

SAFETY DATA SHEET

SUPERIOR NO. 461

DATE REVISED: January 1, 2017

Product Name: Superior No. Superior 461

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 = 3 FLAMMABILITY = 0 REACTIVITY = 0

SECTION I - IDENTIFICATION

Common Name: Superior 461

Chemical Family: Organic acid, chloride activated flux

CAS Number: NA

Chemical Name: NA

Formula: See below

SECTION II – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

Classification (CLP): Corrosive

Label Elements (CLP): Corrosive



Corrosive Irritant

Precautionary Phrases: P264, P270, P280, P301+P312, P305+P351+P338, P330, P337+P313, P301+P330+P331, P304+P340, P309+P311

Risk Phrases: R36/37/38, R34

Safety Phrases: S-26, S-27, S-36/37/39, S-45, S18, S61, S62, S64

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
Ammonium Chloride	12125-02-9	10-20	NA	H302, H319, H401
Hydrochloric Acid	7647-01-0	1-10	5 mg/m ³	H314, H335
Hydroxyacetic Acid	79-14-1	15-30	NA	H302, H312, H318
Monoethanolamine	141-43-5	5-10	3 mg/m ³	H227, H312, H332, H302, H335, H314

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 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): NA

ACGIH Threshold Limit Value (TLV): NA

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA

Flammable Limits in Air % By Volume: NA

Extinguishing Media: CO₂, dry chemical

Auto Ignition Temperature: None

Unusual Fire and Explosion Hazards: None

Special Fire Fighting Procedures: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is spilled: Absorb spill with sawdust or wood shavings and remove in accordance with EPA regulations.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Plastic containers in a cool dry place when not in use.

Handling Requirements: Safe precautionary use to prevent spills and exposure to skin. Keep away from oxidizing agents.

Other Precautions: None

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved respirator.

Ventilation: Yes

Mechanical (General): Yes

Local Exhaust: Yes

Eye Protection: Safety glasses

Protective Gloves: Recommended, NIOSH approved

Other Protective Clothing or Equipment: Rubber gloves and an apron

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: ~112°C/234°F

Specific Gravity (Water = 1): 1.150

pH: 1.1 +/- 0.50 @ 25°C

Vapor Pressure (mmHg): Nil

Percent Volatile By Volume: 54%

Vapor Density (Air = 1): NA

Evaporation Rate (Butyl acetate = 1): NA

Melting Point: ~ 10°C/50°F

Solubility in Water: Unlimited

Reactivity in Water: None

Appearance and Odor: Clear liquid, slight odor

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable

Conditions to Avoid: None

Hazardous Polymerization: None

Conditions to Avoid: Extreme heat

Incompatibility: Oxidizing agents and metals.

Hazardous Decomposition Products: Nitrogen products, CO, CO₂ (above 26°C/500°F)

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: Corrosive Liquid, NOS (Contains Hydroxyacetic Acid, Hydrochloric Acid)

Hazard Class: 8

Identification Number: UN1760

Packing Group: III

Type D.O.T Label Required Information: Corrosive

Waste Disposal Method: Dispose in Accordance with EPA Regulations

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 MSDS are as follows:

R34	Causes burns
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin
S-18	Handle and open container with care
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
S61	Avoid release to the environment. Refer to special instructions/safety data sheet
S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label where possible
S64	If swallowed, rinse mouth with water (only if the person is conscious)
P264	Wash ... thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician 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
P330	Rinse mouth

P337+P313 If eye irritation persists get medical advice/attention
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P309+P311 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician

H319 Causes serious eye irritation
H401 Toxic to aquatic life
H227 Combustible liquid
H302 Harmful if swallowed
H312 Harmful if contact with skin
H318 Causes serious damage to eyes
H332 Harmful if inhaled
H314 Causes severe skin burns and eye damage
H335 May cause respiratory irritation

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.
