

SAFETY DATA SHEET

SUPERIOR NO. 23

DATE REVISED: January 1, 2016

Product Name: Superior No. Superior 23

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 23

Chemical Family: Inorganic Acid 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



Corrosive Irritant Environmentally Damaging

Precautionary Phrases: P101, P102, P103, P264, P270, P273, P280, P301+P312, P303 + P361 + P353, P305+P351+P338, P330, P310, 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
Acetic Acid	64-19-7	2-4	10 mg/m ³	H314
Hydrochloric Acid	7647-01-0	5-15	5 mg/m ³	H314, H335
Zinc Chloride	7646-85-7	30-45	1 mg/m ³	H302, H314, H319, H335, H400, H401

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: NA

Extinguishing Media: Dry chemical, CO₂ foam

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 upon decomposition

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.

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 and fumes.

Other Precautions: NA

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: 104°C/220°F
Specific Gravity (Water = 1): 1.32
Vapor Pressure (mm Hg): NA
VOC Content: 0%
pH: 0-1.00
Vapor Density (Air = 1): NA
Evaporation Rate (Butyl Acetate = 1): 0.6
Melting Point: 0°C/32°F
Solubility in Water: Unlimited
Reactivity in Water: None
Appearance and Odor: Clear odorless liquid

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable **(Conditions to Avoid):** Metals
Incompatibility: Alkaline, strong oxidizing or reducing materials, cyanides or combustible materials.
Hazardous Decomposition Products: HCl, zinc chloride, zinc oxide, ammonium.
Hazardous Polymerization: Will not occur **(Conditions to Avoid):** Excessive heat or cold

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, Acidic, Inorganic, N.O.S.
(Contains Zinc Chloride, Hydrochloric Acid)
Hazard Class: 8
Identification Number: UN3264
Packing Group: III
Type D.O.T Label Required Information: Corrosive

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)
P101	If medical advice is needed, keep container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash ... thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment
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
P303+P361+P353	IF ON SKIN, Remove take off immediately contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P310	Immediately call a Poison Center or doctor/physician.
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
- H302 Harmful if swallowed
- H319 Causes serious eye irritation
- H401 Toxic to aquatic life
- H314 Causes severe skin burns and eye damage
- H335 May cause respiratory irritation
- H400 Very toxic to aquatic life

Further information:

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