# SAFETY DATA SHEET SUPERIOR NO. 464

DATE REVISED: January 1, 2016

Product Name: Superior No. Superior 464

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 464 Chemical Family: Water soluble soldering 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



**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
Hydrochloric Acid	7647-01-0	10-25	$5 \text{ mg/m}^3$	H314, H335
Monoethanolamine	141-43-5	5-10	$3 \text{ mg/m}^3$	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: CO<sub>2</sub>, 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): 1.11 Vapor Pressure (mmHg): Nil Percent Volatile By Volume: 70% 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, CO<sub>2</sub> (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: Hydrochloric Acid
Hazard Class: 8
Identification Number: UN1789
Packing Group: II
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. Remov			
	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+	8		
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		

H227	Combustible liquid
H302	Harmful if swallowed
H312	Harmful if contact with skin
H332	Harmful if inhaled
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

Further information:

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