SAFETY DATA SHEET
SUPERIOR No. 420S-LF
DATE REVISED: January 1, 2018

SECTION 1 -- IDENTIFICATION
Product Name/Part number: Superior No. 420S-LF
Recommended use: Lead-Free, VOC-Free, No-Clean Soldering Flux
6615 Parkland Blvd
Cleveland OH, 44139
Emergency Phone No.: 1-800-424-9300 (CHEMTREC)

SECTION 2 – HAZARD(S) IDENTIFICATION
Classification of the substance or mixture
GHS Classification in accordance with OSHA HCS (29 CFR 1910)
Eye irritation (Category 2A) H319
See below for full text of H-Statements

GHS Label Elements, including precautionary statements
Pictogram(s):

[Warning Pictogram]

Signal Word: Warning
Hazard Statement(s)
H319 Causes serious eye irritation

Precautionary statement(s)
P264 Wash skin thoroughly after handling
P280 Wear eye protection
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice.

Hazards not otherwise classified or not covered by GHS: None

SECTION 3 – COMPOSITION INFORMATION
Components CAS Number %
Carboxylic acid 68937-69-9 0-10
Water 7732-18-5 90-100

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.

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**SECTION 5 – FIREFIGHTING MEASURES**
**Flash Point:** Not applicable
**Flammable Limits:** Not applicable
**Extinguishing Media:** Not applicable
**Auto Ignition Temperature:** Not applicable
**Special Fire Fighting Procedures:** None
**Unusual Fire and Explosion Hazards:** No data available

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**
**Personal Precautions and Equipment and emergency procedures:** 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:** Contain spillage, then collect and place in container for disposal according to local regulations. Wash with hot water.

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**SECTION 7 - HANDLING AND STORAGE**
**Precautions for safe handling:** Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.
**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:** Keep container tightly closed in a dry and well-ventilated place.
SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION
CONTROL PARAMETERS

**Respiratory Protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) 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 safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)

**Body Protection:** Complete suit protecting against chemicals. 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>Clear, colorless liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/Freezing point</td>
<td>0°C / 32°F</td>
</tr>
<tr>
<td>Initial boiling point and boiling 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>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
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</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
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</tr>
<tr>
<td>Vapor pressure</td>
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<tr>
<td>Vapor density</td>
<td>No data available</td>
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<tr>
<td>Relative density</td>
<td>1.010 @ 20-25°C</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Fully 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>No data available</td>
</tr>
</tbody>
</table>
SECTION 10 - STABILITY AND REACTIVITY

**Stability:** Product is stable

(Conditions to Avoid): Not applicable

**Incompatibility:** Do not mix with strong oxidizing agents, heavy metals.

**Hazardous Decomposition Products:** Carbon and nitrogen oxides,

**Hazardous Polymerization:** No data available

(Conditions to Avoid): Not applicable

SECTION 11 - TOXICOLOGICAL INFORMATION

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

**Symptoms (Immediate and Chronic) from**

- **Acute Exposure**
  - No data available

- **Prolonged or Repeated Exposure**
  - No data available

**Measure(s) of toxicity**

- No data available

Is this chemical listed in the National Toxicology Program (NTP) Report on Carcinogens? No data available

Is this chemical found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs or by the Occupational Safety and Health Administration (OSHA)? No data available

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

- **Hazard to ozone layer:** No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

SECTION 14- TRANSPORTATION

**D.O.T. (USA)**

- Not regulated

**IATA**

- Not regulated
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  This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302 Components  Acute Health Hazard

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.

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