



MATERIAL SAFETY DATA SHEET

Revision Number A96008F
03/04/11

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product name YSI 3682 Zobell Solution
Synonyms None
Chemical characterization White powder
Manufacturer, importer, supplier YSI Inc.
1725 Brannum Lane
Yellow Springs, OH 45387
USA
EMERGENCY TELEPHONE NUMBER (937) 767-7241

2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH TWA	Acute Toxicity	IARC*	NTP*	OSHA*
7447-40-7	Potassium chloride	72-78	None	N/A	N/A	N/A	N/A
14459-95-1	Potassium ferrocyanide	10-15			N/A	N/A	N/A
13746-66-2	Potassium ferrocyanide	10-15			N/A	N/A	N/A

* IARC - Group 1 (Carcinogenic to humans)

* NTP - Report on Carcinogens - Known Carcinogens

* OSHA - Regulated Carcinogens

3. HAZARDS IDENTIFICATION

Emergency Overview

- Use all necessary personal protection when handling this material.

Eye Contact	<ul style="list-style-type: none">Contact with eyes may cause irritationWear safety glasses with side shields,In the event of exposure, flush eyes with water for at least 15 minutes.Remove contacts and continue to flush eyes, including under the eye lids.
Skin Contact	<ul style="list-style-type: none">Exposure can cause skin irritation.Wash exposed areas with soap and water for at least 15 minutes.Remove contaminated clothing, laundry before re-using.
Inhalation	<ul style="list-style-type: none">Dust from this product may cause respiratory irritationUse with adequate ventilation.
Ingestion	<ul style="list-style-type: none">No effects expected from normal use of this product. Ingestion may cause digestive system upset.
General Advice	<ul style="list-style-type: none">Users with skin conditions (eczema, psoriasis, etc) respiratory conditions (asthma, bronchitis, emphysema, etc) or with chemical sensitivities should take protective precautions
Principle Routes of Exposure	Eyes, absorption, ingestion

4. FIRST AID MEASURES

General Advice	<ul style="list-style-type: none">If exposure symptoms persist, seek medical attention.
Skin Contact	<ul style="list-style-type: none">Wash exposed area with soap and plenty of water.If skin irritation develops, seek medical attention.
Eye Contact	<ul style="list-style-type: none">Immediately flush with plenty of water after initial flushing, remove any contact lenses and continue flushing for at least 15 minutesKeep eyes wide open while rinsing

	<ul style="list-style-type: none"> If eye irritation persists, seek medical attention
Inhalation	<ul style="list-style-type: none"> Move to fresh air in case of accidental inhalation If a person feels unwell or symptoms of respiratory irritation persist, consult a physician
Ingestion	<ul style="list-style-type: none"> Do not swallow. Rinse mouth with water and afterwards drink plenty of water. For ingestion of large amounts induce vomiting if person is conscious. If conditions persist, seek medical attention.
Notes to Physician	<ul style="list-style-type: none"> Treat symptomatically
Protection of First-Aiders	<ul style="list-style-type: none"> Use necessary personal protective equipment
Aggravated Medical Conditions	<ul style="list-style-type: none"> Users with skin conditions, respiratory conditions, or with chemical sensitivities should take protective precautions.

5. FIRE-FIGHTING MEASURES

Flash Point	NA
Suitable Extinguishing Media	<ul style="list-style-type: none"> Not applicable to this product
Extinguishing media which must not be used for safety reasons	<ul style="list-style-type: none"> Not applicable to this product

Specific Hazards

Special exposure hazards rising from the substance or preparation itself, its combustion products, or released gases	<ul style="list-style-type: none"> Material is not combustible. It may emit toxic fumes when heated, such as hydrogen cyanide, and hydrochloric acid. 			
Special protective equipment for firefighters	<ul style="list-style-type: none"> As in any fire, wear self contained breathing apparatus and full protective gear 			
NFPA (National Fire Protection Association)	Health=3	Reactivity=2	Fire=0	Special=0 (none)
HMIS (Hazardous Material Information System)	Health=3	Reactivity=2	Fire=0	Special=0 (none)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	<ul style="list-style-type: none"> Use necessary personal protective equipment
Environmental precautions	<ul style="list-style-type: none"> No information available
Methods for cleaning up	<ul style="list-style-type: none"> Sweep up and collect in suitable container for disposal Avoid formation of dust

7. HANDLING AND STORAGE

Handling

Technical Measures / Precautions	<ul style="list-style-type: none"> Use only in areas provided with adequate ventilation
Safe Handling Advice	<ul style="list-style-type: none"> Wear personal protective equipment Avoid contact with skin and eyes. Take necessary personal protective precautions before using this product.

Storage

Technical Measures / Precautions	<ul style="list-style-type: none"> Store in a tightly closed container. Store in a cool, dry, well ventilated area away from incompatible substances. Store in properly labeled container
Incompatible Products	<ul style="list-style-type: none"> Avoid strong acids, oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures	<ul style="list-style-type: none">• Ensure adequate ventilation, especially in confined areas• Ensure eyewash station is readily available
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Personal protective equipment

Hand Protection	<ul style="list-style-type: none">• Wear appropriate protective gloves
Eye protection	<ul style="list-style-type: none">• Avoid contact with eyes• Wear safety glasses with side-shields or full face shield.
Respiratory Protection	<ul style="list-style-type: none">• Ensure adequate ventilation is available before handling any chemical
Skin and Body Protection	<ul style="list-style-type: none">• Lightweight protective clothing• Boots• Apron
Hygiene measures	<ul style="list-style-type: none">• Handle in accordance with good industrial hygiene and safety practice• Keep away from food, drink and animal feeding material
Environmental exposure controls	<ul style="list-style-type: none">• No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form	Powder
Appearance	White
Odor	unknown

Important Health Safety and Environmental Information

pH	No information
Boiling Point / Range	No information
Flash Point	None
Water Solubility	Infinitely soluble
Specific Gravity	No information

10. STABILITY AND REACTIVITY

Stability	<ul style="list-style-type: none">• Stable under normal conditions
Materials to Avoid	<ul style="list-style-type: none">• Acids, oxidizing agents
Hazardous Decomposition Products	<ul style="list-style-type: none">• When heated, possibly nitrogen oxides and hydrogen cyanide
Polymerization	<ul style="list-style-type: none">• Polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Local Effects

Skin Irritation	<ul style="list-style-type: none">• May cause skin irritation
Eye Irritation	<ul style="list-style-type: none">• Dust may cause eye irritation
Inhalation	<ul style="list-style-type: none">• Inhalation of dust may cause irritation of respiratory tissue
Ingestion	<ul style="list-style-type: none">• Ingestion of large amounts may cause digestive system upset

Specific Effects

Carcinogenic Effects	<ul style="list-style-type: none">• No information available
Mutagenic Effects	<ul style="list-style-type: none">• No information available
Reproductive Toxicity	<ul style="list-style-type: none">• No information available
Target Organ Effects	<ul style="list-style-type: none">• No information available

12. ECOLOGICAL INFORMATION

Component information

CAS	Chemical Name	% Weight	ACGIH*
7447-40-7	Potassium chloride	72-78	N/A
14459-95-1	Potassium ferrocyanide	10-15	N/A
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* ACGIH - Occupational Exposure Limits - TWA's

* OSHA - PELs

Product Information

Aquatic Toxicity	No information available.
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Other Information

Ozone Depletion Potential; ODP; (R-11=1)	No information available.
Global Warming Potential (GWP)	No information available.
Additional Ecological Information	No information available.
Mobility	No information available.
Bioaccumulative Potential	No information available.
Ecotoxicity Effects	No information available.
Aquatic Toxicity	No information available.

13. DISPOSAL CONSIDERATIONS

Waste From Residues / Unused Products	Dispose of in accordance with local and state regulations
Contaminated Packaging	Empty containers should be rinsed and disposed of as appropriate for glass and plastic containers.

14. TRANSPORT INFORMATION

DOT Not regulated

UN-No

Proper shipping name

Packing group

Subsidiary Risk

Description

15. REGULATORY INFORMATION

U.S. Inventories

CAS	Chemical Name	% Weight	ACGIH*
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* ACGIH - Occupational Exposure Limits - TWA's

International Inventories

CAS	Chemical Name	% Weight	EUOED*
7447-40-7	Potassium chloride	72-78	N/A
14459-95-1	Potassium ferrocyanide	10-15	N/A
13746-66-2	Potassium ferrocyanide	10-15	N/A

* EUOED - EU Occupational Exposure Directive (98/24/EC) Indicative Occupational Exposure Limit Values (IOELV)

16. OTHER INFORMATION

Literary Reference

None.

Prepared By

YSI, Inc.

End of Safety Data Sheet.