SAFETY DATA SHEET
SUPERIOR NO. 7
DATE REVISED: January 1, 2018

Product Name: Superior No. Superior 7
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 SDS 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 SDS should be given to the buyer.

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

SECTION I - IDENTIFICATION

Common Name: Superior 7
Chemical Family: Welding Powder Flux
CAS Number: NA
Chemical Name: NA
Formula: See below

SECTION II – HAZARDS IDENTIFICATION
Classification of Substance or Mixture:
Classification (CLP): Corrosive
Label Elements (CLP): Corrosive
Signal Word: Danger

Precautionary Phrases: P304, P340, P332+P313, P264, P301+P310, P305+P351+P338
Risk Phrases: R36/37/38, R34
Safety Phrases: S-26, S-27, S-36/37/39, S-45, S18, S61, S62, S64
See section XVI for full text description of S and R phrases
Other Hazards: None if used properly

SECTION III- COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>%</th>
<th>OSHA PEL</th>
<th>H Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Tetraborate</td>
<td>1303-96-4</td>
<td>18-37</td>
<td>0.5 mg/m³</td>
<td>H360, H320</td>
</tr>
<tr>
<td>Silica</td>
<td>7631-86-9</td>
<td>25-40</td>
<td>NA</td>
<td>H300, H315, H319, H402</td>
</tr>
<tr>
<td>Sodium Fluoride</td>
<td>7681-49-4</td>
<td>15-30</td>
<td>2.5 mg/m³</td>
<td>H373</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 IV – FIRST AID MEASURES

**Inhalation:** Remove to fresh air
**Eyes:** Flush with water for fifteen (15) Minutes. Call physician.
**Skin:** Wash thoroughly with soap and water.
**Ingestion:** If patient is fully conscious, give large amounts of water. Obtain medical attention immediately.

Most Important Symptoms and effects, both acute and delayed

**Primary Routes of Entry into Body:** Fume inhalation, ingestion, skin, and eyes.

**Symptoms of Overexposure:** Salivation, coughing, choking, chills, may cause weight loss, brittle bones, anemia, 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

**OSHA Permissible Exposure Limit (PEL):** 1 mg/m³

**ACGIH Threshold Limit Value (TLV):** 1 mg/m³

SECTION V - FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** (Method Used): None
**Flammable Limits:** Lower-NA, Upper-NA
**Extinguishing Media:** Not needed
**Auto Ignition Temperature:** None
**Special Fire Fighting Procedures:** Normal caution when using chemicals.

**Unusual Fire and Explosion Hazards:** None

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. Do not store in glass or porcelain containers. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

**Handling Precautions:** Avoid contact with skin and clothing.

**Other Precautions:** NA

SECTION VIII - CONTROL MEASURES

**Respiratory Protection (TYPE):** NIOSH approved respirator.
**Ventilation:** Yes
**Mechanical (General):** Yes
**Local Exhaust:** Yes
**Protective Gloves:** Recommended, NIOSH approved
**Other Protective Clothing or Equipment:** Rubber apron is recommended
**Eye Protection:** Safety Glasses
SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: NA
Specific Gravity (Water = 1): NA
Vapor Pressure (mm Hg): 14
Percent Volatile by Volume: 4.0%
Vapor Density (Air = 1): NA
Evaporation Rate (Butyl Acetate = 1): NA
Melting Point: ~1250°C/2282°F
Solubility in Water: Sparingly soluble
Reactivity in Water: None
Appearance and Odor: White powder

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable
(Conditions to Avoid): Metals
Incompatibility: Alkaline, strong oxidizing or reducing materials, cyanides or combustible materials.
Hazardous Decomposition Products: HCl, zinc chloride, zinc oxide, ammonium.
Hazardous Polymerization: Will not occur
(Conditions to Avoid): Excessive heat or cold

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
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

The labeling of this product is indicated in Section II. The full text of all abbreviations indicated by codes in the SDS are as follows:

R34  Causes burns
R36  Irritating to eyes
R37  Irritating to respiratory system
R38  Irritating to skin

S-18  Handle and open container with care
S-26  In case of eye contact, rinse thoroughly and get medical attention
S-27  Take off immediately contaminated clothing
S-36/37/39  Wear suitable protective clothing, gloves, and eye/face protection
S-45  In case of accident or if feel unwell call medical advice immediately
S61  Avoid release to the environment. Refer to special instructions/safety data sheet
S62  If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label where possible
S64  If swallowed, rinse mouth with water (only if the person is conscious)

P304+P340  If inhaled Remove person to fresh air and keep comfortable for breathing
P332+P313  If skin irritation occurs: Get medical advice/attention
P264  Wash … thoroughly after handling
P301+P310  IF SWALLOWED: Immediately call a POISON CENTER/doctor
P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

H300  Fatal if swallowed
H315  Causes skin irritation
H319  Causes serious eye irritation
H360  May damage fertility or the unborn child
H320  Causes eye irritation
H402  Harmful to aquatic life
H373  May cause damage to organs through prolonged or repeated exposure

Further information:
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