SECTION 1 – IDENTIFICATION
Product Name/Part number: Superior SSF-NC50
Recommended use: Selective Soldering Flux
Manufacturer: Superior Flux & Mfg. Co.  
Mfg. Phone No. (440) 349-3000
6615 Parkland Blvd
Cleveland OH, 44139
Mfg. Phone No. (440) 349-3000
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)
- Acute toxicity, Oral (Category 4)  H302
- Acute toxicity, Dermal (Category 4)  H312
- Skin corrosion (Category 1A)  H314
- Serious eye damage (Category 1)  H318
- Acute toxicity, Inhalation (Category 3)  H331
- Acute aquatic toxicity (Category 1)  H402

See below for full text of H-Statements

GHS Label Elements, including precautionary statements

Pictogram(s):

Signal Word: Warning

Hazard Statement(s)
- H302 Harmful if swallowed
- **H312 Harmful if in contact with skin
- H314 Causes severe skin burns and eye damage
- **H318 Causes serious eye damage
- H331 Toxic if inhaled
- H402 Harmful to aquatic life

**May be omitted from label due to presence of stricter and/or stronger statement.

Precautionary statement(s)
- P210 Keep away from heat, sparks, hot surfaces, and open flames. No smoking.
- P261 Avoid breathing dust, fumes, mist, vapors, or spray
- P264 Wash skin thoroughly after handling
- P270 Do not eat, drink, or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area
- P273 Avoid release to the environment
- P280 Wear protective clothing, eye protection, and face protection
- P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P303+P352+P312 IF ON SKIN: 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 if you feel unwell.

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 POISON CENTER or doctor.

P332+P313  If skin irritation occurs: Get medical advice
P337+P313  If eye irritation persists: Get medical advice or attention
P363  Wash contaminated clothing before reuse.

P403 +P233+P235  Store in a well-ventilated place. Keep container tightly closed and keep cool.

P405  Store locked up

P501    Dispose of contents to an approved waste disposal plant.

Hazards not otherwise classified or not covered by GHS: None

SECTION 3 – COMPOSITION INFORMATION
Components   CAS Number   %
Glycol monobutyl ether   111-76-2   1-7
Carboxylic acids   Proprietary   1-10

SECTION 4 – 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: 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

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Hazards: No data available

Special protective actions for firefighters: Wear self-contained breathing apparatus for
SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment**

**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:** Contain spillage, absorb with sawdust, then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapors, fumes, or mist.

*For full precaution statements see Section 2*

**Storage Requirements:** Store in plastic containers, tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**CONTROL PARAMETERS**

**OSHA Permissible Exposure Limit (PEL):** 10 mg/m$^3$

**ACGIH Threshold Limit Value (TLV):** 10 mg/m$^3$

**Engineering Controls:** Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face 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 supplied air respirator. Use respirators and components tested an 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:** Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)

**Body Protection:** Impervious clothing, flame retardant antistatic protective clothing. 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>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>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>102°C / 220°F (appr06)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</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: N/A</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>Lower explosion limit: N/A</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density (Air = 1)</td>
<td>2.3</td>
</tr>
<tr>
<td>Relative density (Water = 1)</td>
<td>0.810 @ 20-25°C</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>Soluble 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>Not applicable</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</td>
</tr>
<tr>
<td>Incompatibility:</td>
<td>Oxidizing agents, strong acids</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>Carbon oxides (Under fire conditions)</td>
</tr>
<tr>
<td>In the event of fire:</td>
<td>See Section 5</td>
</tr>
</tbody>
</table>

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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
Additional information
  - To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12 - ECOLOGICAL INFORMATION
Persistency and degradability
  - No data available
Bioaccumulative potential
  - No data available
Mobility in soil
  - No data available
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)
  - Non-hazardous

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
  - No Chemicals in this material are subject to the reporting requirement of SARA Title III, Section 311/312.
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