SAFETY DATA SHEET

1. Product and company identification

<table>
<thead>
<tr>
<th>Material name</th>
<th>YSI 1530, 2327, 2328 Lactate Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version No.</td>
<td>01</td>
</tr>
<tr>
<td>Issue date</td>
<td>05-December-2013</td>
</tr>
<tr>
<td>Revision date</td>
<td>-</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>-</td>
</tr>
<tr>
<td>CAS No.</td>
<td>Mixture</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>YSI, Inc</td>
</tr>
<tr>
<td>information</td>
<td>1700/1725 Brannum Lane</td>
</tr>
<tr>
<td></td>
<td>Yellow Springs, Ohio 45387</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:MSDSinfo@ysi.com">MSDSinfo@ysi.com</a></td>
</tr>
<tr>
<td></td>
<td>(937) 767-7241</td>
</tr>
<tr>
<td></td>
<td>CHEMTREC (US/Canada) (800) 424-9300</td>
</tr>
<tr>
<td></td>
<td>CHEMTREC (International) 011 703-527-3887</td>
</tr>
<tr>
<td></td>
<td>(Collect calls accepted)</td>
</tr>
</tbody>
</table>

2. Hazards Identification

Emergency overview
No special precautionary health measures should be needed under anticipated conditions of use.

Potential health effects
- Eyes: Health injuries are not known or expected under normal use.
- Skin: Health injuries are not known or expected under normal use.
- Inhalation: Health injuries are not known or expected under normal use.
- Ingestion: Health injuries are not known or expected under normal use.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycine, N,N'-1,2-ethanediylbis(N-carboxymethyl) dipotassium salt, dihydrate</td>
<td>25102-12-9</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Lithium (S)-lactate</td>
<td>27848-80-2</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Sodium Benzoate</td>
<td>532-32-1</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 97</td>
</tr>
</tbody>
</table>

4. First aid measures

First aid procedures
- Eye contact: Rinse with water. Get medical attention if irritation develops and persists.
- Skin contact: Rinse skin with water/shower. Get medical attention if irritation develops and persists.
- Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
- Ingestion: Rinse mouth. If ingestion of a large amount does occur, call a poison control centre immediately.

5. Fire Fighting Measures

Extinguishing media
- Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters
- Protective equipment for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions  Not available.

Explosion data

Sensitivity to static discharge  Not established.

Sensitivity to mechanical impact  Not established.

6. Accidental release measures

Personal precautions  Keep unnecessary personnel away. For personal protection, see section 8.

Methods for cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13.

7. Handling and storage

Handling  Observe good industrial hygiene practices.

Storage  Store in tightly closed original container in a well-ventilated place. Store away from incompatible materials (See Section 10).

8. Exposure controls / personal protection

Occupational exposure limits  No exposure limits noted for ingredient(s).

Personal protective equipment

Eye / face protection  Not normally needed.

Skin protection  Wear suitable protective clothing.

Respiratory protection  No personal respiratory protective equipment normally required.

9. Physical & Chemical Properties

Appearance  Not available.

Physical state  Liquid.

Form  Liquid.

Colour  Clear and colorless.

Odour  Odourless.

Odour threshold  Not available.

pH  6.5 - 7.5

Vapour pressure  Equivalent to water

Vapour density  Equivalent to water vapor

Boiling point  100 °C (212 °F)

Melting point/freezing point  Not available.

Solubility (water)  Infinitely soluble

Specific gravity  Not available.

Flash point  Not available.

Flammability limits in air, upper, % by volume  Not available.

Flammability limits in air, lower, % by volume  Not available.

Auto-ignition temperature  Not available.

10. Chemical Stability & Reactivity Information

Chemical stability  Material is stable under normal conditions.
Conditions to avoid Contact with incompatible materials.
Incompatible materials None known.
Hazardous decomposition No hazardous decomposition products are known.
products

11. Toxicological information

Acute effects Not expected to be a hazard under normal conditions of intended use.
Chronic effects Not expected to be hazardous by WHMIS criteria.
Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive effects Based on available data, the classification criteria are not met.
Symptoms and target organs None known.

12. Ecological information

Ecotoxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Benzoate (CAS 532-32-1)</td>
<td>Fathead minnow (Pimephales promelas)</td>
<td>LC50 &gt; 100 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Aquatic

Fish

Ecotoxicity Not expected to be harmful to aquatic organisms.
Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability No data is available on the degradability of this product.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG Not regulated as dangerous goods.
IATA Not regulated as dangerous goods.
IMDG Not regulated as dangerous goods.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status Non-Controlled

Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
</tbody>
</table>
## Inventory of Existing and New Chemical Substances (ENCS)

**Country(s) or region** | **Inventory name** | **On inventory (yes/no)**
--- | --- | ---
Japan | Inventory of Existing and New Chemical Substances (ENCS) | No
Korea | Existing Chemicals List (ECL) | No
New Zealand | New Zealand Inventory | Yes
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No

* A “Yes” indicates this product complies with the inventory requirements administered by the governing country(s).

A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. OTHER INFORMATION

### HMIS® ratings
- Health: 0
- Flammability: 0
- Physical Hazard: 0

### NFPA ratings
- Health: 0
- Flammability: 0
- Instability: 0

### Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available.