Material Safety Data Sheet

To the Purchaser: This MSDS contains important environmental, health, and inventory information for your employees who have ordered this product. Please see this information before they use it. If you store this product, a copy of this MSDS should be given to the buyer.

SUPERIOR NO. 6 SILVER SOLDER FLUX

Issue Date: NOVEMBER 16, 1990

Emergency Telephone No.: 216/461-3315

Other Information:

Date Prepared: NOVEMBER 16, 1990

SECTION 1 - IDENTIFICATION

Common Name: Superior No. 6 Silver Solder Flux

Chemical Name: NA

Formula: SEE BELOW

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (Chemical & common name(s)) CAS# % by wt.

Potassium Fluoborate 14075-53-7 25-50%

*Potassium Tetraborate 1332-77-0 20-40%

Water 7732-18-5 15-30%

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point: NA

Percent Volatile by Volume: 30

Vapor Density (Air = 1): NA

Evaporation Rate (Water = 1): 0.2

Reactivity in Water: NONE

Appearance and Odor: WHITE ODORLESS PASTE

Flash Point: NONE

Flammable Limits in Air & by Volume: NA

Lower & Upper: NA

Extinguisher: NOT NEEDED

Auto Ignition Temperature: NONE

Unusual Fire and Explosion Hazards: MAY RELEASE BORON TRIFLUORIDE FUMES UPON DECOMPOSITION.
SECTION 4 - PHYSICAL HAZARDS

Stability: Instable

Conditions to Avoid: EXCESS HEAT

Incompatibility: NA

Hazardous Decomposition Products: POSSIBLY BORON TRIFLUORIDE FUMES

Hazardous Polymerization: May Occur

Conditions to Avoid: Will Not Occur

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value: SEE BELOW

Primary Route(s) of entry in body: SKIN, EYES, INGESTION & FUME INHALATION

Signs and Symptoms of Exposure:

1. Acute Exposure: SALIVATION, COUGHING, CHOKING & CHILLS

2. Chronic Exposure: MAY CAUSE WEIGHT LOSS, BRITTLE BONES, ANEMIA, WEAKNESS AND STIFF JOINTS.

Medical Conditions Generally Aggravated by Exposure: ANY WEAKNESS OF THE LUNGS, KIDNEYS OR LIVER WILL BE AGGRAVATED.

Chemical Listed as Carcinogen or Potential Carcinogen: NONE

National Toxicology Program: Yes

I.A.R.C. Monographs: No

OSHA: Yes

OSHA Permissible Exposure Limit: 2.5 MG/M3

ACGIH Threshold Limit Value: 2.5 MG/M3

Other Exposure Limit Used: 2.5 MG/M3

NIOSH: AS FLUORIDE

Emergency and First Aid Procedures: SEE BELOW

1. Inhalation: REMOVE FROM CONTAMINATED AREA

2. Eyes: WASH THOROUGHLY WITH WATER AND CALL A PHYSICIAN

3. Skin: WASH THOROUGHLY WITH WATER

4. Ingestion: DRINK WATER OR MILK AND CALL A PHYSICIAN

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): NIOSH APPROVED RESPIRATOR IN ABSENCE OF PROPER VENTILATION

Ventilation: TO REMOVE FUNES

Local Exhaust: X

Mechanical (General): X

Special: NA

Other: NA

Protective Gloves: RUBBER OR PLASTIC-COATED

Eye Protection: SAFETY GOGGLES

Other Protective Clothing or Equipment: RUBBER APRON

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: 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.

Steps to be Taken in Case Material is Released or Spilled: CLEAN UP, PASTE AND FLUSH REMAINING MATERIAL WITH LOTS OF WATER

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

Judgements as to the suitability of information herein or the need for special precautions are necessarily the purchaser's responsibility. Reasonable care is recommended. NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THEIR ACCURACY OR COMPLETENESS ARE MADE.