SAFETY DATA SHEET
SUPERIOR NO. 1261
DATE REVISED: January 8, 2020

SECTION 1 – IDENTIFICATION
Product Name/Part number: Superior No. 1261
Recommended use: Aluminum Soldering Flux
Manufacturer: Superior Flux & Mfg. Co.
6615 Parkland Blvd
Cleveland OH, 44139
Emergency Contact: CHEMTREC
6615 Parkland Blvd
Emergency Phone: 1-800-424-9300
For other info: (440) 349-3000

SECTION 2 – HAZARD(S) IDENTIFICATION
Classification of the substance or mixture
GHS Classification in accordance with OSHA HCS (29 CFR 1910)
- Flammable liquids (Category 4) H227
- Corrosive to metals (Category 1) H290
- Skin corrosion (Category 1B) H314
- Skin sensitization (Category 1) H317
- Serious eye damage (Category 1) H318
- Reproductive toxicity (Category 1B) H360
- Acute aquatic toxicity (Category 1) H400
- Chronic aquatic toxicity (Category 1) H410

See below for full text of H-Statement
GHS Label Elements, including precautionary statements
Pictogram(s):

Signal Word: Danger
Hazard Statement(s)
- H227 Combustible liquid
- H290 May be corrosive to metals
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction
- **H318 Causes serious eye damage
- H360 May damage fertility or the unborn child
- **H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

**May be omitted from label due to presence of stricter statement.
Precautionary statement(s)
P210 Keep away from heat, open flames, or hot surfaces. No smoking
P234 Keep only in original container
P261 Do not breathe mist, fumes, vapors, or spray
P264 Wash skin thoroughly after handling
P272 Contaminated work clothing should not be allowed out of the workplace
P273 Avoid release to the environment
P280 Wear protective gloves, eye protection, and face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, Immediately call a doctor.
P308+P313 If exposed or concerned: Get medical advice or attention
P333+P313 If skin irritation or rash occurs: Get medical advice or attention
P337+P313 If eye irritation persists: Get medical advice or attention
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam to extinguish
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up
P501 Dispose of contents and/or container to an approved waste disposal plant

Hazards not otherwise classified or not covered by GHS: None

SECTION 3 – COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aminoethylethanolamine</td>
<td>111-41-1</td>
<td>20-29</td>
</tr>
<tr>
<td>Ammonium Fluoborate</td>
<td>13826-83-0</td>
<td>15-29</td>
</tr>
<tr>
<td>Zinc Oxide</td>
<td>1314-13-2</td>
<td>5-15</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>20-29</td>
</tr>
<tr>
<td>Tetrahydrofurfuryl Alcohol</td>
<td>97-99-4</td>
<td>19-29</td>
</tr>
</tbody>
</table>

Unlisted percentages are non-hazardous stabilizers, and water.

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

Skin: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in section 2 (labeling)

Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys or liver will be aggravated.
SECTION 5 – FIREFIGHTING MEASURES
Suitable Extinguishing Media: Dry sand, chemical, or alcohol-resistant foam
Special Hazards: Will release small amounts of hydrofluoric acid
Special protective actions for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6 - ACCIDENTAL RELEASE MEASURES
Personal Precautions and Equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. See section 8 for personal protection.
Environmental Precautions: Prevent further leakage or spillage if safe to do so.
In Case Material is spilled: First, neutralize with soda ash or sodium bicarbonate. Dilute with water and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE
Precautions for safe handling: Avoid inhalation of vapor, fumes, or mist. Keep closed in a dry and well-ventilated place. Keep cool.
General Precautions: Do not eat, drink, or smoke while using this product. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.
For full precaution statements see Section 2
Storage Requirements: Store in original containers in cool area.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION
CONTROL PARAMETERS
OSHA Permissible Exposure Limit (PEL): 2.5 mg/m³
ACGIH Threshold Limit Value (TLV): 2.5 mg/m³
Engineering Controls: Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.
Special Engineering Control Needs: Non-sparking
Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).
Protective Gloves: Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.
Eye Protection: Use appropriately fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)
Body Protection: Chemical resistant rubber apron. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Gold to yellow liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammonia</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>9.5 (10.6% solution in water)</td>
</tr>
<tr>
<td>Melting point/Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>Upper explosion limit: No data available</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>Lower explosion limit: No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density (Water = 1)</td>
<td>1.266</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Miscible in water</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**SECTION 10 - STABILITY AND REACTIVITY**

**Reactivity:** No data available  
**Stability:** Product is stable under recommended storage conditions  
**Possibility of hazardous reactions:** No data available  
**Conditions to Avoid:** Excessive heat  
**Incompatibility:** Strong oxidants, sulfides and cyanides  
**Hazardous Decomposition Products** Hydrofluoric acid, ammonia, NO₂, boron tri-fluoride gases  

*In the event of fire: See Section 5*
SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact

Symptoms (Immediate and Chronic) from

<table>
<thead>
<tr>
<th>Measure(s) of toxicity</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Exposure</td>
<td>No data available</td>
</tr>
<tr>
<td>Prolonged or Repeated Exposure</td>
<td>No data available</td>
</tr>
</tbody>
</table>

IARC: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods

<table>
<thead>
<tr>
<th>Product</th>
<th>Offer surplus and non-recyclable solutions to a licensed disposal company.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated packaging</td>
<td>Dispose of as unused product.</td>
</tr>
</tbody>
</table>
SECTION 14 - TRANSPORTATION

D.O.T. (USA)
Proper Shipping Name: Corrosive liquid, N.O.S (contains aminoethylethanolamine, ammonium fluoborate)
Identification Number: UN1760 Hazard Class(es): 8
Packing Group: II
Type D.O.T. Label Required Information: Corrosive

IMDG (Sea transport)
Proper Shipping Name: Corrosive liquid, N.O.S (contains aminoethylethanolamine, ammonium fluoborate)
Identification Number: UN1760 Hazard Class(es): 8
Packing Group: II Marine Pollutant: No
IMDG Code segregation group NONE APPLIES

IATA/ICAO (Air transport)
Proper Shipping Name: Corrosive liquid, N.O.S (contains aminoethylethanolamine, ammonium fluoborate)
Identification Number: UN1760 Hazard Class(es): 8
Packing Group: II Marine Pollutant: No
Hazard Label: 8

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components
No Chemicals in this material are subject to the reporting requirement of SARA Title III, Section 302.

SARA 313 Components
No chemicals in this material are subject to the reporting requirement of SARA Title III, Section 313.

SARA 311/312 Hazards
Acute toxicity, Flammable liquid, Corrosive to metal, Skin corrosion, Serious eye damage, Reproductive toxicity

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

THIS PRODUCT IS ROHS 3 COMPLIANT

SECTION 16 - OTHER INFORMATION

Further information:
Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

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Preparation information
Superior Flux & Mfg. Co.
440-349-3000