

# SAFETY DATA SHEET

## SUPERIOR ACF-7

DATE REVISED: January 1, 2017

**Product Name:** Superior ACF-7

**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 ACF-7

**Relevant Identified Uses:** Soldering Core Flux for Aluminum

**Chemical Family:** Aluminum core flux

**CAS Number:** NA

**Chemical Name:** NA

**Formula:** See below

### SECTION II – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

**Classification (CLP):** No Data Available

**Label Elements (CLP):** C – Corrosive



**Risk Phrases:** R61, R62, R34, R43, R36/37/38, R50/53

**Safety Phrases:** S-26, S-36/37/39, S-45

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 Statements
Aminoethylethanolamine	111-41-1	20-40	NA	H360Fd, H361, H314, H317, H335
Ammonium Bifluoride	1341-49-7	15-30	2.5mg/m <sup>3</sup>	H301, H314
Zinc Oxide	1314-13-2	5-15	5.0 mg/m <sup>3</sup>	H400-Acute 1, H410-Chronic 2
Triethanolamine	102-71-6	20-40	NA	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. See section XVI for full text description of S and R phrases, H statements, and classification.

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## SECTION IV - FIRST AID MEASURES

Description of First Aid Measures

- Eyes:** Flush with water for 15 minutes. Call a physician.  
**Skin:** Wash thoroughly with soap and water. If rash develops call a physician.  
**Inhalation:** Remove to fresh air or administer oxygen. Call physician.  
**Ingestion:** Get medical attention immediately.

Most Important Symptoms and effects, both acute and delayed

**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/m<sup>3</sup>

**ACGIH Threshold Limit Value (TLV):** 2.5 mg/m<sup>3</sup>

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## 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 NO<sub>2</sub> fumes. Hydrofluoric acid solution may be formed within water run-off

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## SECTION VI - ACCIDENTAL RELEASE MEASURES

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

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## 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.

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## 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.

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## 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

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## 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, NO<sub>2</sub>, boron trifluoride gases.

**Hazardous Polymerization:** Will not occur

**(Conditions to Avoid):** NA

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## 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.**

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## SECTION XIII - DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose of in accordance with EPA regulations

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## SECTION XIV- TRANSPORTATION

**D.O.T. Proper Shipping Name:** Corrosive solid, basic, organic, N.O.S (Contains 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

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## 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 and REACH Compliant.**

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## 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:

Xi	Irritant
Xn	Harmful
R22	Harmful if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R61	May cause harm to unborn child
R62	Possible risk to fertility
R34	Causes burns
R43	May cause sensitization by skin contact
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin
S-26	In case of eye contact, rinse thoroughly and get medical attention
S-36/37/39	Wear suitable protective clothing, gloves, and eye/face protection
S-45	In case of accident or if you feel unwell seek medical advisement immediately
H227	Combustible Liquid
H301 + H311	Toxic if swallowed, toxic if contact with skin
H302	Harmful if swallowed
H312	Harmful if contact with skin
H360Fd	May damage unborn child, suspected of damage to fertility
H314	Causes severe burns and eye damage
H317	May cause allergic skin reaction
H335	May cause respiratory irritation
H332	Harmful if inhaled
H319	Causes eye irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life, with long lasting effects

Further information:

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