SAFETY DATA SHEET
SUPERIOR No. 17
DATE REVISED: January 1, 2018

Product Name/Part Number: Superior No. 17
Manufacturer: Superior Flux & Mfg. Co. 6615 Parkland Blvd. Cleveland OH, 44139
Emergency Phone Number: 1-800-424-9300 (CHEMTREC)
Other Information Calls: (440) 349-3000

SECTION 1 -- IDENTIFICATION

Common Name: Superior No. 17
Chemical Family: High temperature brazing powder flux
CAS Number: NA
Chemical Name: NA
Formula: See Below

SECTION 2 – HAZARDS IDENTIFICATION
Classification of Substance or Mixture:

GHS Classification:
- Reproductive Toxicity (Category 2) – H361
- Eye Irritant (Category 2A) – H319

Label Elements
Pictogram(s):
- !
- 🔴

Signal Word: Warning

See section XVI for full text description of H-Statements

(Label elements, continued)
Hazard Statement(s)
H319 Causes serious eye irritation
H361 Suspected of damaging 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.
P264 Wash skin and hands thoroughly after handling.
P280 Wear protective gloves, eye protection and face protection.
P308+P313 IF exposed or concerned: Get medical advice.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists, get medical attention.
P405 Store locked up.
P501 Dispose of contents in accordance with local and national regulations.

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>Sodium Carbonate</td>
<td>497-19-8</td>
<td>60-90</td>
</tr>
<tr>
<td>Boric Acid</td>
<td>10043-35-3</td>
<td>10-40</td>
</tr>
</tbody>
</table>

None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

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: Remove to fresh air. Consult a physician.

Eyes: Flush with water for fifteen (15) Minutes. Remove contacts if present and easy to do so. Call physician.

Skin: Wash thoroughly with plenty of soap and water. Consult a physician.

Ingestion: If patient is fully conscious, give large amounts of water. Never give anything by mouth to an unconscious person. 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.

OSHA Permissible Exposure Limit (PEL): 10 mg/m³

ACGIH Threshold Limit Value (TLV): 10 mg/m³

SECTION 5 – FIREFIGHTING MEASURES

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

Special Hazards: Borane/boron oxides

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Use personal protective equipment. Avoid dust formation.

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. See section 8 for personal protection.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

In Case Material is spilled: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7 - HANDLING AND STORAGE

Storage Requirements: Store in tightly closed, plastic containers. Keep containers in a dry and well-ventilated place.

Moisture sensitive.

Handling Precautions: Avoid dust formation. Provide appropriate and adequate ventilation for dust and/or fumes.
SECTION 8 - CONTROL MEASURES
Respiratory Protection: Where appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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 and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Ventilation: Yes Mechanical (General): Yes Local Exhaust: Yes

Protective Gloves: Yes – Nitrile rubber, at least 0.11mm thick. Use equipment tested and approved under NIOSH standards.

Eye Protection: Safety glasses conforming to EN166. Use equipment tested and approved under NIOSH standards.

Other Protective Clothing or Equipment: Rubber apron

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of the anticipated use. 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>Red powder</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>175°C/347°F</td>
</tr>
<tr>
<td>Boiling Point/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/lower flammability or</td>
<td>No data available</td>
</tr>
<tr>
<td>explosive limits</td>
<td></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>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Very Soluble</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>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</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: None

Conditions to Avoid: Excessive heat

Incompatibility: No data available

Hazardous Decomposition Products: No data available

In the event of fire: See Section 5
SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity Data
1) Oral: LD-50 (rat): Not available
2) Inhalation: LC-50 (rat): Not available
3) Dermal: LD-50 (rabbit): Not available
4) Skin Irritation: (rabbit): Not available

Chronic Toxicity Data
1) Repeated Skin Application: (rat): Not available
2) Eye Irritation: (rabbit): Not available

SECTION 12 - ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

SECTION 14- TRANSPORTATION

D.O.T. Proper Shipping Name: Non-hazardous
Identification Number: NA
Type D.O.T Label Required Information: NA
Hazard Class: NA
Packing Group: NA

SECTION 15 - REGULATORY INFORMATION

OSHA Hazardous Chemical According to 29 CFR 1910.1200: None

Carcinogenicity Classification (Components Present at 0.1% or More): Non-carcinogenic
International Agency for Research on Cancer (IARC): Not listed
American Conference of Governmental Industrial Hygienists (ACGIH): Not listed
National Toxicology Program (NTP): Not listed
Occupational Safety and Health Administration (OSHA): Not listed

None of the components of this product are listed on the U.S. toxic substances control act inventory or otherwise comply with TSCA pre-manufacture notification requirements.

SECTION 16 - OTHER INFORMATION

Full text of H-Statements and P-Statements referred to in Section II and/or III.

H319 Causes serious eye irritation
H361 Suspected of damaging fertility or the unborn child

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.

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

Version 2.1
Revision Date: 06/22/2017