SAFETY DATA SHEET SUPERIOR SuperShine

DATE REVISED: January 31, 2018

SECTION 1 -- IDENTIFICATION

Product Name/Part number: Superior SuperShine

Recommended use: Soft Soldering Flux

Manufacturer: Superior Flux & Mfg. Co. Mfg. Phone No. (440) 349-3000

6615 Parkland Blvd Emergency Phone No. Cleveland OH, 44139 **1-800-424-9300 (CHEMTREC)**

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with OSHA HCS (29 CFR 1910)

Flammable liquids (Category 2) H225 Acute toxicity, Oral (Category 4) H302 Skin irritation (Category 2) H315 Eye irritation (Category 2) H319

Specific target organ toxicity after – Single exposure, respiratory system

(Category 3) H335

Specific target organ toxicity – Single exposure, central nervous system

(Category 3) H336

Specific target organ toxicity – Single exposure, central nervous system, optic

nerve, respiratory system (Category 1) H370

Specific target organ toxicity - Repeated exposure, kidney, liver, spleen, blood

(Category 1) H372

Acute aquatic toxicity (Category 1) H400 Chronic aquatic toxicity (Category 1) H410

See below for full text of H-Statement

GHS Label Elements, including precautionary statements

Pictogram(s):



Signal Word: Danger

Hazard Statement(s)

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H400**	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

^{**}May be omitted from label due to presence of stricter and/or stronger statement.

Precautionary statement(s)

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P210	Keep away from heat, sparks, hot surfaces, and open flames. No smoking.			
P233	Keep container tightly closed.			
P240	Ground container and receiving equipment.			
P241	Use explosion-proof electrical, lighting and ventilation equipment.			
P242	Use only non-sparking tools.			
P243	Take precautionary measures against static discharge			
P261	Avoid breathing dust, fumes, mist, vapors, or spray			
P264	Wash skin thoroughly after handling			
P270	Do not eat, drink, or smoke when using this product.			
P271	Use only outdoors or in a well-ventilated area			
P280	Wear protective clothing and face protection			
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell			
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.			
	Rinse skin with water or shower.			
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for			
	breathing.			
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove			
	contact lenses, if present and easy to do. Continue rinsing.			
P312	Call a POISON CENTER if you feel unwell.			
P332+P313	If skin irritation occurs: Get medical advice			
P337+P313	If eye irritation persists: Get medical advice or attention			
P362	Take off contaminated clothing and wash before reuse.			
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for			
	extinction			
P403+P235	Store in a well-ventilated place. Keep cool			
P405	Store locked up			
P501	Dispose of contents to an approved waste disposal plant.			

Hazards not otherwise classified or not covered by GHS: None

SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%
Ethanolamine hydrochloride	2002-24-6	10-55
Ammonium chloride	12125-02-9	1-15
Ethanol	64-17-5	1-15

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

Inhalation: If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult

a physician.

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician. Continue rinsing eyes during transport to hospital.

Skin: Wash off with soap and plenty of water. Consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling)

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Hazards: No data available

Special protective actions for firefighters: Wear self-contained breathing apparatus for

firefighting if necessary. Use water spray to cool unopened containers.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. *See section 8 for personal protection.*

Environmental Precautions: Prevent further leakage or spillage if safe to do so.

In Case Material is spilled: Contain spillage, absorb with sawdust, then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapors, fumes, or mist. Use explosion-proof equipment. Keep away from sources of ignition and oxidizing agents – No smoking. Take measures to prevent the build up for electrostatic charge.

For full precaution statements see Section 2

Storage Requirements: Store in plastic containers, tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION CONTROL PARAMETERS

OSHA Permissible Exposure Limit (PEL): 10 mg/m³ ACGIH Threshold Limit Value (TLV): 10 mg/m³

Engineering Controls: Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.

Special Engineering Control Needs: Explosion Proof, non-sparking equipment

- **Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a full-face respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested an approved under appropriate government standards such as NIOSH (USA) or CEN (EU).
- **Protective Gloves:** Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.
- **Eye Protection:** Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)
- **Body Protection:** Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance Clear to light yellow liquid

Odor Alcohol

Odor threshold No data available Hq No data available No data available Melting point/Freezing point Initial boiling point and boiling range No data available Flash point No data available **Evaporation rate** No data available Flammability (Solid, gas) No data available **Upper flammability or explosive limits** No data available Lower flammability or explosive limits No data available Vapor pressure No data available Vapor density (Air = 1)No data available Relative density (Water = 1) 1.090 @ 20-25°C Solubility(ies) Miscible in water Partition coefficient: n-octanol/water No data available **Auto-ignition temperature** No data available **Decomposition temperature** No data available Viscosity No data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: No data available

Stability: Product is stable under recommended storage conditions

Possibility of hazardous reactions: Vapors may form explosive mixture with air

Conditions to Avoid: Heat, sparks and flames **Incompatibility:** Oxidizing agents, strong acids

Hazardous Decomposition Products Carbon oxides (Under fire conditions)

In the event of fire: See Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact

Symptoms (Immediate and Chronic) from

Acute Exposure No data available Prolonged or Repeated Exposure No data available

Measure(s) of toxicity

No data available

Is this chemical listed in the National Toxicology Program (NTP) Report on Carcinogens?

No data available

Is this chemical found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs or by the Occupational Safety and Health

Administration (OSHA) No data available

Additional information

Central nervous system depression, prolonged or repeated exposure can cause: nausea, headache, vomiting, narcosis, drowsiness. Overexposure may cause mild, reversible liver effects. Aspiration may lead to: lung edema, pneumonia.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

SECTION 12 - ECOLOGICAL INFORMATION

No data available

Persistence and degradability

No data available

Bioaccumulative potential No data available **Mobility in soil** No data available

Other adverse effects

Hazard to ozone layer: No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging Dispose of as unused product.

SECTION 14- TRANSPORTATION

D.O.T. (USA)

Proper Shipping Name: Ethanol solutions

Identification Number: UN1170 **Hazard Class(es):** 3

Packing Group: III D.O.T Label Required Information:

Flammable Liquid

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components No Chemicals in this material are subject to the reporting

requirement of SARA Title III, Section 302.

SARA 313 Components The following components are subject to reporting levels established

by SARA Title III, Section 313:

ComponentCAS No.Revision Date2-Propanol67-63-001-01-1987

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - OTHER INFORMATION

Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

Superior Flux & Mfg. Co. shall not be held liable for any damage resulting from handling or from contact with the above product.

Reference(s):

Sigma-Aldrich – SDS for Isopropanol

Preparation information

Superior Flux & Mfg. Co. 440-349-3000