SAFETY DATA SHEET
SUPERIOR No. 8600-TF
DATE REVISED: January 2, 2020

SECTION 1 -- IDENTIFICATION
Product Name/Part number: Superior No. 8600-TF
Recommended use: Water-Soluble Tacky Flux
Manufacturer: Superior Flux & Mfg. Co.
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
Aspiration toxicant (Category 1) H304
Skin corrosion (Category 2) H315
Serious eye damage (Category 1) H318
Specific target organ toxicity – Single exposure, Respiratory system (Category 3) H335
Specific target organ toxicity – Repeated exposure, Gastrointestinal tract (Category 2) H373
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)
H302** Harmful if swallowed
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation
H373 May cause damage to gastrointestinal tract through prolonged or repeated exposure if swallowed
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 or more severe statement.

Precautionary statement(s)
P260 Do not breathe dust, fumes, vapors, spray, or mist.
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 gloves, face protection, and eye protection
P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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 POISON CENTER or doctor.
P331 Do NOT induce vomiting
P332+P313 If skin irritation occurs: Get medical advice
P337+P313 If eye irritation persists: Get medical advice or attention
P362 Take off contaminated clothing and wash before reuse.
P391 Collect spillage
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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethoxylated rosin amine</td>
<td>61791-17-1</td>
<td>10-40</td>
</tr>
<tr>
<td>Hydro-treated mid petroleum distillate</td>
<td>64742-46-7</td>
<td>5-30</td>
</tr>
<tr>
<td>Ethoxylated octadecylamine</td>
<td>26635-92-7</td>
<td>5-20</td>
</tr>
<tr>
<td>2-methyl-2,4-pentanediol</td>
<td>107-41-5</td>
<td>1-5</td>
</tr>
<tr>
<td>Carboxylic acid</td>
<td>110-94-1</td>
<td>1-5</td>
</tr>
</tbody>
</table>

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.

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

The most important known symptoms and effects are described in section 2 (labeling)

SECTION 5 – FIREFIGHTING MEASURES
Suitable Extinguishing Media: Not applicable
Special Hazards: No data available
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, fumes, 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. Do not let product enter drains.

In Case Material is spilled: Contain spillage, then collect 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 vapor or mist. Soldering should be conducted in a well ventilated area.

For full precaution statements see Section 2

Storage Requirements: Store locked up in a low temperature, low humidity, and well ventilated area.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

OSHA Permissible Exposure Limit (PEL): 20 ppm
ACGIH Threshold Limit Value (TLV): 20 ppm

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

Special Engineering Control Needs: Not applicable

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a face mask as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face face respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges. 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: Use appropriate 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: Where risk assessment shows body protection is appropriate, use a worker coat, laboratory coat, or 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>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Tan to light brown paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</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>No data available</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>Not applicable</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</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

Reactivity: No data available
Stability: Product is stable under recommended storage conditions
Possibility of hazardous reactions: No data available
Conditions to Avoid: Heat, sparks and flames
Incompatibility: Oxidizing agents, soluble carbonates, soluble phosphates, hydroxides, metals, peroxides, permanganates, amines, alcohols and nitric acid
Hazardous Decomposition Products Carbon oxides (Under fire conditions)
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
  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
Other adverse effects: 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)
Proper Shipping Name: Non-hazardous Hazard Class(es): N/A
Identification Number: N/A Packing Group: N/A

IATA (International)
Proper Shipping Name: Non-hazardous Hazard Class(es): N/A
Identification Number: N/A Packing Group: N/A

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, Chronic 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.

Reference(s):
Sigma-Aldrich – SDS formatting

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