



# MATERIAL SAFETY DATA SHEET

Revision Number A95029D  
3/30/09

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

**Product name** YSI 2784 Lactose Standard  
**Synonyms** None  
**Chemical characterization** Dilute aqueous solution of the listed ingredients  
**Manufacturer, importer, supplier** YSI, Inc.  
1700/1725 Brannum Lane  
Yellow Springs, OH 45387  
**EMERGENCY TELEPHONE NUMBER** (937) 767-7241

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH TWA	Acute Toxicity	IARC*	NTP*	OSHA*
7732-18-5	Water	>95	N/A	N/A	N/A	N/A	N/A
25102-12-9	Potassium EDTA	<1			N/A	N/A	N/A
64044-51-5	Lactose, monohydrate	<5			N/A	N/A	N/A
1405-41-0	Gentamicin, sulfate	<0.01			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

This product contains no substances which at their given concentration, are considered to be hazardous to health.

<b>Eye Contact</b>	<ul style="list-style-type: none"><li>Can cause severe irritation</li></ul>
<b>Skin Contact</b>	<ul style="list-style-type: none"><li>Prolonged exposure can cause skin irritation</li></ul>
<b>Inhalation</b>	<ul style="list-style-type: none"><li>Possible irritation of nasal passages from breathing mist from this product</li></ul>
<b>Ingestion</b>	<ul style="list-style-type: none"><li>No effects expected from normal use and minor amounts ingested. Ingestion of large amounts can cause digestive system upset.</li></ul>
<b>General Advice</b>	<ul style="list-style-type: none"><li>As with any chemical, use caution when handling</li><li>If exposure effects persist seek medical attention</li></ul>
<b>Principle Routes of Exposure</b>	<ul style="list-style-type: none"><li>Eyes, absorption, ingestion</li></ul>

## 4. FIRST AID MEASURES

<b>General Advice</b>	<ul style="list-style-type: none"><li>If exposure symptoms persist, seek medical attention.</li></ul>
<b>Skin Contact</b>	<ul style="list-style-type: none"><li>Wash exposed areas with soap and water for 15 minutes</li></ul>
<b>Eye Contact</b>	<ul style="list-style-type: none"><li>Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes</li></ul>
<b>Inhalation</b>	<ul style="list-style-type: none"><li>Move to fresh air in case of accidental inhalation</li></ul>
<b>Ingestion</b>	<ul style="list-style-type: none"><li>For ingestion of large amounts induce vomiting if person is conscious. If conditions persist, seek medical attention.</li></ul>
<b>Notes to Physician</b>	<ul style="list-style-type: none"><li>Treat symptomatically</li></ul>
<b>Protection of First-Aiders</b>	<ul style="list-style-type: none"><li>Use necessary personal protective equipment</li></ul>
<b>Aggravated Medical Conditions</b>	<ul style="list-style-type: none"><li>Users with skin conditions (eczema, psoriasis, etc), respiratory conditions (asthma, bronchitis, emphysema, etc), or with chemical sensitivities should take protective precautions</li></ul>

## 5. FIRE-FIGHTING MEASURES

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

### Specific Hazards

Special exposure hazards rising from the substance or preparation itself, its combustion products, or released gases	<ul style="list-style-type: none"> <li>None</li> </ul>
Special protective equipment for firefighters	<ul style="list-style-type: none"> <li>None</li> <li>As in any fire, wear self-contained breathing apparatus, and full protective gear</li> </ul>

### Specific Methods

<b>NFPA (National Fire Protection Association)</b>	Health=1 (slight)	Reactivity=0	Fire=0	Special=0 (none)
<b>HMIS (Hazardous Material Information System)</b>	Health=1 (slight)	Reactivity=0	Fire=0	Special=0 (none)

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	<ul style="list-style-type: none"> <li>Ensure adequate ventilation</li> <li>Use necessary personal protective equipment</li> </ul>
Environmental precautions	<ul style="list-style-type: none"> <li>No information available</li> </ul>
Methods for cleaning up	<ul style="list-style-type: none"> <li>Soak up with inert absorbent</li> <li>After cleaning, flush away traces with water</li> </ul>

## 7. HANDLING AND STORAGE

### Handling

Technical Measures / Precautions	<ul style="list-style-type: none"> <li>This product is not flammable</li> </ul>
Safe Handling Advice	<ul style="list-style-type: none"> <li>Avoid contact with eyes. Wash hands immediately after contact to avoid hand-eye transfer</li> <li>Wear personal protective equipment</li> </ul>

### Storage

Technical Measures / Precautions	<ul style="list-style-type: none"> <li>Store in properly labeled containers</li> <li>Keep containers tightly closed. Discard any material that may be contaminated or, which may have changed composition.</li> </ul>
Incompatible Products	<ul style="list-style-type: none"> <li>No information available</li> </ul>

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

### Personal protective equipment

Hand Protection	<ul style="list-style-type: none"> <li>Wear the appropriate protective gloves</li> </ul>
Eye protection	<ul style="list-style-type: none"> <li>Wear tightly fitting safety goggles or safety glasses with side-shields</li> <li>Face-shield</li> </ul>
Respiratory Protection	<ul style="list-style-type: none"> <li>Ensure adequate ventilation is available before handling any chemical</li> <li>In case of insufficient ventilation, wear suitable respiratory equipment</li> </ul>
Skin and Body Protection	<ul style="list-style-type: none"> <li>Long sleeved clothing</li> <li>Boots</li> <li>apron</li> </ul>

Hygiene measures	<ul style="list-style-type: none"> <li>Handle in accordance with good industrial hygiene and safety practice</li> <li>Keep away from food, drink, and animal feeding stuffs</li> </ul>
Environmental exposure controls	<ul style="list-style-type: none"> <li>No information available</li> </ul>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

Form	Liquid
Appearance	Clear colorless liquid
Odor	None

### Important Health Safety and Environmental Information

pH	6.5 to 7.5
Boiling Point / Range	100 °C
Flash Point	None
Vapor Pressure	Equivalent to water
Vapor Density	= water vapor
Water Solubility	Infinitely soluble
Specific Gravity	1.00

## 10. STABILITY AND REACTIVITY

Stability	Stable
Materials to Avoid	None
Hazardous Decomposition Products	None
Polymerization	Polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Local Effects

Skin Irritation	<ul style="list-style-type: none"> <li>May cause skin irritation</li> </ul>
Eye Irritation	<ul style="list-style-type: none"> <li>Can cause severe irritation</li> </ul>
Inhalation	<ul style="list-style-type: none"> <li>May cause irritation in nasal passages</li> </ul>
Ingestion	<ul style="list-style-type: none"> <li>No effects expected from normal use. Ingestion of this product may cause digestive system upset</li> </ul>
Sensitization	<ul style="list-style-type: none"> <li>No information available</li> </ul>
Chronic Toxicity	<ul style="list-style-type: none"> <li>No information available</li> </ul>

### Specific Effects

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

## 12. ECOLOGICAL INFORMATION

### Product Information

Aquatic Toxicity	No information available.
------------------	---------------------------

### 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

