

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**Product Name: **Roots Yuccah**Recommended use

This product is a concentrated liquid surfactant for landscape use.

**Supplier/Manufacturer**Lebanon Seaboard Corporation  
1600 East Cumberland Street  
Lebanon PA 17042Emergency telephone number

800-233-0628

Chemtrec 1-800-424-9300

Prosar 888-208-1368

**2. HAZARDS IDENTIFICATION****Hazard Statements:**

H290: May be corrosive to metals (Category 1)

H302: Harmful if swallowed (Category 4)

H315: Causes skin irritation with prolonged contact (Category 2)

H319: Causes serious eye irritation (Category 2A)

**Signal Word:** WarningAdditional Hazard Statements:

Keep out of reach of children.

**Pictogram(s):****Precautionary Statements for handling:**

P234, P406: Keep only in original container or in corrosive-resistant containers with corrosive-resistant liner.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301, P310, P330: IF SWALLOWED: Rinse mouth and immediately call a POISON CENTER or doctor/physician.

P332, P352: If skin irritation occurs: Wash with plenty of soap and water.

P337, 351: In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, and continue rinsing. If eye irritation persists, get medical attention.

P362: Take off contaminated clothing and wash before reuse.

P390: Absorb spillage to prevent material-damage.

**Precautionary Statements for disposal** - Dispose in accordance with all federal, state and local regulations.**Hazards not otherwise classified (HNOC):** None

Unknown acute toxicity: 10% of the mixture consists of ingredients of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Weight %
Yucca plant juice (aqueous solution)	90147-57-2	90
Nonylphenoxypoly(ethyleneoxy) ethanol surfactant	Proprietary	9.985
Cupric sulfate	7758-98-7	0.015%

**4. FIRST AID MEASURES**

Eye Contact	Rinse eyes with water. Remove contact lenses if present and easy to do, and continue rinsing. If discomfort or irritation persists contact a physician.
Skin Contact	Wash with soap and water. If injury occurs, or if discomfort or irritation persists contact a physician.
Inhalation	If inhaled as mist and discomfort occurs, move to fresh air, and keep person at rest in a position comfortable for breathing. If difficulty in breathing occurs and/or persists, administer oxygen and get medical attention. If medical advice is needed, have product container or label on hand.
Ingestion	Rinse mouth. Drink Plenty of water. Do not induce vomiting. Seek medical attention.

Self-protection of the first aider: When spraying, use dust/mist mask or any appropriate personal protective equipment as required.

Most important symptoms and effects, both acute and delayed:

Symptoms: Mist inhalation can result in irritation with nasal discomfort; skin irritation with redness, itch, burning if prolonged contact; Irritating to eyes with tearing, pain, and redness.

Indication of any immediate medical attention and special treatment needed: Treat Symptoms.

**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

Liquid product is not a fire hazard, and will not burn. Use extinguishing media suitable to local circumstances and the surrounding environment. Options in this case include water, CO<sub>2</sub>, ABC Dry Chemical extinguisher, or foam.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire, do not breathe fumes.

**Explosion data**

Sensitivity to mechanical impact: None  
 Sensitivity to static discharge: None

**Protective equipment and precautions for firefighters**

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

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment, and emergency procedures**

Personal Precautions	Avoid prolonged skin contact with concentrated product. Use reasonable personal protective equipment as required to prevent contact with eyes or skin, and to avoid breathing mist.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.
Methods for containment	Prevent further leakage or spillage, if safe to do so.
Methods for clean-up	Absorb spillage to prevent material damage. Use reasonable personal protective equipment as required. Soak up excess with inert absorbent material, or take up

mechanically, placing in appropriate containers for disposal. Avoid creating mist. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE**

**Safe Handling** Use personal protective equipment during use as required to prevent contact with eyes or skin, and to avoid breathing mist. Avoid prolonged skin contact with concentrated product. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

**Storage Conditions** Store only in original containers or in corrosive-resistant containers with corrosive-resistant liner. Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children.

**Incompatible materials** Avoid strong alkalis, or other reactive substances.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH*
Yucca plant juice (aqueous solution)	None	None	None
Nonylphenoxypoly(ethyleneoxy) ethanol surfactant	None	None	None

\*IDLH refers to amounts that are "Immediately Dangerous to Life or Health"

Engineering controls: Avoid creating fine, inhalable mists during application.

**Individual protection measures**

Wear protective gloves/protective clothing/eye protection/face protection.

**Eye protection** Safety glasses, or goggles if eye contact with concentrated product or diluted mist is likely.

**Skin and Body Protection** Gloves and normal work coveralls recommended. Avoid prolonged skin contact.

**Respiratory Protection** Dust/mist mask recommended for misty conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene** When using product, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state** Liquid

**Appearance** Solution

**Color** Mixed, various

**Odor** Slight

**Odor Threshold** No information available

**pH** 3.5 (Acidic)

**Melting point/freezing point** No information available

**Boiling point / boiling range** 102 C

**Flash point** Not applicable

**Evaporation rate** No information available

**Flammability (solid, gas)** Will not burn

**Flammability Limit in Air**

Upper flammability limit: Aqueous liquid; Will not burn

Lower flammability limit: Aqueous liquid; Will not burn

Vapor pressure	Similar to water
Vapor density	No information available
Specific Gravity	1.0 - 1.04 g/cc
Water solubility	Fully soluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	Aqueous liquid; Will not burn
Decomposition temperature	No information available
Oxidizing properties	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

Corrosive to metals.

**Chemical stability**

Stable.

**Possibility of Hazardous Reactions**

May release heat and fumes when mixed in solution with incompatible reactive materials.

**Hazardous polymerization**

Will not occur.

**Conditions to avoid**

None known

**Incompatible materials**

Strong acids or alkali, or other reactive substances. Can corrode aluminum, iron and other corrodable metals.

**Hazardous Decomposition Products**

May emit toxic fumes under fire conditions, such as Carbon monoxide.

**11. TOXICOLOGICAL INFORMATION**

Routes of exposure: Ingestion, eyes (contact), skin (contact), mist inhalation

Symptoms	May irritate the digestive tract if ingested in quantity, causing nausea, vomiting and diarrhea. Will severely irritate eyes with redness and burning sensation if eye contact occurs with concentrate. Skin redness and irritation likely with prolonged contact.
Sensitization	No information available.
Germ cell mutagenicity	No information available
Carcinogenicity	No information available
Reproductive toxicity	No information available
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Chronic toxicity	No information available
Target Organ Effects	No information available
Aspiration hazard	No information available

**12. ECOLOGICAL INFORMATION**

Surfactants may be harmful to aquatic life with short term effects, depending on the amount released.

Persistence and degradability	Slowly biodegradeable
Bioaccumulation	No information available
Other adverse effects	No information available

**13. DISPOSAL CONSIDERATIONS**

This material, as supplied is not a hazardous waste according to federal regulations (40 CFR 261).

**Disposal of wastes:**

No EPA Waste Numbers are applicable for this product’s components.  
Dispose of in accordance with Local, State, and Federal regulations.

**Contaminated packaging**

No US Federal special packaging considerations at the date of this document. Follow local regulations.

**14. TRANSPORT INFORMATION**

DOT Description: Corrosive liquid, acidic, organic, N.O.S. (UN 3265). DOT Hazard Class 8. Packing Group III.

**15. REGULATORY INFORMATION**

<b>General Product Information:</b>	This product is not federally regulated as a hazardous material, except as a corrosive liquid.
<b>Clean Air Act:</b>	No information is available.
<b>Clean Water Act:</b>	No information is available.
<b>CERCLA:</b>	Cupric sulfate, RQ = 10 Lb.
<b>State Regulations – General:</b>	This product is not regulated by any State as a hazardous material, except as a corrosive liquid.
<b>Component Analysis – State</b>	Cupric sulfate: CA, MA, NJ, PA

**16. OTHER INFORMATION**

**Other Information**

Disclaimer

The information provided in this material safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.