**Product Name:** Superior No. Superior Dross Reducer  
**Manufacturer:** Superior Flux & Mfg. Co. 6615 Parkland Blvd. Cleveland, OH 44139  
**Emergency Phone Number:** 1-800-424-9300 (CHEMTREC)  
**Other Information Calls:** (440) 349-3000  

To the Purchaser: This MSDS contains important environmental, health, and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the MSDS should be given to the buyer.

| H.M.I.S. INFORMATION | HEALTH = 2 | FLAMMABILITY = 0 | REACTIVITY = 0 |

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**SECTION I – IDENTIFICATION**  
**Common Name:** Superior dross reducer  
**Chemical Name:** NA  
**Chemical Family:** Dross reducer  
**CAS Number:** NA  
**Formula:** See below

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**SECTION II – COMPOSITION INFORMATION**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>%</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Fluoborate</td>
<td>13826-83-0</td>
<td>15-25</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Potassium Fluoborate</td>
<td>14075-53-7</td>
<td>75-85</td>
<td>2.5 mg/m³</td>
</tr>
</tbody>
</table>

Unlisted percentages are non-hazardous stabilizers, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

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**SECTION III - HEALTH HAZARDS**  
**Primary Routes of Entry:** Fume inhalation, ingestion, skin, and eyes.  
**Symptoms of Overexposure:** Salivation, coughing, choking, chills, brittle bones, weakness, stiff joints, irritation, reddening of skin and rash.  
**Medical Conditions Generally Aggravated by Overexposure:** Any weakness of the lungs, kidneys or liver will be aggravated.  
**Chemical Listed as a Carcinogen or Potential Carcinogen:** None  
**OSHA Permissible Exposure Limit (PEL):** 2.5 mg/m³  
**ACGIH Threshold Limit Value (TLV):** 2.5 mg/m³

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**SECTION IV - EMERGENCY AND FIRST AID PROCEDURES**  
**Eyes:** Flush with water for 10 minutes. Call a physician.  
**Skin:** Wash thoroughly with water.  
**Inhalation:** Remove to fresh air or administer oxygen. Call physician.  
**Ingestion:** If patient is fully conscious, give large amounts water. Obtain medical attention immediately.
SECTION V - FIRE AND EXPLOSION HAZARD DATA
Flash Point: None
Flammable Limits: Lower-NA upper-NA
Extinguishing Media: Not needed
Auto Ignition Temperature: None
Special Fire Fighting Procedures: Normal conditions when dealing with chemicals
Unusual Fire and Explosion Hazards: Decomposes at elevated temperatures to form ammonia, hydrogen fluoride, and boron tri-fluoride

SECTION VI - ACCIDENTAL RELEASE MEASURES
Steps to be taken in case material is spilled: Clean up powder and flush remaining material with lots of water

SECTION VII - HANDLING AND STORAGE
Storage Requirements: Store in plastic containers in cool area. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.
Handling Precautions: Safe precautionary practices.
Other Precautions: Keep away from excessive heat.

SECTION VIII - CONTROL MEASURES
Respiratory Protection (TYPE): NIOSH approved respirator.
Ventilation: Yes
Mechanical (General): Yes
Local Exhaust: Yes
Eye Protection: Safety glasses
Protective Gloves: Recommended, NIOSH approved
Other Protective Clothing or Equipment: Rubber apron is recommended

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS
Boiling Point: NA
Specific Gravity (Water = 1): NA
Vapor Pressure (mm Hg): NA
Percent Volatile by Volume: 0%
Vapor Density (Air = 1): NA
Melting Point: 300^0C/572^0F
Solubility in Water: Very soluble
Reactivity in Water: None
Appearance and Odor: White odorless powder

SECTION X - STABILITY AND REACTIVITY
Stability: Product is stable
(Conditions to Avoid): NA
Incompatibility: Strong oxidizers
Hazardous Decomposition Products: Ammonia, hydrogen fluoride, and boron trifluoride.
Hazardous Polymerization: Will not occur
SECTION XI - TOXICOLOGICAL INFORMATION

Acute Toxicity Data
1) Oral: LD-50 (rat): Not available
2) Inhalation: LC-50 (rat): Not available
3) Dermal: LD-50 (rabbit): Not available
4) Skin Irritation: (rabbit): Not available

Chronic Toxicity Data
1) Repeated Skin Application: (rat): Not available
2) Eye Irritation: (rabbit): Not available

SECTION XII - ECOLOGICAL INFORMATION
This material has not been tested for environmental effects.

SECTION XIII - DISPOSAL CONSIDERATIONS
Waste Disposal Method: Dispose of in accordance with EPA regulations

SECTION XIV - TRANSPORTATION
D.O.T. Proper Shipping Name: Non-Hazardous
Hazard Class: NA.
Identification Number: NA. Packing Group: NA.
Type D.O.T Label Required Information: NA.
Waste Disposal Method: Dispose in accordance with EPA regulations.

SECTION XV - REGULATORY INFORMATION
OSHA Hazardous Chemical According to 29 CFR 1910.1200: NA
Carcinogenicity Classification: (Components Present at 0.1% or More)
International Agency for Research on Cancer (IARC): NA
American Conference of Governmental Industrial Hygienists (ACGIH): NA
National Toxicology Program (NTP): NA
Occupational Safety and Health Administration (OSHA): NA
All Components of this Product are Listed on the U.S. Toxic Substances Control Act Inventory or Otherwise Comply with TSCA Pre-manufacture Notification Requirements.
This Product is RoHS Compliant.

SECTION XVI - OTHER INFORMATION
Disclaimer: Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. Reasonable care has been taken in the preparation of this material, but there are NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.