



AccuStandard®, Inc.

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Emergency Contact Information:

AccuStandard, Inc.
1-203-786-5290

Hours: Monday to Friday 8:00am to 5:00pm EST

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers

Catalog Name: ALR-027S-ET-10X

Description: Alanroot (Inula helenium)

1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

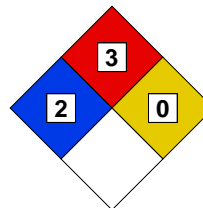
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1.4 - Emergency Telephone Number

Emergency Phone #: AccuStandard, Inc.
1-203-786-5290
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SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements



*	2	HEALTH
3	FLAMMABILITY	
0	PHYSICAL HAZARD	

Signal Word: Danger

Hazard Codes:

H225 - Highly Flammable (Flammable liquids, category 2)

H302 - Harmful if swallowed. (Acute toxicity, oral, category 4)

H312 - Harmful if absorbed through skin. (Acute toxicity, dermal, category 4)

H320 - Irritating to eyes. (Eye damage/irritation, category 2B)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

H335 - May be irritating to mucous membrane and upper respiratory system. (Specific target organ toxicity, single exposure; Respiratory tract irritation, category 4)

Precautionary Codes:

P202 - This product should only be used by persons trained in the safe handling of hazardous chemicals.

P260 - Do not breathe vapor.

P262 - Do not get in eyes, on skin or clothing.

SECTION 2 - HAZARDS IDENTIFICATION - continued**2.1 - GHS Label Elements** - continued

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P280 - Protective gloves must be worn to prevent skin contact.

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P360 - Skin contact: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

P404 - Store in a tightly closed container.

2.2 - Other Hazards**2.2.1 - Symptom of Exposure Health/Environment**

Highly Flammable (Flammable liquids, category 2)

High concentrations or prolonged exposure causes headache, dizziness, nausea, irritation of eyes and respiratory tract, narcosis and eventually unconsciousness.

High vapor concentrations may cause drowsiness.

May cause eye damage.

Causes depression of central nervous system.

2.2.2 - Potential Health Effects

Irritating to eyes. (Eye damage/irritation, category 2B)

May be irritating to skin.

Harmful if absorbed through skin. (Acute toxicity, dermal, category 4)

May be irritating to mucous membrane and upper respiratory system. (Specific target organ toxicity, single exposure; Respiratory tract irritation, category 4)

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

Harmful if swallowed. (Acute toxicity, oral, category 4)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

This product is or contains a component that is classified (ACGIH, IARC, NTP, OSHA) as probably not a cancer hazard.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Alanroot (Inula helenium)

Synonyms: N/A

Molecular Weight: N/A

Molecular Formula: N/A

SECTION 3 - COMPOSITION / ANALYTES DATA - continued

Analyte	CAS Number	% Concentration	ACGIH -TLV (mg/m ³)			OSHA -PEL (mg/m ³)		
			TWA	STEL	Skin	TWA	STEL	Skin
Alanroot (Inula helenium)	97676-35-2	0.100						
Ethanol	64-17-5	79.920	1880	1000		1900	1000	
Water	7732-18-5	19.980						

SECTION 4 - FIRST AID MEASURES**4.1 - First Aid Procedures - General**

Get medical assistance for all cases of overexposure.

4.2 - Eye Contact

Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. (P338)

4.3 - Skin Contact

Skin contact: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse. (P360)

4.4 - Inhalation

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. (P340)

4.5 - Ingestion

Ingestion: Drink water and induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES**5.1 - Flammable Properties**

Vapors can travel to a source of ignition and flash back.

Containers can build up pressure if exposed to heat.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

5.2 - Extinguishing Media

Use alcohol foam, carbon dioxide, dry chemical, or water spray when fighting fires involving this material.

Water spray to cool fire-exposed containers and disperse vapors.

5.3 - Protection of Firefighters

As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES**6.1 - Spill Response**

Wear suitable protective equipment listed under Exposure Controls / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Dispose as hazardous waste. Comply with Federal, State and local regulations.

SECTION 7 - HANDLING AND STORAGE

Store in a tightly closed container. (P404)

Store in a cool area away from ignition sources and oxidizers.

Material is hygroscopic.

Do not breathe vapor. (P260)

Use with adequate ventilation. (P271)

Do not get in eyes, on skin or clothing. (P262)

Avoid prolonged or repeated exposure.

This product should only be used by persons trained in the safe handling of hazardous chemicals. (P202)

SECTION 8 - EXPOSURE CONTROLS**8.1 - Engineering Controls/PPE**

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available. (P264)

8.2 - General Hygiene Considerations

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Protective gloves must be worn to prevent skin contact. (P280)

(Chloroprene, natural rubber, nitrile, or equivalent)

Safety glasses with side shields must be worn at all times.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Odor: Characteristic odor

Odor Threshold: N/A

pH: N/A

Melting Point: N/A

Boiling Point: N/A

Flash Point: <68 °F (<20°C) (cc)

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

Flammability Class: IB

Lower Flammability Level: N/A

Upper Flammability Level: N/A

Vapor Pressure: N/A

Vapor Density (Air = 1): N/A

Specific Gravity: N/A

Solubility in Water: Very soluble

Partition Coefficient: N/A

Autoignition Temperature: N/A

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES - *continued*

Decomposition Temperature: N/A

Viscosity: N/A

VOC Content: N/A

Percent Volatile: 99.9+

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Oxidizers

Hazardous Decomposition: Carbon oxides

Hazardous Polymerization: Will not occur

Condition to Avoid: Moisture; Heat; Contact with ignition sources

SECTION 11 - TOXICOLOGICAL INFORMATION**Human Health Toxicity**

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): Rat - 7060 mg/kg

LD50 (Dermal) : N/A

LC50 (Inhalation): Rat - 38 mg/L

No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION**Environmental Toxicity**

By complying with sections 6 and 7 there should be no release to the environment.

No environmental toxicity data is available for this product.

No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION**Transportation Information (DOT/IATA)**

UN Number: UN1170

UN Shipping Class: 3

UN Packing Group: II

UN Proper Shipping Name: Ethanol

Poison by Inhalation: No

Marine Pollutant:

SECTION 15 - REGULATORY INFORMATION

All components are listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

- 0 - Minimal
- 1 - Slight
- 2 - Moderate
- 3 - Serious
- 4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

- Category 1 - Most Severe
- Category 5 - Least Severe

**** End of Document ****