

# SAFETY DATA SHEET

## SUPERIOR NO. 312-PVA

DATE REVISED: January 1, 2017

**Product Name:** Superior No. Superior 312-PVA

**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 = 1**

### SECTION I - IDENTIFICATION

**Common Name:** Superior 312-PVA

**Chemical Family:** No Clean Flux for Photovoltaic Assembly

**CAS Number:** NA

**Chemical Name:** NA

**Formula:** See below

### SECTION II – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

**Classification (CLP):** NA

**Signal Word:** Danger

**Label Elements (CLP):** NA



Flammable



Warning



Health Hazard

**Precautionary Phrases:** P210, P233, P240, P241, P243, P280, P303+P361+P353, P264, P370+P378, P305+P351+P338, P337+P313, P403+P235, P501

**Risk Phrases:** R11, R36, R67

**Safety Phrases:** S2, S7, S16, S24/25, S-26

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 Phrases              |
|-----------------|------------|-------|----------|------------------------|
| Ethanol         | 64-17-5    | 85-97 | 1000 PPM | H225, H319, H335, H336 |
| Carboxylic Acid | 68937-69-9 | 2-10  | 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.

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## SECTION IV – FIRST AID MEASURES

**Inhalation:** Remove to fresh air  
**Eyes:** Flush with water for fifteen (15) Minutes. Call physician.  
**Skin:** Wash thoroughly with water.  
**Ingestion:** If patient is fully conscious, give large amounts of water. Obtain medical attention immediately.

Most Important Symptoms and effects, both acute and delayed

**Primary Routes of Entry into Body:** Fume inhalation, ingestion, skin, and eyes.

**Symptoms of Overexposure:** Salivation, coughing, choking, chills, may cause weight loss, brittle bones, anemia, and stiff joints.

**Medical Conditions Generally Aggravated by Exposure:** Any weakness of the lungs, kidneys or liver will be aggravated.

**Chemical Listed as Carcinogen or Potential Carcinogen:** None

**OSHA Permissible Exposure Limit (PEL):** 1000 PPM

**ACGIH Threshold Limit Value (TLV):** 1000 PM

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## SECTION V - FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** 11.7°C/53°

**Flammable Limits:** Lower-2 Upper-12

**Extinguishing Media:** Dry Chemical, CO<sub>2</sub>

**Auto Ignition Temperature:** 398.9°C/750°F

**Special Fire Fighting Procedures:** Wear protective clothing, including NIOSH approved self-contained breathing apparatus

**Unusual Fire and Explosion Hazards:** Flammable, do not mix with strong oxidizing or dehydrating agents. Do not store in presence of oxidizing agents

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## SECTION VI - ACCIDENTAL RELEASE MEASURES

**Steps to be Taken in Case Material is Spilled:** Absorb with sawdust and remove in accordance to EPA regulations.

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## SECTION VII - HANDLING AND STORAGE

**Storage Requirements:** Store in plastic containers in cool area. Do not store in glass containers.

**Handling Precautions:** Safe precautionary practices.

**Other Precautions:** Keep away from electrical sparks, heat, open flame or oxidizing agents

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## SECTION VIII - CONTROL MEASURES

**Respiratory Protection (TYPE):** NIOSH approved respirator.

**Ventilation:** Yes

**Mechanical (General):** Explosion proof

**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.

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## SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

**Boiling Point:** 77°C/170.6°F

**Specific Gravity (Water = 1):** 0.815

**Vapor Pressure (mm Hg):** 42

**Percent Volatile by Volume:** 94%

**Vapor Density (Air = 1):** 1.4

**Evaporation Rate (Butyl Acetate = 1):** 3.1

**Melting Point:** -90°C/-130°F

**Solubility in Water:** Unlimited

**Reactivity in Water:** None

**Appearance and Odor:** Clear liquid, alcohol odor

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## SECTION X - STABILITY AND REACTIVITY

**Stability:** Product is stable                      **(Conditions to Avoid):** Avoid heat sparks and open flames

**Incompatibility:** Strong oxidizers.

**Hazardous Decomposition Products:** CO.

**Hazardous Polymerization:** 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:** Alcohol NOS (Contains Ethanol, Methanol)

**Hazard Class:** 3

**Identification Number:** UN1987

**Packing Group:** II

**Type D.O.T Label Required Information:** Flammable Liquid

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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 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:

|                |   |
|----------------|---|
| R11            | Highly flammable  |
| R36            | Irritating to eyes  |
| R67            | Irritating to respiratory system  |
|                |   |
| S-2            | Keep out of the reach of children   |
| S-7            | Keep container tightly closed   |
| S-16           | Keep away from sources of ignition - No smoking   |
| S-24/25        | Avoid contact with skin and eyes  |
| S-26           | In case of eye contact, rinse thoroughly and get medical attention                                  |
|                |   |
| H225           | Highly flammable liquid and vapour  |
| H319           | Causes serious eye irritation   |
| H335           | May cause respiratory irritation  |
| H336           | May cause drowsiness or dizziness   |
|                |   |
| P210           | Keep away from heat/sparks/open flames/hot surfaces – No smoking                                    |
| P233           | Keep container tightly closed   |
| P240           | Ground/bond container and receiving equipment   |
| P241           | Use explosion-proof electrical/ventilating/light/.../equipment.                                     |
| P242           | Use only non-sparking tools   |
| P243           | Take precautionary measures against static discharge  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection                           |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower |

P264 Wash ... thoroughly after handling

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P337+P313 If eye irritation persists get medical advice/attention

P403+P235 Store in a well ventilated place. Keep cool

Further information:

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