



MATERIAL SAFETY DATA SHEET SUPERIOR NO. 435

DATE REVISED: November 13, 2003



Product Name: Superior No. 435

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 = 2** **FLAMMABILITY = 3** **REACTIVITY = 0**

SECTION I - IDENTITY

Common Name: Superior No. 435

Chemical Family: Organic Acid Soldering Flux

CAS Number: NA

Chemical Name: NA

Formula: See Below

SECTION II - COMPOSITION INFORMATION

<u>Components</u>	<u>CAS Number</u>	<u>%</u>	<u>OSHA PEL</u>
Isopropanol	67-63-1	40-58	400PPM
Monoethanolamine	141-43-5	3-8	3PPM
Hydroxyacetic Acid	79-14-1	20-35	NA

Unlisted percentages are non-hazardous stabilizers, activators, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

SECTION III - HEALTH HAZARDS

EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Remove Victim to Fresh Air or Administer Oxygen. Call Physician.

Ingestion: Drink Large Amounts of Water and Induce Vomiting. Call Physician.

Eyes: Flush with Water for 15 Minutes. Call a Physician.

Skin: Wash Thoroughly With Water.

Primary Routes of Entry into Body: Fume Inhalation, Ingestion, Skin, and Eyes.

Symptoms of Overexposure: Dizziness, Blurred Vision, Headache, Irritation of Eye, Skin and Mucous Membranes and Loss of Appetite.

Medical Conditions Generally Aggravated by Exposure: Skin Conditions

Chemicals Listed as Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 400PPM

ACCGIH Threshold Limit Value (TLV): 400PPM

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 18.3°C/65°F

Flammable Limits in Air % By Volume: Upper 13- Lower 2

Auto Ignition Temperature: 398.9°C/750°F

Extinguishing Media: CO₂, Dry Chemical

Unusual Fire and Explosion Hazards: Flammable, Do Not Mix With Strong Oxidizing Agents or Dehydrating Agents. Do Not Store with Oxidizing Agents.

Special Fire Fighting Procedures: Wear Protective Clothing, Including NIOSH Self-Contained Breathing Apparatus.

Superior manufactures quality fluxes. Our business is solving problems.



SECTION V - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Spilled: Absorb Spill with Sawdust or Wood Shavings and Dispose in Accordance to State and Local EPA Regulations.

SECTION VI - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: Store in Closed Plastic Containers in a Cool Dry Area. Do Not Store in Glass Containers.

Work/Hygienic Practices: Safe Precautionary Use to Prevent Spills and Exposure to Skin.

Other Precautions: Keep out of Contact with Electrical Sparks, Heat or Open Flame. Keep Thinner Away From Oxidizing Agents.

SECTION VII - CONTROL MEASURES

Ventilation: Yes **Local Exhaust:** Yes **Mechanical Exhaustion:** Explosion Proof

Respiratory Protection (Type): NIOSH Approved Respirator

Protective Gloves: Recommended, NIOSH Approved

Eye Protection: Safety Glasses

Other Protective Clothing or Equipment: Rubber Apron

SECTION VIII - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: 82°C /179.6°F

Specific Gravity (Water = 1): 1.045

Vapor Pressure (mmHg): 33

Percent Volatile By Volume: 77%

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: Amber Liquid, Alcohol Odor

SECTION IX - STABILITY AND REACTIVITY

Stability: Product is Stable

Conditions to Avoid: Extreme Heat

Hazardous Polymerization: None

Incompatibility: Oxidizing Agents

Hazardous Decomposition Products: CO

SECTION X - TRANSPORTATION AND DISPOSAL CONSIDERATIONS

D.O.T. Proper Shipping Name: Flammable Liquid, Corrosive, NOS (Contains Isopropanol, Glycolic Acid)

Hazard Class: 3

Identification Number: UN2924

Packing Group: II

Type D.O.T Label Required Information: Flammable Liquid, Corrosive

Waste Disposal Method: Dispose in Accordance with State and Local EPA Regulations.

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Superior manufactures quality fluxes. Our business is solving problems.



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