

# SAFETY DATA SHEET

## SUPERIOR TWF

DATE REVISED: January 1, 2016

**Product Name:** Superior TWF

**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

**To the Purchaser:** This MSDS contains important environmental, health, and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the MSDS should be given to the buyer.

**H.M.I.S. INFORMATION: HEALTH = 2      FLAMMABILITY = 0      REACTIVITY = 0**

### SECTION I -- IDENTIFICATION

**Common Name:** Superior TWF

**Chemical Family:** Silver Brazing Paste Flux

**CAS Number:** NA

**Chemical Name:** NA

**Formula:** See Below

### SECTION II – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

**Classification (CLP):** NA

**Label Elements (CLP):** NA

**Signal Word:** Danger



Irritant

Health hazard

**Precautionary Phrases:** P264, P305+P351+P338, P301+P330+P331

**Risk Phrases:** R62, R25, R36/37/38, R60/61

**Safety Phrases:** S-26, S-27, S-36/37/39, S-45

See section XVI for full text description of S and R phrases

**Other Hazards:** None if used properly

### SECTION III- COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL	H Statements
Potassium Fluoroborate	12228-71-6	20-40	2.5 mg/m <sup>3</sup>	H319, H360
Potassium Tetraborate	1332-77-0	15-25	5.0 mg/m <sup>3</sup>	H360
Boric Acid	10043-35-3	30-45	10 mg/m <sup>3</sup>	H303, H360
Potassium Fluoborate	14075-53-7	7-15	2.5 mg/m <sup>3</sup>	NA

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

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## SECTION IV – FIRST AID MEASURES

**Inhalation:** Remove to fresh air  
**Eyes:** Flush with water for fifteen (15) Minutes. Call physician.  
**Skin:** Wash thoroughly with soap and water.  
**Ingestion:** If patient is fully conscious, give large amounts of water. Obtain medical attention immediately.

Most Important Symptoms and effects, both acute and delayed

**Primary Routes of Entry into Body:** Fume inhalation, ingestion, skin, and eyes.

**Symptoms of Overexposure:** Salivation, coughing, choking, chills, may cause weight loss, brittle bones, anemia, and stiff joints.

**Medical Conditions Generally Aggravated by Exposure:** Any weakness of the lungs, kidneys or liver will be aggravated.

**Chemical Listed as Carcinogen or Potential Carcinogen:** None

**OSHA Permissible Exposure Limit (PEL):** 2.5 mg/m<sup>3</sup>

**ACGIH Threshold Limit Value (TLV):** 2.5 mg/m<sup>3</sup>

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## SECTION V - FIRE AND EXPLOSION HAZARD DATA

**Flash Point: (Method Used):** None

**Flammable Limits:** Lower-NA, Upper-NA

**Extinguishing Media:** Not Needed

**Auto Ignition Temperature:** None

**Special Fire Fighting Procedures:** Normal caution when using chemicals.

**Unusual Fire and Explosion Hazards:** Fluorides

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## SECTION VI - ACCIDENTAL RELEASE MEASURES

**Steps to be taken in Case Material is spilled:** Clean up paste and flush remaining material with lots of water.

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## SECTION VII - HANDLING AND STORAGE

**Precautions to be Taken in Handling and Storage:** Store in plastic containers in cool area. Do not store in glass or porcelain container. Wash thoroughly after use.

**Work/Hygienic Practices:** Avoid contact with skin, eyes and clothing.

**Other Precautions:** Keep container away from excessive heat.

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## SECTION VIII - CONTROL MEASURES

**Ventilation:** Yes

**Local Exhaust:** Yes

**Eye Protection:** Safety Goggles

**Protective Gloves:** Recommend, NIOSH approved

**Mechanical (General):** Yes

**Respiratory Protection (Type):** NIOSH approved respirator.

**Other Protective Clothing or Equipment:** Rubber apron

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## SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

**Boiling Point:** NA  
**Specific Gravity (Water = 1):** 1.6  
**Vapor Pressure (mm Hg):** NA  
**Percent Volatile by Volume:** 30%  
**Vapor Density (Air = 1):** NA  
**Evaporation Rate (Butyl Acetate = 1):** 0.3  
**Melting Point:** 500°C  
**Solubility in Water:** Moderate  
**Reactivity in Water:** None  
**Appearance and Odor:** White odorless paste

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## SECTION X - STABILITY AND REACTIVITY

**Stability:** Product is stable (Conditions to Avoid): Excess heat  
**Incompatibility:** Glass or porcelain  
**Hazardous Decomposition Products:** Fluorides with high heat.  
**Hazardous Polymerization:** Will not occur (Conditions to Avoid): NA

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## SECTION XI - 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
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## SECTION XII - ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

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## SECTION XIII - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose of in accordance with EPA regulations

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## SECTION XIV- TRANSPORTATION

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

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## SECTION XV - 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.**

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## SECTION XVI - OTHER INFORMATION

The labeling of this product is indicated in Section II. The full text of all abbreviations indicated by codes in the MSDS are as follows:

R25	Toxic if swallowed
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin
R60/61	May cause infertility/May cause harm to unborn child
R62	Possible risk of impaired fertility
S-26	In case of eye contact, rinse thoroughly and get medical attention
S-27	Take off immediately contaminated clothing
S-36/37/39	Wear suitable protective clothing, gloves, and eye/face protection
S-45	In case of accident or if feel unwell call medical advice immediately
H303	May be harmful if swallowed
H319	Causes serious eye irritation
H360	May damage fertility or the unborn child
P264	Wash hands thoroughly after handling
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Further information:

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