

# MATERIAL SAFETY DATA SHEET

Continental Research Corp.  
PO Box 15204  
St. Louis, MO 63110

GENERAL INFORMATION NUMBER: (800) 325-4869

REVISION DATE: June 24, 2004  
DATE OF ISSUE: January 11, 2006

## I - Product Identification

### Boiler Mate

#### PRODUCT

**CHEMICAL FORMULATION:** Closed loop water treatment.

**NFPA HAZARD IDENTIFICATION SYSTEM:** **HEALTH:** 2

**FLAMMABILITY:** 0

**REACTIVITY:** 0

**HAZARD RATING:** 4 - Extreme;

3 - High;

2 - Moderate;

1 - Slight;

0 - Insignificant

## II - Hazardous Ingredients

Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u> <u>%</u>	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
				<u>302</u>	<u>355</u>	<u>372</u>	
Potassium hydroxide	1.00-5.00	2 mg/m <sup>3</sup> C	2 mg/m <sup>3</sup> C	Y	N	N	1310-58-3

Key: **PEL:** Permissible Exposure Limit    **TLV:** Threshold Limit Value    **C:** Ceiling level    **STEL:** Short Term Exposure Limit  
**N/A:** Not Applicable    **N/D:** Not Determined    **N/E:** Not Established    **Y:** Yes    **N:** No  
**302:** CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).  
**355:** SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).  
**372:** SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

## III - Physical Data

**BOILING POINT (°F):** N/D

**SPECIFIC GRAVITY (WATER = 1):** 1.00-1.05

**VAPOR PRESSURE (mm Hg):** N/D

**VOC CONTENT (% by weight):** N/D

**VAPOR DENSITY (AIR = 1):** N/D

**EVAPORATION RATE (WATER = 1):** N/D

**SOLUBILITY IN WATER:** Soluble

**pH:** 12.00-13.00

**APPEARANCE AND ODOR:** Clear, red liquid; mild odor.

## IV - Fire and Explosion Hazard Data

**FLASH POINT (°F):** N/A

**(TEST METHOD):** Closed cup

**FLAMMABLE LIMITS IN AIR (VOLUME %)**

**UPPER:** N/A

**LOWER:** N/A

**EXTINGUISHING MEDIA:** Water, foam, carbon dioxide, dry chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** None.

PRODUCT NAME: Boiler Mate

## V - Reactivity Data

**STABILITY:** Stable

**INCOMPATIBILITY:** Strong acids.

**CONDITIONS TO AVOID:** None.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** None

## VI - Health Hazard Data

**ROUTES OF ENTRY**    **INHALATION:** X    **EYE CONTACT:** X    **SKIN CONTACT:** X    **INGESTION:** X

**INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:** None.

### EFFECTS OF OVEREXPOSURE

**IF IN EYES:** Moderate to severe irritation, redness, tearing, possible destruction of tissue.

**IF ON SKIN:** Severe irritation, burns and ulcerations.

**IF SWALLOWED:** Burns to mucous membranes, nausea, cramps. Harmful if swallowed.

**IF INHALED:** Irritation to upper respiratory tract.

### EMERGENCY AND FIRST AID PROCEDURES

**IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. Obtain medical attention.

**IF ON SKIN:** Wash with soap and water. Repeat washing Remove contaminated clothing and launder separately before reuse. If irritation persists, obtain medical attention.

**IF SWALLOWED:** Contact physician or poison control center immediately. Do not induce vomiting. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving 1 to 2 glasses of water or milk. Avoid giving alcohol or alcohol related products. Never give anything to an unconscious person.

**IF INHALED:** Remove person to fresh air. Obtain medical attention.

## VII - Spill or Leak Protection

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Ventilate area. Contain spill and soak up spilled material with inert absorbent material and place in a properly marked closed container for proper disposal.

**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

## VIII - Special Protection Information

**RESPIRATORY PROTECTION:** Use with adequate ventilation. Do not breathe vapors or mists. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.

**VENTILATION**

**LOCAL:** Recommended

**MECHANICAL:** Not required

**PROTECTIVE GLOVES:** Chemical resistant.

**EYE PROTECTION:** Chemical goggles or face shield.

**OTHER PROTECTIVE EQUIPMENT:** Eye wash station. Protective clothing.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place away from acidic material. Keep container tightly closed when not in use. Always add this product to water, never add water to this product.

**OTHER PRECAUTIONS:** Keep out of reach of children.

## IX - Transportation Information (ground transportation only)

**DOT PROPER SHIPPING NAME:** Corrosive liquids, n.o.s. (potassium hydroxide)

**DOT CLASS:** 8

**DOT ID NUMBER:** UN1760

**DOT PACKING GROUP:** III

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

**REVISION DATE:** June 24, 2004

**Prepared by:** Tec Service

**DATE OF ISSUE:** January 11, 2006

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Continental Research Corporation assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.