# SAFETY DATA SHEET
# SUPERIOR No. 70-5

DATE REVISED: August 3, 2017

## SECTION 1 -- IDENTIFICATION

**Product Name/Part number:** Superior No. 70-5
**Recommended use:** Tinning Flux

**Manufacturer:** Superior Flux & Mfg. Co.
6615 Parkland Blvd
Cleveland OH, 44139

**Emergency Contact:** CHEMTREC
**Emergency Phone: 1-800-424-9300**
**For other info:** (440) 349-3000

## 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 1B) H314
Serious eye damage (Category 1) H318
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 |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| **H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

**Not on label due to H410 being more severe

**Precautionary statement(s)**

| | |
|---|---|
| P260 | Do not breath dust or mist |
| P264 | Wash skin thoroughly after handling |
| P270 | Do not eat, drink or smoke when using this product |
| P273 | Avoid release to the environment |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |
| P301+P312+P330 | IF SWALLOWED: Call a POISON CENTER if you feel unwell. Rinse mouth |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. |
| P304+P340+P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor |

**(Precautionary phrases, continued)**

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

P363 Wash contaminated clothing before reuse.

P391 Collect spillage

P405 Store locked up

P501 Dispose of contents and/or container to an approved waste disposal plant

**Hazards not otherwise classified or not covered by GHS:** None

## SECTION 3 – COMPOSITION INFORMATION

| Components | CAS Number | % |
|---|---|---|
| Zinc Chloride | 7646-85-7 | 15-25 |
| Tin | 7400-31-5 | 3-8 |

Unlisted percentages are non-hazardous stabilizers, and water.

## 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:** 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

**Suitable Extinguishing Media:** Use dry chemical, $CO_2$ foam

**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. *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 by wet-brushing and place in container for disposal according to local regulations.

## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Avoid inhalation of vapor or mist. Keep tightly closed in a dry and well-ventilated place.

**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):** 1 $mg/m^3$

**ACGIH Threshold Limit Value (TLV):** 1 $mg/m^3$

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

**Special Engineering Control Needs:** No data available

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a 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 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 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

| | |
|---|---|
| **Appearance** | Yellow paste |
| **Odor** | None |
| **Odor threshold** | No data available |
| **pH** | Not applicable |
| **Melting point/Freezing point** | No data available |
| **Initial boiling point and boiling range** | 337°C / 639°F (literary) |
| **Flash point** | No data available |
| **Evaporation rate** | Not applicable |
| **Flammability (Solid, gas)** | No data available |
| **Upper flammability or explosive limits** | Upper explosion limit: No data available |
| **Lower flammability or explosive limits** | Lower explosion limit: No data available |
| **Vapor pressure** | No data available |
| **Vapor density** | No data available |
| **Relative density** | No data available |
| **Solubility(ies)** | Insoluble |
| **Partition coefficient: n-octanol/water** | No data available |
| **Auto-ignition temperature** | No data available |
| **Decomposition temperature** | No data available |
| **Viscosity** | No data available |

## 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:** Excessive heat or cold
**Incompatibility:** Alkaline, strong oxidizing or reducing materials, cyanides or combustible materials.
**Hazardous Decomposition Products** Hydrogen chloride gas, zinc chloride, zinc oxide, ammonium (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

**IARC:** No component of this product is 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 is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

## 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**

*An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.*

## 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) –** Ships as non-hazardous goods

**Proper Shipping Name:** N/A

**Identification Number:** N/A

**Hazard Class(es):** N/A

**Packing Group:** N/A

**Reportable Quantity (RQ):** N/A

**Special Precautions to Note:**

N/A

**Environmental Hazards**

**Marine Pollutant?** 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** The following components are subject to reporting levels established by SARA Title III, Section 313

| | **CAS No.** | **Revision Date:** |
|---|---|---|
| Zinc chloride | 7646-85-7 | 03/01/2007 |

**SARA 311/312 Hazards** Acute 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.

**THIS PRODUCT IS ROHS 2 COMPLIANT**

## SECTION 16 - OTHER INFORMATION

**HMIS Rating**

| | |
|---|---|
| Health | 2 |
| Flammability | 1 |
| Reactivity | 1 |

**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. There are *NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.*

**Reference(s):**

Sigma-Aldrich – SDS for Zinc Chloride ≥ 98%

**Preparation information**

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

Version 3.1
Revision Date: 08/03/2017