

GENERAL CHEMICAL CORPORATION -- ALUMINUM ETCHANT 16-1-1-2 P/N 186-2829 --
6810-01-027-6112

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

Product ID:ALUMINUM ETCHANT 16-1-1-2 P/N 186-2829

MSDS Date:08/05/1991

FSC:6810

NIIN:01-027-6112

MSDS Number: BLXHZ

=== Responsible Party ===

Company Name:GENERAL CHEMICAL CORPORATION

Address:90 EAST HAKSEY ROAD

Box:395

City:PARSIPPANY

State:NJ

ZIP:07054-0393

Country:US

Info Phone Num:201-515-1838

Emergency Phone Num:800-631-8050

Prepar

er's Name:C.A. EISENHARD

CAGE:0AU44

=== Contractor Identification ===

Company Name:CHEMICAL COMMODITIES AGENCY, INC.

Address:27447 PACIFIC STREET

Box:City:HIGHLAND

State:CA

ZIP:92346-2640

Country:US

Phone:909-864-2310

CAGE:60777

Company Name:GENERAL CHEMICAL CORPORATION

Address:90 EAST HALSEY ROAD

Box:City:PARSIPPANY

State:NJ

ZIP:07054

Country:US

Phone:973-515-1840

CAGE:0AU44

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

Ingred Name:PHOSPHORIC ACID (SARA III) *

CAS:7664-

38-2
RTECS #:TB6300000
Fraction by Wt: 80%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3/3 STEL *
ACGIH TLV:1 MG/M3/3 STEL; 9192
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:NITRIC ACID (SARA III) *
CAS:7697-37-2
RTECS #:QU5775000
Fraction by Wt: 5%
Other REC Limits:NONE SPECIFIED
OSHA PEL:2 PPM/4 STEL *
ACGIH TLV:2 PPM/4 STEL; 9192 *
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:ACETIC ACID (SARA III) *
CAS:64-19-7
RTECS #:AF1225000
Fraction by Wt: 5%
Other REC Limits:NONE
SPECIFIED
OSHA PEL:10 PPM *
ACGIH TLV:10 PPM/15 STEL; 9192
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 10%
Other REC Limits:NONE SPECIFIED

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: MAY CAUSE IRRITATION OF EYES,
SKIN, UPPER RESPIRATORY TRACT, OR GI TRAC

T. MAY CAUSE BURNS OF SKIN, EYES AND MUCOUS MEMBRANES. MAY CAUSE DAMAGE TO EYES OR BLINDNESS. MAY CAUSE LUNG DAMAGE. MAY B E FATAL IF INGESTED. CHRONIC: LUNG DAMAGE, DERMATITIS.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Effects of Overexposure:INHALATION: COUGHING, WHEEZING, SNEEZING, BURNING SENSATION IN LUNGS, SORE THROAT, SALIVATION, LABORED BREATHING. EYES: REDNESS, TEARING, BU

RNS, BLURRED VISION. SKIN:

REDNESS, RASH, ITCHING, BURNS. IN GESTION: SEVERE BURNS TO MOUTH, THROAT,AND ESOPHAGUS, CIRCULATORY SHOCK, UNCONSCIOUSNESS.

Medical Cond Aggravated by Exposure:PREEXISTING SKIN OR RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE.

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

First Aid:INHALATION: REMOVE PERSON TO FRESH AIR. RESUSCITATE IF NEEDED. EYES: FLUSH WITH WATER FOR 15 MINUTES. SEE DOCTOR. SKIN: REMOVE CONTAMINATED CLOTHES. FLUSH WITH LOTS OF WATER THEN WASH WITH SOAP AND WA TER. SEE DOCTOR. INGESTION: DO NOT INDUCE VOMITING. GIVE MILK OR WATER TO CONSCIOUS VICTIM. GET IMMEDIATE MEDICAL ATTENTION.

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

Flash Point Method:COC

Flash Point:104F,40C

Lower Limits:5.4%

Upper Limits:16.0%

Extinguishing Media:WATER SPRAY

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COOL FIRE EXPOSED CONTAINERS WITH WATER

SPRAY. MOVE CONTAINERS FROM FIRE IF DONE AT NO RISK.

Unusual Fire/Explosion Hazard:CONTACT WITH COMMON METALS AT ELEVATED TEMPERATURES PRODUCES HYDROGEN GAS, WHICH MAY FORM FLAMMABLE AND EXPLOSIVE MIXTURES IN AIR.

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

Spill Release Procedures:NEUTRALIZE. ABSORB IN INERT MATERIAL. SCOP UP AND PLACE IN A CONTAINER OF COMPATIBLE MATERIAL FOR LATER DISPOSAL.

Neutralizing Agent:20% SODIUM BICARBONATE S

OLUTION

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

Handling and Storage Precautions:KEEP OUT OF HEAT AND SUNLIGHT. PROTECT FROM PHYSICAL DAMAGE. KEEP UPRIGHT.

Other Precautions:HANDLE ESSENTIALLY AS 80% PHOSPHORIC ACID (ORTHO). KEEP IN COOL, DRY AREA.

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

Respiratory Protection:NONE NORMALLY REQUIRED. IN EMERGENCY SITUATIONS WEAR SELF-CONTAINED BREATHING APPARATUS OR NIOSH/MSHA APPROVED RESPIRATOR.

Ventilation:CLOSED VENTILATION SYSTEM MUST BE MADE IF CORROSION RESISTANT MATERIALS.

Protective Gloves:NEOPRENE OR PVC GAUNTLETS

Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES

Other Protective Equipment:RUBBER APRON, EYE WASH STATION & SAFETY SHOWER

Work Hygienic Practices:WASH HANDS AFTER USE AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

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

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HCC:C1

Boiling Pt:B.P. Text:502F,261C

Melt/Freeze Pt:M.P/F.P Text:-0F,-18C

Vapor Pres:6

Vapor Density:2.07

Spec Gravity:1.5-1.6

Evaporation Rate & Reference:>1 (N-BUTYL ACETATE=1)

Solubility in Water:COMPLETE

Appearance and Odor:CLEAR, COLORLESS LIQUID; SLIGHT ACETIC ACID ODOR

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, MOST METALS, METAL OXIDES, STRONG ALKALIS, CARBONATES, SULFIDES,

AND CYANIDES.

Stability Condition to Avoid:TEMPERATURES ABOVE BOILING POINT (502F).

Hazardous Decomposition Products:OXIDES OF NITROGEN AND CARBON; ACETIC ACID.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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