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  
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

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>Approximate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;98.8</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>7447-40-7</td>
<td>&lt;0.8</td>
</tr>
<tr>
<td>Potassium Ferricyanide</td>
<td>13746-66-2</td>
<td>&lt;0.2</td>
</tr>
<tr>
<td>Potassium Ferrocyanide</td>
<td>14459-95-1</td>
<td>&lt;0.2</td>
</tr>
</tbody>
</table>

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**


**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

Personal Precautions
Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions
Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up
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

Precautions for Safe Handling
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.

Conditions for Safe Storage
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

<table>
<thead>
<tr>
<th>Chemical</th>
<th>USA ACGIH</th>
<th>ACGIH TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Ferricyanide (13746-66-2)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Potassium Ferrocyanide, Trihydrate (14459-95-1)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls
Provide adequate general ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures
Avoid all unnecessary exposure.

Eye/Face Protection
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.

Skin Protection
Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection
Wear appropriate mask.

Other Information
Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Initial Boiling Point and Boiling Range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper/Lower Flammability/Explosive Limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
</tbody>
</table>
Partition Coefficient: n-octanol/water  Not determined
Auto-Ignition Temperature  Not determined
Decomposition Temperature  Not determined
Viscosity  Not determined

SECTION 10: STABILITY AND REACTIVITY

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

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

<table>
<thead>
<tr>
<th></th>
<th>Water (7732-18-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>≥ 90000 mg/kg</td>
</tr>
<tr>
<td>Potassium Ferricyanide (13746-66-2)</td>
<td>1600 mg/kg</td>
</tr>
<tr>
<td>Potassium Ferrocyanide, Trihydrate (14459-95-1)</td>
<td>3613 mg/kg</td>
</tr>
<tr>
<td>Potassium Chloride (7447-40-7)</td>
<td>2600 mg/kg</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation  Not classified
Serious Eye Damage/Irritation  Not classified
Respiratory or Skin Sensitization  Not classified
Germ Cell Mutagenicity  Not classified
Carcinogenicity  Not classified
Reproductive Toxicity  Not classified
Specific Target Organ Toxicity (Single Exposure)  Not classified
Specific Target Organ Toxicity (Repeated Exposure)  Not classified
Aspiration Hazard  Not classified
Potential Adverse Human Health Effects and Symptoms  No data available
Other Information  Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity  Not applicable
Persistence and Degradability  Not applicable
Bioaccumulative Potential  Not applicable
Mobility in Soil  Not applicable
Other Adverse Effects  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

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

SECTION 16: OTHER INFORMATION

Revision Date: 04/10/2015

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

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, NCL of Wisconsin, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for their conditions of use. Accordingly, NCL of Wisconsin, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

END OF SAFETY DATA SHEET