1. Product and Company Identification

Product identifier: YSI Oxygen Probe Electrolyte for Model 5204, 5906, 5908, & 5909

Version #: 01
Issue date: 20-March-2014
Revision date: -
Supersedes date: -

CAS #: Mixture
Product use: Analysis Standard/Reagent
Manufacturer information:
YSI, Inc
1700/1725 Brannum Lane
Yellow Springs, Ohio 45387
MSDSinfo@ysi.com
(937) 767-7241
CHEMTREC (US/Canada) (800) 424-9300
CHEMTREC (International) 011 703-527-3887
(Collect calls accepted)

2. Hazards Identification

Emergency overview: Exposure to powder or dusts may be irritating to eyes, nose and throat.

Potential health effects:

Routes of exposure:
- Inhalation
- Eye contact
- Skin contact

Eyes:
Dust in the eyes will cause irritation.

Skin:
Dust or powder may irritate the skin.

Inhalation:
Dust may irritate respiratory system.

Ingestion:
Expected to be a low ingestion hazard.

Signs and symptoms:
Dusts may irritate the respiratory tract, skin and eyes.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium sulfate</td>
<td>7757-82-6</td>
<td>71</td>
</tr>
<tr>
<td>Potassium Chloride</td>
<td>7447-40-7</td>
<td>29</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 dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

Ingestion:
Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

General advice:
If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties:
No unusual fire or explosion hazards noted.

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

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Explosion data

Sensitivity to static discharge

Not available.

Sensitivity to mechanical impact

Not available.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits. For personal protection, see section 8 of the MSDS.

Environmental precautions

Do not contaminate water.

Methods for containment

If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product.

Methods for cleaning up

Minimize dust generation and accumulation. Should not be released into the environment. Collect dust using a vacuum cleaner equipped with HEPA filter. Following product recovery, flush area with water. For waste disposal, see section 13 of the MSDS.

7. Handling and Storage

Handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Practice good housekeeping. Avoid release to the environment.

Storage

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS).

8. Exposure Controls / Personal Protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Personal protective equipment

Eye / face protection

Use tight fitting goggles if dust is generated.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Wear respirator with dust filter.

9. Physical & Chemical Properties

Appearance

Physical state

Solid.

Form

Powder.

Color

White.

Odor

None.

Odor threshold

Not available.

pH

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Boiling point

Not available.
Melting point/Freezing point  Not available.
Solubility (water)   Not available.
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. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products No hazardous decomposition products are known.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

11. Toxicological Information

Toxicological data
Components Species Test Results
Potassium Chloride (CAS 7447-40-7)
  Acute
    Oral
    LD50 Rat  2600 mg/kg
Sodium sulfate (CAS 7757-82-6)
  Acute
    Oral
    LD50 Mouse  5989 mg/kg
    Other
    LD50 Rabbit  > 4 g/kg
Acute effects Not classified.
Sensitization Not expected to be a skin sensitizer.
Local effects Dust may cause skin and eye irritation. Inhalation of dusts may cause respiratory irritation.
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 This product is not expected to cause reproductive or developmental effects.
Symptoms and target organs Exposure may cause temporary irritation, redness, or discomfort.

12. Ecological Information

Ecotoxicological data
Components Species Test Results
Potassium Chloride (CAS 7447-40-7)
  Aquatic
    Crustacea EC50 Water flea (Daphnia magna)  83 mg/l, 48 hours
    Fish LC50 Western mosquitofish (Gambusia affinis)  435 mg/l, 96 hours
Sodium sulfate (CAS 7757-82-6)
  Aquatic
    Crustacea EC50 Water flea (Ceriodaphnia dubia)  2807 - 3535 mg/l, 48 hours
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Striped bass (Morone saxatilis) 790 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

**Ecotoxicity**
Contains a substance which causes risk of hazardous effects to the environment.

**Environmental effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Persistence and degradability**
Not available.

**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.

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**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>Yes</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>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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: 1
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.