

R & D METALS AND CHEMICALS INC -- SILVER SOLDER FLUX 601 -- 3439-00-914-8390

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

Product ID:SILVER SOLDER FLUX 601

MSDS Date:02/26/1998

FSC:3439

NIIN:00-914-8390

Status Code:A

MSDS Number: CKSFW

=== Responsible Party ===

Company Name:R & D METALS AND CHEMICALS INC

Address:201C PERIMETER PARK

Box:22533

City:KNOXVILLE

State:TN

ZIP:37922

Country:US

Info Phone Num:423

-531-6065/800-645-7476

Emergency Phone Num:423-531-6065

CAGE:56406

=== Contractor Identification ===

Company Name:R & D METALS & CHEMICALS, INC

Address:201C PERIMETER PARK

Box:22533

City:KNOXVILLE

State:TN

ZIP:37922-2233

Country:US

Phone:423-531-6065 / FAX: 423-531-2044

Contract Num:SP0490-00-M-BL54

CAGE:56406

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

Ingred Name:POTASSIUM TETRABORATE

CAS:1332-77-0

Minumum % Wt:15.

Maxumum % Wt:25.

Other REC Limits:TLV 5.0 MG/M3

Ing

red Name:BORIC ACID
CAS:10043-35-3
RTECS #:ED4550000
Minumum % Wt:15.
Maxumum % Wt:30.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 MG BORATES/M3
ACGIH TLV:5 MG BORATES/M3

Ingred Name:POTASSIUM FLUOBORATE
CAS:14075-53-7
RTECS #:ED2800000
Minumum % Wt:7.
Maxumum % Wt:15.
Other REC Limits:NONE RECOMMENDED
OSHA PEL:2.5 MG/M3 AS F
ACGIH TLV:2.5 MG/M3 AS F

Ingred Name:POTASSIUM FLUOROHYDROBORATE
CAS:12228-71-6
Minumum % Wt:30.
Maxumum % Wt:45.

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Health Hazards Acute and Chronic:ACUTE: OVEREXPOSURE MAY CAUSE
SALIVATION, COUGHING, CHOKING, CHILLS. CHRONIC: MAY CAUSE WEIGHT
LOSS, BRITTLE BONES, ANEMIA, WEAKNESS, STIFF JOINTS.
Explanation of Carcinogenicity:NONE
Effects of Overexposure:SALIVATION, COUGHING, CHOCKING, CHILLS, WEIGHT
LOSS, BRITTLE BONES, ANEMIA, WEAKNESS, STIFF JOINTS.
Medical Cond Aggravated
by Exposure:ANY WEAKNESS OF THE LUNGS, KIDNEYS,
LIVER WILL BE AGGRAVATED.

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

First Aid:INHALATION: REMOVE FROM CONTAMINATED AREA. EYES: WASH
THOROUGHLY WITH WATER AND CALL A PHYSICIAN. SKIN: WASH THOROUGHLY
WITH WATER. INGESTION: DRINK WATER OR MILK AND CALL PHYSICIAN.

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

Flash Point:NONE
Extinguishing Media:NOT NEEDED.
Fire Fighting Procedures:NORM

AL CAUTION WHEN DEALING WITH FLUX
CHEMICALS.

Unusual Fire/Explosion Hazard:WILL RELEASE BORON TRIOXIDE FUMES UPON
DECOMPOSITION.

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

Spill Release Procedures:CLEAN UP PASTE AND FLUSH RESIDUAL MATERIAL
WITH LOTS OF WATER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:DO NOT STORE IN GLASS OR PORCELAIN
CONTAINERS.

AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. WASH
THOROUGHLY AFTER HANDLING.

Other Precautions:KEEP CONTAINERS AWAY FROM EXCESSIVE HEAT.

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

Respiratory Protection:WEAR NIOSH APPROVED RESPIRATOR IN ABSENCE OF
PROPER VENTILATION.

Ventilation:TO REMOVE FUMES

Protective Gloves:WEAR RUBBER OR PLASTIC COATED GLOVES.

Eye Protection:WEAR SAFETY GOGGLES.

Other Protective Equipment:WEAR RUBBER APRON TO PROTECT SKIN AND
CLOTHING.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING,
DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSING.

Supplemental Safety and Health

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

HCC:N1

Spec Gravity:1.6

Evaporation Rate & Reference:0.3

Solubility in Water:MODERATE

Appearance and Odor:WHITE ODORLESS PASTE.

Percent Volatiles by Volume:30

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

Stability Indicators

r/Materials to Avoid: YES

GLASS OR PORCELAIN.

Stability Condition to Avoid: EXCESSIVE HEAT.

Hazardous Decomposition Products: B₂O₃ FUMES, KBF₄.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

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

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

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of D

efense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.