SAFETY DATA SHEET
SUPERIOR No. 67DSA
DATE REVISED: November 1, 2019

SECTION 1 -- IDENTIFICATION
Product Name/Part number: Superior No. 67DSA
Recommended use: ZC Free™ Zinc Chloride-Free Flux
Manufacturer: Superior Flux & Mfg. Co.
Mfg. Phone No. (440) 349-3000
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)
Corrosive to metals (Category 1) H290
Acute toxicity, Oral (Category 4) H302
Skin corrosion (Category 1B) H314
Serious eye damage (Category 1) H318
Specific target organ toxicity - Single Exposure, Respiratory system (Category 4) H335

See below for full text of H-Statements
GHS Label Elements, including precautionary statements
Pictogram(s):

Signal Word: Danger
Hazard Statement(s)
H290 May be corrosive to metals
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
**H318 Causes serious eye irritation
H335 May cause respiratory irritation

**May be omitted from label due to presence of stricter hazard statement
Precautionary statement(s)
P261 Avoid breathing fumes, mist, vapours, or spray.
P264 Wash hands and 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
P280 Wear protective gloves, protective clothing, and face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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/doctor
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P312 Call a POISON CENTER or doctor if you feel unwell
P332+P313 If skin irritation occurs: Get medical advice
P337+P313 If eye irritation persists: Get medical attention.
P362 Take off and wash contaminated clothing before reuse.
P391 Collect spillage
P403+P405+P233 Store in a well ventilated place, locked up, and tightly closed.
P501 Dispose of contents and 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>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylamine hydrochloride</td>
<td>506-59-2</td>
<td>10 – 20</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>1 – 10</td>
</tr>
</tbody>
</table>

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: 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.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: NA
Flammable Limits: NA
Extinguishing Media: Dry chemical, CO₂, foam or water spray.
Auto Ignition Temperature: NA
Special Fire Fighting Procedures: Normal cautions when dealing with chemicals
Unusual Fire and Explosion Hazards: May liberate toxic gases
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. Evacuate personnel to safe areas. Vapors can accumulate in low 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 spill and neutralize with soda ash or sodium bicarbonate. Collect and place in container for disposal according to local regulations. Wash spill area with plenty of water.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid inhalation of vapor or mist. Use safe, precautionary practices to avoid spills and exposure to skin or fumes.

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. 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 ppm
ACGIH Threshold Limit Value (TLV): 10 ppm

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

Special Engineering Control Needs: Explosion Proof, non-sparking equipment

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: Use tightly 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: Complete suit protecting against chemical, 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>Clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>Melting point/Freezing point</td>
<td>104°C/220°F</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</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>
<td>No data available</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>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.030</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Completely 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): NA

Incompatibility: Do not mix with strong oxidizing agents.

Hazardous Decomposition Products: Small amounts of hydrochloric acid may be released on burning or heating to decomposition.

Hazardous Polymerization: NA  (Conditions to Avoid): NA
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:** Hazard to ozone layer: No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste treatment methods**
- **Product:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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**
- **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.

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