

MATERIAL SAFETY DATA SHEET

SUPERIOR ALUMINUM CORE FLUX

DATE REVISED: January 1, 2011

Product Name: Superior Aluminum Core Flux

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 = 1 REACTIVITY = 1

SECTION I – IDENTIFICATION

Common Name: Superior Aluminum Core Flux

Chemical Family: Aluminum core flux

CAS Number: NA

Chemical Name: NA

Formula: See below

SECTION II - COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL
Aminoethylethanolamine	111-41-1	20-40	NA
Ammonium Bifluoride	1341-49-7	15-30	2.5 mg/m ³
Zinc Oxide	1314-13-2	5-15	5.0 mg/m ³
Triethanolamine	102-71-6	20-40	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: Eye and skin burns, damage to digestive and respiratory system, abdominal pain, vomiting and effects central nervous system.

Medical Conditions Generally Aggravated by Overexposure: Lung and skin disorders.

Chemical Listed as a Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 2.5 mg/m³

ACGIH Threshold Limit Value (TLV): 2.5 mg/m³

SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 15 minutes. Call a physician.

Skin: Wash thoroughly with water. If rash develops call a physician.

Inhalation: Remove to fresh air or administer oxygen. Call physician.

Ingestion: Get medical attention immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: >135°C/275°F

Flammable Limits: Lower-1.5, upper-10.0

Extinguishing Media: Water, fog, foam or dry chemical

Auto Ignition Temperature: None

Special Fire Fighting Procedures: Full protective equipment required. Ammonia, boron oxide, or fluoride fumes may be released.

Unusual Fire and Explosion Hazards: Decomposition may produce NO₂ fumes. Hydrofluoric acid solution may be formed within water run-off.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is spilled: Contain, absorb, sweep-up and dispose

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in plastic containers in cool area, away from heat.

Handling Precautions: Wash hands thoroughly after handling. Safe precautionary practices to avoid spills and exposure to skin and fumes.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Type): NIOSH approved respirator in absence of adequate ventilation.

Ventilation: Yes

Mechanical (General): Yes

Local Exhaust: Yes

Eye Protection: Safety goggles

Protective Gloves: NIOSH approved chemical resistant

Other Protective Clothing or Equipment: Full protective clothing to prevent any contact.

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: NA

Specific Gravity: NA

Vapor Pressure (mm Hg): NA

Percent Volatile by Volume: NA

Vapor Density (Air = 1): NA

Evaporation Rate (Butyl Acetate = 1): N/A

Melting Point: NA

Solubility in Water: Freely soluble

Reactivity in Water: NA

Appearance and Odor: Amber solid with ammonia odor

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable

(Conditions to Avoid): Excess heat

Incompatibility: Strong oxidants, sulfides and cyanides.

Hazardous Decomposition Products: Hydrofluoric acid, ammonia, NO₂, boron trifluoride gases.

Hazardous Polymerization: Will not occur

(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

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 solid, basic, organic, N.O.S (aminoethylethanolamine, ammonium bifluoride)

Hazard Class: 8

Identification Number: UN3263

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

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