HANDY AND HARTMAN -- FLUX,AMS 3410 G,0-F-499 D,TYPE B,AWS CLASS -- 3439-00-582-1110

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

Product ID:FLUX,AMS 3410 G,0-F-499 D,TYPE B,AWS CLASS
MSDS Date:01/16/1989
FSC:3439
NIIN:00-582-1110
MSDS Number: BLPFQ
=== Responsible Party ===
Company Name:HANDY AND HARTMAN
Address:850 THIRD AVE
City:NEW YORK
State:NY
ZIP:10022-6222
Country:US
Info Phone Num:212-752-3400/203-2
59-8321
Emergency Phone Num:212-207-2632/203-259-8321
CAGE:JO825
=== Contractor Identification ===
Company Name:HANDY & HARMAN
Address:850 THIRD AVENUE
Box:City:NEW YORK
State:NY
ZIP:10022
Country:US
Phone:212-752-3400
CAGE:73977
Company Name:HANDY AND HARTMAN
Address:850 THIRD AVE
City:NEW YORK
State:NY
ZIP:10022-6222
Country:US
Phone:212-752-3400
CAGE:JO825

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

Ingred Name:POTASSIUM FLUORIDE BORATE HYDROXIDE
CAS:12228-71-6
Frac

tion by Wt: 50 - 70%
Other REC Limits:NONE SPECIFIED
OSHA PEL:2.5 MG/M3 (MFR)
ACGIH TLV:2.5 MG/M3 (MFR)

Ingred Name:POTASSIUM HYDROXIDE (SARA III)
CAS:1310-58-3
RTECS #:TT2100000
Fraction by Wt: 0.05-.9%
Other REC Limits:NONE SPECIFIED
OSHA PEL:C, 2 MG/M3
ACGIH TLV:C 2 MG/M3; 9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:POTASSIUM FLUORIDE SOLUTION
CAS:7789-23-3
RTECS #:TT0700000
Fraction by Wt: 5 - 20%
Other REC Limits:NONE SPECIFIED
OSHA PEL:2.5 MG/M3 (MFR)
ACGIH TLV:2.5 MG/M3
(MFR)

Ingred Name:WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 20 - 35%
Other REC Limits:NONE SPECIFIED
OSHA PEL:NOT RELEVANT
ACGIH TLV:NOT RELEVANT

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

LD50 LC50 Mixture:LD50 (ORAL RAT) IS 245 MG/KG FLUORIDES
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE-FLUORIDES ARE POISONOUS IF
SWALLOWED.POTASSIUM HYDROXIDE IS B
OTH TOXIC(LD50,RAT=365 MG/KG) &
AN IRRITANT.PROLONGED SKIN CONTACT MAY CAUSE
DERMATITIS.OVEREXPOSURE TO BF3 & HF GASES ON HEATING ARE
TOXIC.B2O3 IS AN IRRITANT.CHRONIC-DERMATITIS.
Effects of Overexposure:EYES, SKIN AND RESPIRATORY TRACT IRRITATION.
TOXIC IF SWALLOWED OR INHALED.
Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN DISORDERS MAY BE
AGGRAVATED BY EXPOSURE TO THIS MATERIAL.

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

First Aid:CALL A

PHYSICIAN IN ALL CASES.INHALATION:REMOVE TO FRESH AIR.GIVE CPR/OXYGEN IF NEEDED.EYES:IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES HOLDING EYELIDS OPEN.SKIN:WASH WITH WATER.INGESTION:IF CONSCIOUS ,INDUCE VOMITING.NEVER GIVE ANYTHING BYMOUTH TO AN UNCONSCIOUS PERSON.

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

Flash Point:NONE
Extinguishing Media:WATER
Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SELF CONTAINED BREATHING APPARATUS
OPERATED IN POSITIVE PRESSURE MODE.
USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

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

Spill Release Procedures:AVOID CONTACT WITH EYES OR SKIN. AVOID HIGH TEMPERATURES. WEAR RUBBER GLOVES DURING SPILL CLEAN-UP. DILUTE AND WASH SPILLAGE WITH WATER.
Neutralizing Agent:LIME THEN MAGNESIUM HYDROXIDE/ALUMINUM SULFATE

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

Handling and Storage Precautions:ST
ORAGE-STORE IN A DRY PLACE.AVOID HEATING ABOVE 1050F.
Other Precautions:THIS FLUX IS OFTEN USED WITH BRAZING FILLER METALS CONTAINING CD. CD OXIDE FUMES IS A GREATER HAZARD THAN FLUORIDE FUME FROM FLUX.ZN OXIDE FUME MAY ALSO BE EMITTED.PRODUCTS OF COMBUSTION FROM TORCH/FU RNACE MAY BE TOXIC NO2, O3 & CO GASES.

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

Respiratory Protection:NONE FOR BRAZING IN PROPERLY VENTILATED AREA. IN CONFINED SPACE USE AN AIRL
INE RESPIRATOR OR HOSE MASK, NIOSH/MSHA APPROVED HOSE TYPE C OR SELF-CONTAINED AIR RESPIRATOR.
Ventilation:LOCAL EXHAUST/MECHANICAL
Protective Gloves:LEATHER WELDING
Eye Protection:SAFETY GOGGLES
Other Protective Equipment:NON-FLAMMABLE PROTECTIVE CLOTHING, PLASTIC FRAME SAFETY SPECTACLES WITH SIDE SHIELDS-FILTER LENSES SHADE # 3 OR # 4
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.
Su

pplemental Safety and Health

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

HCC:N1
Melt/Freeze Pt:M.P/F.P Text:1050F,566C
Spec Gravity:1.67
pH:8.5
Solubility in Water:SOLUBLE
Appearance and Odor:WHITE PASTE - NO ODOR

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

Stability Indicator/Materials to Avoid:YES
NONE KNOWN
Stability Condition to Avoid:HIGH TEMPERATURES AND OPEN FLAMES
Hazardous Decomposition Products:EXCESSIVE FUMES (BF3)

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

Waste Disposal Methods:ALL EFFLUENT INGREDIENTS ARE INORGANIC. LOCAL REGULATIONS MAY REQUIRE THE REMOVAL OF FLUORIDES AND SUSPENDED TRACE METALS BEFORE DISCHARGE OF FINAL EFFLUENT. ADDITION OF LIME FOLLOWED BY MG(OH)2/AL2(S O4)3, THEN FILTRATION IS A SIMPLE METHOD.