SAFETY DATA SHEET
SUPERIOR No. 100-HT
DATE REVISED: November 11, 2019

SECTION 1 -- IDENTIFICATION
Product Name/Part number: Superior No. 100-HT
Recommended use: High Temperature Rosin 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)
- Flammable liquids (Category 4) H225
- Skin sensitization (Category 1) H317
- Eye irritation (Category 2A) H319
- Specific target organ toxicity after single exposure –
  Central nervous system (Category 3) H336
- Reproductive toxicity (Category 1B) H360

See below for full text of H-Statements

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

Signal Word: Danger

Hazard Statement(s)
H227 Combustible liquid
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H360 May damage fertility or the unborn child

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, sparks, hot surfaces, and open flames. No smoking.
P261 Avoid breathing dust or fumes
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
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective clothing and face protection
P301+P312 IF SWALLOWED: Call a doctor if you feel unwell
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313  IF exposed or concerned: Get medical advice
P333+P313  If skin irritation or rash occurs: Get medical advice.
P337+P313  If eye irritation persists: Get medical advice or attention.
P362  Take off contaminated clothing and wash before reuse
P370+P378  In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403+P235  Store in a well-ventilated place. Keep cool.
P405  Store locked up.
P501  Dispose of contents/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>EC Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrohydro-2-furyl Alcohol</td>
<td>97-99-4</td>
<td>202-625-6</td>
<td>25 – 50</td>
</tr>
<tr>
<td>Rosin</td>
<td>8050-09-7</td>
<td>232-475-7</td>
<td>25 – 50</td>
</tr>
<tr>
<td>Dimethyl ammonium Chloride</td>
<td>506-59-2</td>
<td>208-046-5</td>
<td>&lt; 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. 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

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

SECTION 5 – FIREFIGHTING MEASURES

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

Unsuitable extinguishing media: Do NOT use water jet.

Special Hazards: Carbon oxides

Special protective actions for firefighters: Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.
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 non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) 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, mist or gas. Use explosion-proof equipment. Keep away from sources of ignition – No smoking. Take measures to prevent the buildup of electrostatic charge.

For full precaution statements see Section 2

Storage Requirements: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage Class (TRGS 510): 6.1D – Non-combustible, acute toxic Category 3 / toxic hazardous materials or hazardous materials causing chronic effects

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

USA Workplace Environmental Exposure Levels (WEEL): 0.5 ppm (THFA – Skin)

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

Special Engineering Control Needs: N/A

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 to approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

Protective Gloves: Handle with gloves. (Nitrile or Butyl 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: 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. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace
Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Brown liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</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>&lt; -80°C / -112°F</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt; 178°C / 352°F</td>
</tr>
<tr>
<td>Flash point</td>
<td>~ 75°C / 167°F (closed cup)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>Upper explosion limit: 9.7% (V)</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>Lower explosion limit: 1.5% (V)</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>3.53 (Air = 1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.070 (Water = 1)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not 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>282°C / 540°F @ 1,023 hPA (THFA – lit)</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: Vapors may form explosive mixture with air
Conditions to Avoid: Heat, sparks and flames
Incompatibility: Strong oxidizing agents, strong reducing agents, strong acids
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

Acute toxicity No data available
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available

Carcinogenicity
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated carcinogen by NTP.
OSHA No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by OSHA.

Reproductive toxicity No data available
Specific target organ toxicity – Single exposure No data available
Specific target organ toxicity – Repeated exposure No data available
Aspiration hazard 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

TOXICITY

Persistence and degradability No data available
Bioaccumulative potential No data available
Mobility in soil No data available

Results of PBT and vPvB assessment: 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. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. 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: Combustible liquid, NOS (Contains Tetrahydrofurfuryl Alcohol)

NA-Number: 1993

Hazard Class(es): None

Packing Group: III

Reportable Quantity (RQ): NA

Type D.O.T Label Required Information: 49CFR173.150: Combustible liquids in non-bulk packaging are not regulated by DOT.

Special Precautions to Note:

Environmental Hazards

Poison Inhalation Hazard? No

Marine Pollutant? No

IMDG

Not dangerous goods

IATA

Not dangerous goods

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 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Heath 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.

THIS PRODUCT IS ROHS 3 COMPLIANT

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 – Tetrahydrofurfuryl alcohol (PN 185396)

Preparation information
Superior Flux & Mfg. Co.