

## Material Safety Data Sheet



# POTASSIUM HYDROXIDE, CREATINE SOLUTION

**Revised:** 07/13/2010  
**Replaces:** 05/09/2010  
**Printed:** 08/03/2010

**Carolina Biological Supply Company**

2700 York Rd | Burlington, NC 27215 • to order: 800.334.5551 • for support: 800.227.1150

**CAROLINA**  
www.carolina.com

### Section 1 - Product Description

**Product Name:** Potassium Hydroxide, Creatine Solution

**Product Code(s):** 88-3643

**Size:** 500 mL

**Chemical Name:** N/A

**CAS Number:** See Section 3

**Formula:** See Section 3

**Synonyms:** Caustic potash solutions

**Distributor:** Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215

**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F) **Chemtrec** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 - Hazard Identification

**Emergency Overview:** N/A

**Potential Health Effects:**

**Eyes:** May cause irritation.

**Skin:** May cause irritation to skin.

**Ingestion:** May cause gastrointestinal discomfort.

**Inhalation:** May cause irritation to respiratory tract.

### Section 3 - Composition / Information on Ingredients

**Principal Hazardous Components:** Creatine (CAS#57-00-1) 60%; Potassium Hydroxide (CAS#1310-58-3) 40%

**TLV units:** (Potassium Hydroxide) ACGIH-TLV 2 mg/m<sup>3</sup> (ceiling)

**PEL units:** (Potassium Hydroxide) OSHA-PEL (Vacated) 2 mg/m<sup>3</sup> (ceiling)

### Section 4 - First Aid Measures

**Emergency and First Aid Procedures:**

**Eyes** - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin** - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).

**Ingestion** - If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

**Inhalation** - In case of accident by inhalation: remove casualty to fresh air and keep at rest.

## Section 5 - Firefighting Procedures

**Flash Point (Method Used):** N/A

**NFPA Rating:**

**Health:** 3

**Fire:** 0

**Reactivity:** 1

**Extinguisher Media:** Use dry chemical, CO<sub>2</sub> or appropriate foam.

**Flammable Limits in Air % by Volume:** N/A

**Autoignition Temperature:** N/A

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** N/A

## Section 6 - Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

## Section 7 - Special Precautions

**Precautions to Take in Handling or Storing:** Store at controlled room temperature.

Protect containers against physical damage.

Keep container tightly closed in a cool, well-ventilated place.

## Section 8 - Protection Information

**Respiratory Protection (Specify Type):** None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

**Ventilation:**

**Local Exhaust:** Yes

**Mechanical(General):** Yes

**Special:** No

**Other:** No

**Protective Gloves:** Natural rubber, Neoprene, PVC or equivalent.

**Eye Protection:** Splash proof chemical safety goggles should be worn.

**Other Protective Clothing or Equipment:** Lab coat, apron, eye wash, safety shower.

## Section 9 - Physical Data

**Molecular Weight:** 56.10

**Boiling Point:** Slightly more than 100°C (212°F)

**Vapor Density(Air=1):** N/A

**Percent Volatile by Volume:** N/A

**Solubility in Water:** Soluble

**Melting Point:** Slightly less than 0°C (32°F)

**Vapor Pressure:** N/A

**Specific Gravity (H<sub>2</sub>O=1):** Slightly greater than 1

**Evaporation Rate (BuAc=1):** N/A

**Appearance and Odor:** Clear, colorless, odorless liquid

## Section 10 - Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** N/A

**Incompatibility (Materials to Avoid):** Acids, Halogens, Reducing agents, Metals,

**Hazardous Decomposition Products:** Hydrogen Gas, CO<sub>x</sub>, K<sub>2</sub>O - Potassium Oxide,

**Hazardous Polymerization:** Will not occur

## Section 11 - Toxicity Data

**Toxicity Data:** (Potassium Hydroxide) orl-rat LD50 214 mg/kg

**Effects of Overexposure:**

**Acute:** See Section 2

**Chronic:** Mutation data cited.

**Conditions Aggravated by Overexposure:** N/A

**Target Organs:** Respiratory system, Gastrointestinal tract, Skin, Eyes,

**Primary Route(s) of Entry:** Inhalation, ingestion, eye or skin contact.

## Section 12 - Ecological Data

**EPA Waste Numbers:** N/A

## Section 13 - Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

## Section 14 - Transport Information

**DOT Proper Shipping Name:** UN1814, Potassium Hydroxide Solution, 8, II, Corrosive

## Section 15 - Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Acute

**Name List:**

Creatine - No

KOH - No

**Chemical Category:**

Creatine - No

KOH - No

**CERCLA Section 103 RQ(lb.):** Creatine - No

KOH - Yes 1000

**RCRA Section 261.33:** Creatine - No

KOH - No

## Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

|            |   |
|------------|---|
| ACGIH      | American Conference of Governmental Industrial Hygienists             |
| CAS Number | Chemical Services Abstract Number                                     |
| CERCLA     | Comprehensive Environmental Response, Compensation, and Liability Act |
| DOT        | U.S. Department of Transportation                                     |
| IARC       | International Agency of Research on Cancer                            |
| N/A        | Not Available   |
| NTP        | National Toxicology Program   |
| OSHA       | Occupational Safety and Health Administration                         |
| PEL        | Permissible Exposure Limit  |
| ppm        | Parts per million   |
| RCRA       | Resource Conservation and Recovery Act                                |
| SARA       | Superfund Amendments and Reauthorization Act                          |
| TLV        | Threshold Limit Value   |
| TSCA       | Toxic Substances Control Act  |