEN IF  
NECESSARY.INGESTION:DO NOT USE GASTRIC LAVAGE/EMESIS.IF  
CONSCIOUS,DRINK LARGE AMOUNT OF WATER/ MILK.IF VOMITING  
OCCURS,DRINK FLUIDS REPEATEDLY.INGESTED ACID MUST BE DILUTED 100  
FOLD TO RENDER IT HARMLESS TO TISSUE.TREAT SYMPTOMATICALLY.

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===== Fire Fighting Measures =====  
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Flash Point:NONE  
Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY  
CHEMICAL FOR SURROUNDING FIRE. DO NOT PUT WATER INTO THE ACID TANK.  
Fire Fighting Pro

cedures:WEAR A FULL FACE SELF-CONTAINED BREATHING APPARATUS AND IMPERVIOUS CLOTHING. PREVENT HUMAN EXPOSURE TO FIRE, FUMES/ PRODUCTS OF COMBUSTION.

Unusual Fire/Explosion Hazard:EXCESSIVE HEAT MAY CAUSE THE TANK TO RUPTURE. TAKE CARE NOT TO IGNITE HYDROGEN GAS WHICH CAN ACCUMULATE INSIDE METAL TANKS CONTAINING HYDROCHLORIC ACID.

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

Spill Release Procedures:WEAR PROPER PROTECTIVE EQUIPMENT.EVACUATE AREA,KEEP UP

WIND.WEAR SELF-CONTAINED BREATHING APPARATUS.DIKE LARGE SPILLS. COVER SPILLS WITH SODIUM BICARBONATE,SODA ASH, OR LIME.AVOID FOAMING. TRANSFER TO DOT APPROVED CONTAINERS.IF SMALL SPILLS,USE SAND.

Neutralizing Agent:SODA ASH, LIME, SODIUM BICARBONATE

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

Handling and Storage Precautions:STORAGE-STORE IN A COOL WELL VENTILATED PLACE AWAY FROM SUN & HEAT.STORE IN AN UPRIGHT POSITION.

Other Precautions:DANGER! CORROSI

VE; BURNS EYES AND SKIN.HARMFUL IF

SWALLOWED. DO NOT GET IN EYES,ON SKIN,OR ON CLOTHING.DO NOT BREATH VAPORS. KEEP CONTAINER CLOSED.DO NOT TAKE INTERNALLY.ALWAYS POUR ACID INTO WATER. R EPORTABLE QUANTITY IS 5000 POUNDS.

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

Respiratory Protection:USE NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH) OR MINE SAFETY AND HEALTH ADMINISTRATION (MSHA) APPROVED RESPIRATOR APPROPRIATE FOR THIS PRODUCT WHEN PERMISSIBLE

EXPOSURE LIMITS ARE E XCEEDED.

Ventilation:PROVIDE GENERAL VENTILATION TO MEET OSHA PERMISSIBLE EXPOSURE LIMITS (OSHA PEL).

Protective Gloves:RUBBER OR NEOPRENE

Eye Protection:CHEMICAL SAFETY GOGGLES & FACE SHIELD

Other Protective Equipment:USE RUBBER SPLASH APRON AND RUBBER BOOTS. EYEWASH AND SAFETY SHOWER SHOULD BE LOCATED NEARBY.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

===== Physical/Chemical Properties ==

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HCC:C1

Vapor Density:1.3

Spec Gravity:1.2

pH:1.1

Solubility in Water:COMPLETE

Appearance and Odor:COLORLESS TO YELLOW LIQUID WITH A PUNGENT,  
IRRITATING ODOR.

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

Stability Indicator/Materials to Avoid:YES

ACETIC ANHYDRIDE,ALCOHOLIC HYDROGEN CYANIDE,AL,2-  
AMINOETHANOL,NH4OH,BASES,WATER,BRASS,STRONG  
OXIDIZERS,METALS,FLUORINE

Stability Condition to Avoid:STABLE AT NORMAL AMBIENT TEMPERATURES AND  
ATMO

SPHERIC PRESSURE. RELEASES HYDROGEN CHLORIDE GAS WHEN HEATED.

Hazardous Decomposition Products:WITH METALS GIVES HYDROGEN GAS,WHICH  
WHEN MIXED WITH AIR,MAY RESULT IN EXPLOSION OR FIRE.WITH OXIDIZER  
GIVES OFF CL2.

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

Waste Disposal Methods:CONTACT FEDERAL, COUNTY, AND LOCAL ENVIRONMENTAL  
REGULATORS FOR GUIDANCE REGARDING PROPER DISPOSAL.

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