SAFETY DATA SHEET
SUPERIOR No. 141
DATE REVISED: June 28, 2017

Product Name/Part Number: Superior No. 141
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

SECTION 1 -- IDENTIFICATION
Common Name: Superior No. 141
Chemical Family: Soft soldering flux
CAS Number: N/A
Chemical Name: N/A
Formula: See Section 3

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification:
- Acute toxicity, Oral (Category 4) H302
- Skin corrosion (Category 1B) H314
- Serious eye damage (Category 1) H318
- Acute aquatic toxicity (Category 1) H400
- Chronic aquatic toxicity (Category 1) H410

Label Elements
Pictogram(s):

Signal Word: Danger

See below for full text description of H-Statements

Hazard Statement(s)
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
**H318 Causes serious eye damage
**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/more severe statement.

Precautionary statement(s)
P260 Do not breathe mist or fumes
P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P273 Avoid release to the environment
P280 Wear protective gloves, protective clothing, eye protection
P301+P312+P330 IF SWALLOWED: Call a POISON CENTER if you feel unwell. Rinse mouth
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
P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a 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
P363 Wash contaminated clothing before reuse.
P391 Collect spillage
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>Zinc Chloride</td>
<td>7646-85-7</td>
<td>1-3</td>
</tr>
</tbody>
</table>

None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

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: Remove to fresh air.

Eyes: Flush with water for fifteen (15) Minutes. Remove contacts if present and easy to do so. Call physician.

Skin: Wash thoroughly with soap and water.

Ingestion: Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a physician immediately

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 may be aggravated.

OSHA Permissible Exposure Limit (PEL): 1 mg/m³
ACGIH Threshold Limit Value (TLV): 1 mg/m³

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing Media: Dry chemical, carbon dioxide foam

Special Hazards: Will release small amounts of HCl upon decomposition

Flash Point: Not applicable

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary
SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Use personal protective equipment.

See section 8 for personal protection.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so.

**In Case Material is spilled:** Neutralize with soda ash or sodium bicarbonate, dilute with water. Mop up and arrange disposal. Keep in suitable, closed containers for disposal in accordance with EPA regulations.

SECTION 7 - HANDLING AND STORAGE

**Storage Requirements:** Store in plastic containers in cool area, away from heat

**Handling Precautions:** Avoid contact with skin and eyes. Provide appropriate and adequate ventilation for or fumes when using this product.

For precautions see Section 2

SECTION 8 - CONTROL MEASURES

**Respiratory Protection:** For nuisance exposures use type P95 (US) respirator. For higher level protection use type OV/AG/P99 respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Ventilation:** Yes   **Mechanical (General):** Explosion proof   **Local Exhaust:** Yes

**Protective Gloves:** Yes – Nitrile rubber. Use equipment tested and approved under NIOSH standards.

**Eye Protection:** Safety glasses conforming to EN166. Use equipment tested and approved under NIOSH standards.

**Other Protective Clothing or Equipment:** Rubber apron recommended.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of the anticipated use. 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>Paste, white</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>60°C/140°F</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>104°C/220°F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid/gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>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</td>
<td>0.97 (Water = 1)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Unlimited</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>No data available</td>
</tr>
</tbody>
</table>

SECTION 10 - STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity:</td>
<td>No data available</td>
</tr>
<tr>
<td>Stability:</td>
<td>Product is stable under recommended storage conditions</td>
</tr>
<tr>
<td>Possibility of hazardous reactions:</td>
<td>No data available</td>
</tr>
<tr>
<td>Conditions to Avoid:</td>
<td>Excessive heat, excessive cold, metals</td>
</tr>
<tr>
<td>Incompatibility:</td>
<td>Alkalines, strong oxidizing or reducing materials, cyanides or combustible materials.</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td>Hydrochloric acid, zinc chloride, zinc oxide, ammonium</td>
</tr>
</tbody>
</table>

In the event of fire: See Section 5

SECTION 11 - 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 12 - ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.
SECTION 13 - DISPOSAL CONSIDERATIONS
Waste Disposal Method: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

SECTION 14- TRANSPORTATION
D.O.T. Proper Shipping Name: Non-hazardous
Identification Number: NA
Type D.O.T Label Required Information: NA
Hazard Class: NA
Packing Group: NA

SECTION 15 - REGULATORY INFORMATION
OSHA Hazardous Chemical According to 29 CFR 1910.1200: None

Carcinogenicity Classification (Components Present at 0.1% or More): Non-carcinogenic
International Agency for Research on Cancer (IARC): Not listed
American Conference of Governmental Industrial Hygienists (ACGIH): Not listed
National Toxicology Program (NTP): Not listed
Occupational Safety and Health Administration (OSHA): Not listed

None of the components of this product are listed on the U.S. toxic substances control act inventory or otherwise comply with TSCA pre-manufacture notification requirements.

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.

Superior Flux & Mfg. Co. shall not be held liable for any damage resulting from handling or from contact with the above product.

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