SAFETY DATA SHEET
SUPERIOR No. 8804-WTF
DATE REVISED: August 18, 2017

SECTION 1 -- IDENTIFICATION
Product Name/Part number: Superior No. 8804-WTF
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
Skin corrosion (Category 2) H315
Serious eye damage (Category 1) H318
Carcinogenicity (Category 2) H351
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
H318 Causes serious eye damage
H335 May cause respiratory irritation
H351 Suspected of causing cancer
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

Precautionary statement(s)
P260 Do not breathe dust, fumes, vapor, mist, 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 gloves, eye protection/face protection
P301+P310+P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting
P302+P352 IF ON SKIN: Wash with plenty of soap and water

(precautionary statements, continued)
P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313  If skin irritation occurs, get medical advice or attention
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 and container in accordance with local, regional, and national regulations or 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>10-30</td>
</tr>
<tr>
<td>Distillates (petroleum)</td>
<td>64742-46-7</td>
<td>10-20</td>
</tr>
<tr>
<td>Ethomeen</td>
<td>26635-92-7</td>
<td>2-10</td>
</tr>
<tr>
<td>Hexylene glycol</td>
<td>107-41-5</td>
<td>2-10</td>
</tr>
<tr>
<td>Cetrimonium bromide</td>
<td>57-09-0</td>
<td>1-5</td>
</tr>
<tr>
<td>Carboxylic acid</td>
<td>68937-69-9</td>
<td>1-5</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>1317-70-0</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, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low 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 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 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): No data available
ACGIH Threshold Limit Value (TLV): No data available

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>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Solvent</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>183°C / 361.4°F (literary)</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>No data available</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>No data available</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>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

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
Identification Number: N/A
Hazard Class(es): 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

HMIS Rating
Health 1
Flammability 0
Reactivity 0

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 for product 232033 (version 4.10, rev 05/27/16)

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

Version 2.0
Revision Date: 09/18/2017