



**Manufacturer Info**  
RKI Instruments, Inc.  
33248 Central Ave.  
Union City, CA 94587  
(510) 441-5656  
Fax: (510) 441-5650

**Emergency Phone**  
(800) 424-9300

RKI Reference#: 2004  
Date prepared: 9/22/2011

# MATERIAL SAFETY DATA SHEET

*Product: Oxygen Cell*

## 1. COMPOSITION, INFORMATION OR INGREDIENTS

<u>Contents</u>	<u>Composition (wt. %)</u>
Potassium Hydroxide	21.5
Sodium Alginate	1.2
Ethylenediamine tetracetic acid disodium salt	2.4
Ethylene Glycol	21.3
Water	53.6

## 2. HAZARDOUS IDENTIFICATION

<u>Common Name</u>	<u>CAS No</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Potassium Hydroxide, solution (KOH)	1310-58-3	2 mg/m3	2 mg/m3
Ethylene Glycol HOCH2CH2OH	107-21-1	None	

### Regulatory Lists

Carcinogenicity: NO  
EHS: NO  
CERCLA: YES  
SARA 313 Toxic Chemical: NO  
TSCA Inventory: YES

**WARNING:** Leaking cell may cause chemical burns. Do not get in eyes, on skin or on clothing.

Routes of Exposure: Skin, eyes, inhalation, ingestion

Target organs: Eyes, skin, respiratory system, lungs, gastrointestinal tract

Effects of Overexposure (acute & chronic):

Acute: Severe burns, permanent eye damage, severe irritation, ulceration of mucous membranes

Chronic: lung damage



### **3. FIRST AID MEASURES**

Ingestion: Call a physician. Do not induce vomiting. Give large amounts of water. Follow with diluted vinegar or fruit juice

Inhalation: Provide fresh air or oxygen

Respiration: If breathing is difficult, give oxygen

Eye: Immediately flush with water for 15 minutes

Skin: Immediately flush with water

Medical Conditions Generally Aggravated by Exposure: Dermatitis

Wash contaminated clothing before reuse

### **4. FIRE FIGHTING MEASURES**

Flash Point: 230° F

NFPA 704M rating: 3-0-0

LEL: 15.3%

UEL: 3.2%

Extinguishing Media: Water spray, carbon dioxide, dry chemical powder or appropriate foam

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards: Emits toxic fumes under fire conditions.

### **5. SPILL AND DISPOSAL PROCEDURES**

Steps to be taken in case material is released or spilled: Wear appropriate protective clothing, absorb spilled material with absorbent materials suitable for corrosives (pH = 13) and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Waste Disposal Method: Dispose in accordance with all applicable federal, state, and local regulations.

### **6. HANDLING AND STORAGE**

Handling Precautions: Use safe chemical handling procedures. Wash hands after handling. Do not breath vapor. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling

Storage Precautions: Suitable for general storage. Isolate from incompatibles.

### **7. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Respiratory Protection: Wear appropriate NIOSH/OSHA approved respirator

Ventilation: Recommended

Eye/Skin Protection:

Skin: neoprene gloves, apron recommended

Eye: safety goggles recommended



## 8 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 180 degrees C	Vapor Pressure: 0.05	Appearance: Colorless
Melting Point: 360 degrees C	Vapor Density: 2.0	Odor: Odorless
Specific Gravity: 1.5	Solubility: Appreciable	U. E. L.: 15.3%
Physical State: Liquid	Evaporation Rate: 0.01	L. E. L.: 3.2%

## 9 STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: Excessive heat

Incompatible materials: Strong acids, strong oxidizers, chemically active metals, sulfuric acid, nitric acid, polymerization catalysts, strong bases

Hazardous Decomposition or Byproducts: Hydrogen, Carbon Monoxide, Carbon Dioxide

Hazardous Polymerization: Will not occur

## 10. TOXICOLOGICAL INFORMATION

Acute Effects: Harmful if swallowed, inhaled, or absorbed through skin. Vapor or mist is irritating to the eyes, mucous membranes upper respiratory tract. Causes skin irritation. May cause nervous system disturbances.

Prolonged exposure can cause: Nausea, headache and vomiting

Chronic Effects: May cause reproductive disorders.

Target Organs: Liver, kidneys,, central nervous system

## 11. OTHER INFORMATION

The information in this material safety data sheet meets the requirements of 29 CFR 1910.1200. It is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, hazardous materials handling. The employer is responsible for determining the precautions and dangers of this material for specific applications of the product.

This product has not been tested as a whole by RKI Instruments Inc. Information is provided, at a minimum, on constituents which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that substances identified as carcinogens shall be listed if the concentrations are 0.1% or greater.

This information contained herein is based on the data available to us and is believed to be correct. However, RKI Instruments makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. RKI Instruments assumes no responsibility for illness, injury, or death from the proper or improper use of the product described herein.