ROTOMETALS INC -- ROTOMET FLUX TYPE SS -- 3439-00N059759

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

Product ID: ROTOMET FLUX TYPE SS
MSDS Date: 11/21/1986
FSC: 3439
NIIN: 00N059759
MSDS Number: BXJRS

=== Responsible Party ===
Company Name: ROTOMETALS INC
Address: 980 HARRISON ST
City: SAN FRANCISCO
State: CA
ZIP: 94107
Country: US
Info Phone Num: 415-392-3285
Emergency Phone Num: 415-392-3285
CAGE: 86824

=== Contractor Identification ===
Company Name: ROTOMETALS INC
Address: 980 HARRISON ST
Box: City: SAN FRANCISCO
State: CA
ZIP: 94107
Country: US
Phone: 415-392-3285
CAGE: 86824

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

Ingred Name: ZINC CHLORIDE (SARA 313) (CERCLA)
CAS: 7646-85-7
RTECS #: ZH1400000
OSHA PEL: 1 MG/M3
ACGIH TLV: 1 MG/M3
EPA Rpt Qty: 1000 LBS
DOT Rpt Qty: 1000 LBS

Ingred Name: AMMONIUM CHLORIDE (CERCLA)
CAS: 12125-02-9
RTECS #: BP4550000
OSHA PEL: 10 MG/M3
ACGIH TLV: 10 MG/M3 FUME
EPA Rpt Qty: 5000 LBS
DOT Rpt Qty: 5000 LBS

Ingred Name: ZINC AMMONIUM CHLORIDE (SARA 313) (CERCLA)
OSHA PEL: N/K
ACGIH TLV: N/K

Ingred Name: HYDROCHLORIC ACID
CAS: 7647-01-0
RTECS #: Mw4025000
OSHA PEL: 5 PPM CEILING (MFR)
ACGIH TLV:N/K
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES  Skin:YES  Ingestion:YES
Reports of Carcinogenicity:NTP:NO    IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ING 2 IS MILD IRRIT TO SKIN & RESP
TRACT, W/LOW GRADE SYS TOX BY INGEST. ING 4, WHEN INHALED, CAUSES
IRRIT OF RESP TRACT W/BURNING, CHOKING & COUGHING. AT TIMES,
ULCERATION OF NOSE & THROAT MAY OCCUR. ALSO CAUSES EYE IRRIT &
BURNS & POSS LOSS OF SIGHT. SKIN INFLAM & RASH MAY OCCUR. ING 1
(ETFS OF OVEREXP)
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:HLTH HAZS:CAN DMG MUC MEMBS & PRDCE SEV PNEUM
AS RSLT OF RESP IRRIT. ING 1 IS CAUSTIC & CAN ULCERATE EXPOSED
SURFS OF SKIN. ING 3 IS MILD EYE, MUC MEMB & SKIN IRRIT.
Medical Cond Aggravated by Exposure:BRONCHITIS, PNEUMONIA.

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

First Aid:INHAL:REMOVE TO FRESH AIR. SUPPORT BREATHING (GIVE O*2/ARTF
RESP) . AVOID CONT W/SKIN, EYES & MUC MEMBS. EYES:FLUSH W/WATER FOR
AT LST 15 MIN. SKIN:FLUSH WITH WATER FOR AT LEAST 15 MIN. INGEST:I
MMED DRINK MUCH WATER/MILK, RUSH TO HOSPITAL EMER ROOM. IF
SWALLOWED/GOTTEN INTO EYES, SHOW LBL TO MD. HE WILL THEN KNOW/CAN
CONT POIS CTR FOR TOX OF ZINC CHLORIDE.

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

Extinguishing Media:MEDIA SUITABLE FOR SURROUNDING FIRE .
Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA & FULL
PROTECTIVE EQUIPMENT .
Unusual Fire/Explosion Hazard:NON-COMBUSTIBLE AND NON-EXPLOSIVE.

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

Spill Release Procedures:IMMEDIATELY WASH OFF SENSITIVE TISSUE OR SKIN
AND CLOTHING. USE MUCH WATER. PROMPTLY WASH OFF CORRODABLE SURFACES
WITH MUCH WATER.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:FLUX (AND FLUX RESIDUES AFTER
SOLDERING) SHOULD BE WASHED OFF CORRODABLE OR OTHER SENSITIVE
SURFACES WITH MUCH WATER.
Other Precautions:USUAL FOR CORROSIVE LIQUID IN PLASTIC CONTAINER. FOR
PROFESSIONAL USE ONLY BY SKILLED ARTISANS WITH SOLDERING SAFETY
TRAINING.

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

Respiratory Protection:USE OF NIOSH/MSHA APPROVED RESPIRATORY
PROTECTION REQUIRED IF LEVELS EXCEED OSHA LIMITS SHOWN IN
INGREDIENT SECTION.
Ventilation:LOCAL EXHAUST:YES. MECHANICAL (GENERAL):GOOD NORMAL
VENTILATION OR EXHAUST FAN.
Protective Gloves:RUBBER GLOVES.
Eye Protection: ANSI APPROVED CHEM WORKERS GOGGS (SUPDAT)
Other Protective Equipment: EMER EYEWASH & DELUGE SHOWER WHICH MEET ANSI DESIGN CRITERIA. RUBBER CLOTHING AND SHOES.
Work Hygienic Practices: AVOID INHALING VAPORS/FUMES.
Supplemental Safety and Health
AND FULL LENGTH FACE SHIELD.

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

Boiling Pt: B.P. Text: 212F, 100C
Vapor Pres: 28
Spec Gravity: 1.5 (H*2O=1)
Evaporation Rate & Reference: 0 (BUTYL ACETATE=1)
Solubility in Water: COMPLETE
Appearance and Odor: WATER WHITE OR VERY LIGHT BROWN. (AQUEOUS SOLNS OF MIXED CHLORIDES). NO ODOR

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

Stability Indicator/Materials to Avoid: YES UNKNOWN.
Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products: HCL AND ZNO*2.

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

Waste Disposal Methods: DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL REGULATIONS. FLUSH WITH WATER.

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