SAFETY DATA SHEET SUPERIOR PRE-FLUX COPPER CLEANER

DATE REVISED: January 1, 2016

Product Name: Superior Pre-Flux Copper Cleaner

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 = 1 FLAMMABILITY = 0 REACTIVITY = 0

SECTION I - IDENTIFICATION

Common Name: Superior Pre-flux copper cleaner Chemical Family: Pre-flux Cleaner for Copper

CAS Number: NA Chemical Name: NA Formula: See Below

SECTION II - HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

Classification (CLP): No Data Available Label Elements (CLP): No Data Available



Irritant

Risk Phrases: R41

Safety Phrases: S36, S39

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

Glutamic Acid Hydrochloride 138-15-8 5-10 NA

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

SECTION IV- HEALTH HAZARDS

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

Signs and Symptoms of Exposure:

1) Acute Effects: Reddening of eyes and skin, acid stomach if ingested, inhalation may cause

respiratory tract irritation.

2) Chronic Effects: No specific information available

Medical Conditions Generally Aggravated by Overexposure: None presently known.

Chemical Listed as a Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 5 mg/m³ **ACGIH Threshold Limit Value (TLV):** 5 mg/m³

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 10 minutes. Call a physician.

Skin: Wash thoroughly with water.

Inhalation: Remove to fresh air or administer oxygen. Call a physician.

Ingestion: If patient is fully conscious, give two glasses of water. Obtain medical attention

immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA

Flammable Limits: NA

Extinguishing Media: Not necessary **Auto Ignition Temperature:** None

Special Fire Fighting Procedures: Normal cautions when dealing with chemicals

Unusual Fire and Explosion Hazards: Will release small amounts of HCl.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Spilled: First, neutralize with soda ash or sodium bicarbonate. Dilute with water and dispose of in accordance with EPA regulations. Wash spill area with plenty of water.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area, away from heat.

Handling Precautions: Safe, precautionary practices to avoid spills and exposure to skin or fumes.

Other Precautions: None

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): Adequate ventilation and air removal from solder area is required. If

working in inadequate ventilation area, wear NIOSH approved respirators.

Ventilation: Yes

Mechanical (General): Yes

Local Exhaust: Yes

Eye Protection: Safety glasses/goggles

Protective Gloves: Recommended, NIOSH approved

Other Protective Clothing or Equipment: Optional to user preference

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: 104°C/220°F

Specific Gravity (Water = 1): 1.04 Vapor Pressure (mm Hg): NA **Percent Volatile by Volume: 85%** Vapor Density (Air = 1): NA

Evaporation Rate (Butyl Acetate = 1): 0.9

Melting Point: 0°C/32°F

Solubility in Water: Unlimited Reactivity in Water: None

Appearance and Odor: Pink liquid, citrus odor

SECTION X - STABILITY AND REACTIVITY

Stability: Product is Stable (Conditions to Avoid): NA

Incompatibility: Strong Oxidizers, Metals.

Hazardous Decomposition Products: Small Amounts of HCl.

Hazardous Polymerization: Will Not Occur (Conditions to Avoid): 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: Non-hazardous

Identification Number:NAHazard Class:NAType D.O.T Label Required Information:NAPacking Group:NA

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. 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 MSDS are as follows:

R41 Risk of serious damage to eyes

S-36/39 Wear suitable protective clothing and eye/face protection

Disclaimer: 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.