



Safety Data Sheet  
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name** Zobell's Solution  
**NCL Catalog Number** Z-65  
**Product Description** Laboratory chemical, APHA for ORP  
**Supplier** NCL of Wisconsin, Inc. PO Box 8, Birnamwood, WI 54414  
Telephone: 1-800-648-7836 Fax: 715-449-2454  
Email: [nclabs@nclabs.com](mailto:nclabs@nclabs.com) Emergency Contact: 1-800-424-9300 (Chemtrec)

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS Classification** Not classified  
**Signal Word** Not applicable  
**Pictograms** None  
**Hazard Statements** Not applicable  
**Precautionary Statements** Not applicable  
**Other Hazards Not Contributing to the Classification** None under normal conditions.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture

Name	CAS #	Approximate %
Water	7732-18-5	>98.8
Potassium Chloride	7447-40-7	<0.8
Potassium Ferricyanide	13746-66-2	<0.2
Potassium Ferrocyanide	14459-95-1	<0.2

**SECTION 4: FIRST AID MEASURES**

Description of First Aid Measures

**General First Aid Measures** Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.  
**If Inhaled** Remove person to fresh air and keep comfortable for breathing. Allow victim to rest.  
**In Case of Skin Contact** Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water.  
**In Case of Eye Contact** Immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops.  
**If Swallowed** Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

Not expected to present a significant hazard under normal use.

Indication of Immediate Medical Attention and Special Treatment Needed

No additional information available.

**SECTION 5: FIRE-FIGHTING MEASURES**

Extinguishing Media

**Suitable Extinguishing Media** Foam. Dry powder. Sand. Carbon dioxide. Water spray.

**Unsuitable Extinguishing Media** Do not use high pressure water stream.

Special Hazards Arising from the Chemical

No additional information available.

**Special Protective Actions for Fire-Fighters**

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment and Emergency Procedures**

<b>Personal Precautions</b>	Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.
<b>Environmental Precautions</b>	Prevent entry to surface and ground waters.
<b>Methods and Materials for Containment and Cleaning Up</b>	Clean up spills with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

**SECTION 7: HANDLING AND STORAGE**

<b>Precautions for Safe Handling</b>	Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
<b>Conditions for Safe Storage Including any Incompatibilities</b>	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from acids and heat sources.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Control Parameters**

<b>Potassium Ferricyanide (13746-66-2)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
<b>Potassium Ferrocyanide, Trihydrate (14459-95-1)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

<b>Appropriate Engineering Controls</b>	Provide adequate general ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.
<b>Individual Protection Measures</b>	Avoid all unnecessary exposure.
<b>Eye/Face Protection</b>	Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.
<b>Skin Protection</b>	Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.
<b>Respiratory Protection</b>	Wear appropriate mask.
<b>Other Information</b>	Do not eat, drink or smoke when using this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Liquid
<b>Color</b>	Yellow
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	Not determined
<b>pH</b>	Not determined
<b>Melting Point/Freezing Point</b>	Not determined
<b>Initial Boiling Point and Boiling Range</b>	Not determined
<b>Flash Point</b>	Not determined
<b>Evaporation Rate</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Not determined
<b>Upper/Lower Flammability/Explosive Limits</b>	Not determined
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Relative Density</b>	Not determined
<b>Solubility</b>	Soluble in water

<b>Partition Coefficient: n-octanol/water</b>	Not determined
<b>Auto-Ignition Temperature</b>	Not determined
<b>Decomposition Temperature</b>	Not determined
<b>Viscosity</b>	Not determined

#### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	No data available
<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage.
<b>Possibility of Hazardous Reactions</b>	No data available
<b>Conditions to Avoid</b>	Store away from acids and heat sources.
<b>Incompatible Materials</b>	Contact with acids, ammonia, chromic anhydride, and cupric nitrate
<b>Hazardous Decomposition Products</b>	When heated to decomposition, can emit toxic gases of cyanides and nitrogen oxides.

#### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	Not classified
<b>Water (7732-18-5)</b>	
<b>LD50 oral rat</b>	≥ 90000 mg/kg
<b>Potassium Ferricyanide (13746-66-2)</b>	
<b>LD50 oral rat</b>	1600 mg/kg
<b>Potassium Ferrocyanide, Trihydrate (14459-95-1)</b>	
<b>LD50 oral rat</b>	3613 mg/kg
<b>Potassium Chloride (7447-40-7)</b>	
<b>LD50 oral rat</b>	2600 mg/kg
<b>Skin Corrosion/Irritation</b>	Not classified
<b>Serious Eye Damage/Irritation</b>	Not classified
<b>Respiratory or Skin Sensitization</b>	Not classified
<b>Germ Cell Mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive Toxicity</b>	Not classified
<b>Specific Target Organ Toxicity (Single Exposure)</b>	Not classified
<b>Specific Target Organ Toxicity (Repeated Exposure)</b>	Not classified
<b>Aspiration Hazard</b>	Not classified
<b>Potential Adverse Human Health Effects and Symptoms</b>	No data available
<b>Other Information</b>	Not available

#### SECTION 12: ECOLOGICAL INFORMATION

<b>Toxicity</b>	Not applicable
<b>Persistence and Degradability</b>	Not applicable
<b>Bioaccumulative Potential</b>	Not applicable
<b>Mobility in Soil</b>	Not applicable
<b>Other Adverse Effects</b>	Not applicable

#### SECTION 13: DISPOSAL CONSIDERATIONS

##### Methods of Disposal

**Disposal Recommendations** Dispose of contents/containers in accordance with local, state and federal regulations.

**Other Information** Avoid release to the surrounding environment.

**SECTION 14: TRANSPORT INFORMATION**

**UN Number** Not applicable

**UN Shipping Name** Not applicable

**Transport Hazard Class(es)** Not applicable

**Packing Group** Not applicable

**Environmental Hazards** Not applicable

**Transport in Bulk** Not applicable

**Other Precautions** Not applicable

**SECTION 15: REGULATORY INFORMATION**

<b>Potassium Ferrocyanide, Trihydrate (14459-95-1)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Potassium Chloride (7447-40-7)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Potassium Ferricyanide (13746-66-2)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Water (7732-18-5)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

**SECTION 16: OTHER INFORMATION**

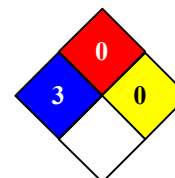
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**NFPA Hazards**

**Health Hazard** 3: Short exposure could cause serious temporary or moderate residual injury.

**Fire Hazard** 0: Materials that will not burn.

**Reactivity/Instability** 0: Normally stable, even under fire exposure conditions, and are not reactive with water.



**HMIS III Rating**

**Health** 3: Major injury likely unless prompt action is taken and medical treatment is given.

**Flammability** 0: Materials that will not burn.

**Physical Hazard** 0: Materials that are normally stable.

**Personal Protection** B

Z-65	
Health	3
Flammability	0
Physical Hazard	0
Personal Protection	B

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**END OF SAFETY DATA SHEET**