SAFETY DATA SHEET SUPERIOR NO. 45

DATE REVISED: January 1, 2017

Product Name: Superior No. Superior 45

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 SDS 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 SDS should be given to the buyer.

H.M.I.S. INFORMATION: HEALTH = 1 FLAMMABILITY = 3 REACTIVITY = 0

SECTION I - IDENTIFICATION

Common Name: Superior 45 Chemical Family: Soft Soldering 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



Flammable Warning **Precautionary Statements:** P210, P280, P303+P361+P353 **Risk Phrases:** R11, R36, R67 **Safety Phrases:** S2, S7, S16, S24/25, S-26 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 Phrases |
|---------------------------------------|------------|-------|----------|---------------------------------------|
| Isopropanol | 67-63-0 | 70-90 | 400 PPM | H225, H302, H305, H320, H332, H336 |
| Glutamic Acid Hydrochloride15767-75-6 | | 5-12 | NA | H318 |
| Polyethylene Glycol | 25322-68-3 | 4-9 | NA | NA |

Unlisted percentages are non-hazardous stabilizers, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

SECTION IV – FIRST AID MEASURES

| Inhalation: | Remove to fresh air |
|-------------|--|
| Eyes: | Flush with water for fifteen (15) Minutes. Call physician. |
| Skin: | Wash thoroughly with 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):** NA

ACGIH Threshold Limit Value (TLV): NA

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 18.3°C/65°FFlammable Limits: Lower-2 Upper-12Extinguishing Media: Dry chemical, CO2Auto Ignition Temperature: 398.9°C/750°FSpecial Fire Fighting Procedures: Wear protective clothing, including NIOSH approved self-
contained breathing apparatusUnreaded Fire Fighting Procedures: Depended Fire Fighting apparatus

Unusual Fire and Explosion Hazards: Flammable, do not mix with strong oxidizing or dehydrating agents. Do not store in presence of oxidizing agents.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Spilled: Absorb with sawdust and remove in accordance to EPA regulations.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area. Do not store in glass containers. **Handling Precautions:** Safe precautionary practices. **Other Precautions:** Keep away from electrical sparks, heat, open flame or oxidizing agents

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved respirator.
Ventilation: Yes
Mechanical (General): Explosion proof
Local Exhaust: Yes
Protective Gloves: Recommended, NIOSH approved
Other Protective Clothing or Equipment: Rubber apron is recommended.
Eye Protection: Safety Glasses
Regulatory Information: The chemical components are listed on TSCA and DSL inventory. See composition section ii for CAS numbers.

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: 82°C/179.6°F Specific Gravity (Water = 1): 0.88 Vapor Pressure (mm Hg): 33 Percent Volatile by Volume: 79% Vapor Density (Air = 1): 2.07 Evaporation Rate (Butyl Acetate = 1): 2.5 Melting Point: -88.5°C/-127.6°F Solubility in Water: Unlimited Reactivity in Water: None Appearance and Odor: Clear liquid, alcohol odor

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable(Conditions to Avoid): Avoid heat sparks and open flamesIncompatibility: Strong oxidizers.Hazardous Decomposition Products: CO.Hazardous Polymerization: NA

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

SECTION XII - ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with EPA regulations

SECTION XIV- TRANSPORTATION

D.O.T. Proper Shipping Name: Isopropanol Hazard Class: 3 Identification Number: UN1219 Packing Group: II Type D.O.T Label Required Information: Flammable Liquid SECTION XV - REGULATORY INFORMATION OSHA Hazardous Chemical According to 29 CFR 1910.1200: NA Carcinogenicity Classification: (Components Present at 0.1% or More) International Agency for Research on Cancer (IARC): NA American Conference of Governmental Industrial Hygienists (ACGIH): NA National Toxicology Program (NTP): NA Occupational Safety and Health Administration (OSHA): NA All Components of this Product are Listed on the U.S. Toxic Substances Control Act Inventory or Otherwise Comply with TSCA Pre-manufacture Notification Requirements. This product is RoHS compliant.

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 SDS are as follows:

| R11 | Highly flammable | |
|--|---|--|
| R36 | Irritating to eyes | |
| R67 | Irritating to respiratory system | |
| | | |
| S-2 | Keep out of the reach of children | |
| S-2 S-7 | Keep container tightly closed | |
| S-16 | Keep away from sources of ignition - No smoking | |
| S-24/25 | Avoid contact with skin and eyes | |
| | 5 | |
| S-26 | In case of eye contact, rinse thoroughly and get medical attention | |
| H225 | Highly flammable liquid and vapour | |
| H302 | Harmful if swallowed | |
| H305 | May be harmful if swallowed and enters airways | |
| H318 | Causes serious eye damage | |
| H320 | Causes eye irritation | |
| H332 | Harmful if inhaled | |
| | | |
| P210 | Keep away from heat/sparks/open flames/hot surfaces – No smoking | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection | |
| P303+361+353IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. | | |
| | | |

Rinse skin with water/shower

Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. Reasonable care has been taken in the preparation of this material, but 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.