

SAFETY DATA SHEET

SUPERIOR NO. 602

DATE REVISED: January 28, 2020

SECTION 1 -- IDENTIFICATION

Product Name/Part number: Superior No. 602

Recommended use: Silver brazing paste 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 3)	H301
Acute toxicity, Dermal (Category 3)	H311
Skin irritation (Category 2)	H315
Serious eye damage (Category 1)	H319
Acute toxicity, Inhalation (Category 3)	H331
Specific target organ toxicity – Single exposure, Respiratory system (Category 3)	H335
Reproductive toxicity (Category 2)	H361

See below for full text of H-Statement

GHS Label Elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s)

H301	Toxic if swallowed
H311	Toxic if in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child

Precautionary statement(s)

P202	Do not handle until all safety precautions have been read and understood
P261	Do not breathe 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.
P280	Wear protective gloves or protective clothing and eye protection
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352	IF ON SKIN: Wash with plenty of soap and water
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

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
P332+P313 If skin irritation occurs: Get medical advice
P337+P313 If eye irritation persists: Get medical advice
P361 Remove all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up
P501 Dispose of contents or container to an approved waste disposal plant

Hazards not otherwise classified or not covered by GHS:

Boric acid Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)
Potassium silicofluoride Strong hydrogen fluoride releaser

SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%
Boric acid	10043-35-3	30 – 45
Potassium Flurohydroborate	12228-71-6	20 – 40
Potassium Tetraborate	1332-77-0	15 – 25
Potassium silicofluoride	16871-90-2	5 – 10

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.
Skin: Wash off with soap and plenty of water. Consult a physician.
Ingestion: 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: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special Hazards: Will release small amounts of borane/boron oxides

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

Further information No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, 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.

Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Mop or sweep up and shovel. Keep in suitable, closed containers for disposal.

For disposal, see section 13.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin, eyes, and clothing. Wash thoroughly after use. Provide appropriate exhaust ventilation.

For precautions, see section 2.

Conditions for safe storage, including any incompatibilities Keep in plastic containers tightly closed in a cool area. Do not store in glass or porcelain.

For full precaution statements see Section 2

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA Permissible Exposure Limit (PEL): 2.5 mg/m³

ACGIH Threshold Limit Value (TLV): 2.5 mg/m³

General Precautions: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

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

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator 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 (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 appropriately fitting safety goggles with side-shields conforming to EN166.. 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.

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	White paste
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting point/Freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	Not applicable
Evaporation rate	No data available
Flammability (Solid, gas)	No data available
Upper flammability or explosive limits	Upper explosion limit: Not applicable
Lower flammability or explosive limits	Lower explosion limit: Not applicable
Vapor pressure	No data available
Vapor density	No data available
Relative density (Water = 1)	No data available
Solubility(ies)	Soluble in water
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, exposure to moisture

Incompatible Material: Potassium, acid anhydrides, strong oxidizers, glass

Hazardous Decomposition Products Hydrogen fluoride

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.

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) Not regulated

IMDG 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 No chemicals in this material are subject to the reporting requirement of SARA Title III, Section 313.

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.

EPA TSCA Inventory (Environmental Protection Agency Toxic Substances Control Act)

The product is comprised of components that are listed on the US EPA TSCA Chemical Substance Inventory and can be used for commercial purposes in the US without limitation or restriction. All components of this product have an "Active" TSCA Inventory status designation.

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.

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Preparation information

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