

MATERIAL SAFETY DATA SHEET

SUPERIOR NO. 84

DATE REVISED: January 1, 2011

Product Name: Superior No. 84

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 = 3 REACTIVITY = 0

SECTION I - IDENTIFICATION

Common Name: Superior No. 84

Chemical Family: Organic Acid, Water Soluble Flux

CAS Number: NA

Chemical Name: NA

Formula: See Below

SECTION II - COMPOSITION INFORMATION

| Components | CAS Number | % | OSHA PEL |
|------------------|------------|-------|----------------------|
| Isopropanol | 67-63-0 | 70-90 | 400PPM |
| DMA-HCL | 506-59-2 | 1-5 | 10 mg/m ³ |
| Hydrobromic Acid | 10035-10-6 | 1-5 | 3 mg/m ³ |
| Alkanolamine | 141-43-5 | 1-5 | 3 mg/m ³ |

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 III - HEALTH HAZARDS

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

Symptoms of Overexposure: Dizziness, blurred vision, headache, irritation of mucous membranes, loss of appetite, and inability to concentrate.

Medical Conditions Generally Aggravated by Overexposure: Skin conditions, kidney or liver diseases.

Chemical Listed as a Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 400 PPM

ACGIH Threshold Limit Value (TLV): 400 PPM

SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 30 minutes. Call a physician.
Skin: Wash thoroughly with lot of water. Consult a physician if irritation continues.
Inhalation: Remove to fresh air: give artificial respiration if not breathing. Consult a physician.
Ingestion: If conscious, give lots of water and induce vomiting. Get immediate medical attention.
Never give anything by mouth to an unconscious person.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 18.3°C/65°F **Flammable Limits:** Lower-2 Upper-12.7
Extinguishing Media: Dry chemical, CO₂ **Auto Ignition Temperature:** 398.9°C/750°F
Special Fire Fighting Procedures: Wear protective clothing, including NIOSH-Approved self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: Flammable, do not mix with strong oxidizing or dehydrating agents. Do not store in presence of oxidizing agents.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Spilled: Absorb with sawdust and remove in accordance to EPA regulations.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area. Do not store in glass containers.
Handling Precautions: Safe precautionary practices.
Other Precautions: Keep away from electrical sparks, heat, open flame or oxidizing agents.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved respirator.
Ventilation: Yes
Mechanical (General): Yes
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: 82°C/179.6°F
Specific Gravity (Water = 1): 0.8475 ± 0.005 @ 25°C

Vapor Pressure (mm Hg): 33
Percent Volatile by Volume: 83%
Vapor Density (Air = 1): 2.07
Evaporation Rate (Butyl Acetate = 1): 2.88
Melting Point: -88.5°C/-127.3°F
Solubility in Water: Unlimited
Reactivity in Water: None
Appearance and Odor: Clear, pale yellow liquid, alcohol odor.

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable. **(Conditions to Avoid):** NA
Incompatibility: Strong oxidizers, alkaline compounds.
Hazardous Decomposition Products: CO₂, CO.
Hazardous Polymerization: NA **(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
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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: Isopropanol
Hazard Class: 3
Identification Number: UN 1219
Packing Group: II
Type D.O.T Label Required Information: Flammable Liquid

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 premanufacture notification requirements.
This Product is RoHS Compliant.**

SECTION XVI - OTHER INFORMATION

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