

MATERIAL SAFETY DATA SHEET

SUPERIOR NO. 45

DATE REVISED: January 1, 2014

Product Name: Superior No. 45

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
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SECTION I - IDENTIFICATION

Common Name: Superior No. 45

Chemical Family: Organic Acid, Halide Flux

CAS Number: NA

Chemical Name: NA

Formula: See Below

SECTION II - COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL
Isopropanol	67-63-0	60-80	400PPM
Glutamic Acid Hydrochloride	15767-75-6	5-12	NA
Polyethylene Glycol	25322-68-3	4-9	NA

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: Further irritation of mucous membranes and kidney or liver diseases.

Chemical Listed as a Carcinogen or Potential Carcinogen: No

OSHA Permissible Exposure Limit (PEL): 400PPM

ACGIH Threshold Limit Value (TLV): 400PPM

SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 10 minutes. Call a physician.
Skin: Wash thoroughly with water.
Inhalation: Remove to fresh air or administer oxygen. Call physician.
Ingestion: If patient is conscious, drink two glasses of water and induce vomiting. Get medical attention immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 18.3°C/65°F
Flammable Limits: Lower-2, Upper-12
Extinguishing Media: Dry chemical, CO₂
Auto Ignition Temperature: 398.9°C/750°F
Special Fire Fighting Procedures: Flammable, do not mix with strong oxidizing or dehydrating agents. Do not store in the presence of oxidizing agents.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Spilled: Absorb spill with sawdust and dispose of in accordance with EPA regulations and wash with plenty of water.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area away from heat. Do not store in glass.
Handling Precautions: Safe, precautionary practices to avoid spills and exposure to skin or fumes.
Special Precautions: Keep out of contact with electrical sparks, heat or open flame. Keep away from 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): 0.88

Vapor Pressure (mm Hg): 33

Percent Volatile by Volume: 79%

Vapor Density (Air = 1): 2.07

Evaporation Rate (Butyl Acetate = 1): 2.5

Melting Point: -88.5°C/-127.6°F

Solubility in Water: Unlimited

Reactivity in Water: None

Appearance and Odor: Clear liquid, alcohol odor.

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable

(Conditions to Avoid): NA

Incompatibility: Strong oxidizing and dehydrates materials

Hazardous Decomposition Products: HCl, CO, CO₂

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

Identification Number: UN1219

Hazard Class: 3

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

DISCLAIMER: 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.
