SAFETY DATA SHEET SUPERIOR NO. 40MM4

DATE REVISED: February 20, 2018

SECTION 1 -- IDENTIFICATION

Product Name/Part number: Superior No. 40MM4 **Recommended use:** Organic Acid Water Soluble Flux

Manufacturer: Superior Flux & Mfg. Co. Emergency Contact: CHEMTREC

6615 Parkland Blvd Emergency Phone: 1-800-424-9300 Cleveland OH, 44139 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)

Skin corrosion (Category 1) H314 Serious eye damage (Category 1) H318

See below for full text of H-Statement

GHS Label Elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s)

H314 Causes severe skin burns and eye damage

**H318 Causes serious eye damage

Precautionary statement(s)

P260	Do not breathe mist, vapors, spray, or fumes.
P264	Wash any exposed skin thoroughly after handling

P280 Wear protective gloves, eye protection, and face protection 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 or shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse

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

^{**}May be omitted from label due to presence of stricter statement.

SECTION 3 – COMPOSITION INFORMATION

ComponentsCAS Number%Glutamic acid-HCl15767-75-61-10

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. Remove contacts if present and easy to do so. 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: Not applicable

Special Hazards: Will release small amounts of hydrofluoric acid

Special protective actions for firefighters: Normal cautions when dealing with chemicals.

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. See section 8 for personal protection.

Environmental Precautions: Prevent further leakage or spillage if safe to do so.

In Case Material is spilled: First, neutralize with soda ash or sodium bicarbonate. Dilute with water and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid inhalation of vapor, fumes, or mist.

General Precautions: Do not eat, drink, or smoke while using this product. Wash hands after use. Remove contaminated clothing and equipment before entering eating areas.

For full precaution statements see Section 2

Storage Requirements: Keep container away from excessive heat.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION CONTROL PARAMETERS

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

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

- **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 appropriately 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:** Chemical resistant rubber apron. 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 Clear liquid None

Odor threshold

pH

No data available

No data available

Melting point/Freezing pointNo data availabl

0°C/32°F

Initial boiling point and boiling range 104°C/220°F **Flash point** Not applicable

Evaporation rate (Butyl Acetate = 1) 0.9

Flammability (Solid, gas) Not applicable

Upper flammability or explosive limits

Lower flammability or explosive limits

Upper explosion limit: Not applicable

Lower explosion limit: Not applicable

Vapor pressureNo data availableVapor densityNo data available

Relative density (Water = 1) 1.050

Solubility(ies)Miscible in waterPartition coefficient: n-octanol/waterNo data availableAuto-ignition temperatureNot applicableDecomposition temperatureNo data availableViscosityNot applicable

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, metals, strong oxidizers

Incompatibility: No data available

Hazardous Decomposition Products Small amounts of hydrofluoric acid, carbon oxides

(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.

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)

Non-hazardous

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.

THIS PRODUCT IS ROHS 2 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