# EXTREMULTUS K2000 CEMENT

## 1. Product And Company Identification

### Supplier
Siegling America, Inc  
12201 Vanstory Road  
Huntersville, NC 28078  
Company Contact: Mr. Jay Leighton  
Telephone Number: 704-948-0800

### Manufacturer
Siegling America, Inc  
12201 Vanstory Road  
Huntersville, NC 28078  
Company Contact: Mr. Jay Leighton  
Telephone Number: 704-948-0800

### Supplier Emergency Contacts & Phone Number
CHEMTREC: (800) 424-9300

### Manufacturer Emergency Contacts & Phone Number
CHEMTREC: (800) 424-9300

### Issue Date
02/08/2004

### Product Name
EXTREMULTUS K2000 CEMENT

### CAS Number
NE

### Chemical Family
aromatic/alcohol mixture

### MSDS Number
668

### Synonyms
K2000 Cement

## 2. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Percent Of Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>48.5</td>
</tr>
<tr>
<td>polyamide (Nylon) compound</td>
<td>NE</td>
<td>3</td>
</tr>
<tr>
<td>resorcinol</td>
<td>108-46-3</td>
<td>48.5</td>
</tr>
</tbody>
</table>

## EMERGENCY OVERVIEW

**WARNING! FLAMMABLE. CONTACT WITH EYES, SKIN AND MUCOUS MEMBRANES MAY CAUSE IRRITATION. INHALATION OF AEROSOLS OR VAPORS MAY CAUSE COUGHING, NOSE, THROAT AND UPPER RESPIRATORY IRRITATION. HARMFUL IF SWALLOWED.**

## Hazards Identification (Pictograms)

![Pictograms]

## 3. Hazards Identification

### Eye Hazards
Contact with eyes may be irritating. Prolonged contact with solutions may cause severe irritation and corneal injury.

### Skin Hazards
Contact with solutions may cause local reddening, swelling, itching, and possibly corrosion and loss of surface skin layers. May be absorbed through skin in toxic amounts. Prolonged contact may cause dermatitis (redness, dryness and itching) and rarely skin sensitization.
5. Fire Fighting Measures - Continued

**Extinguishing Media**
Carbon dioxide, AFF/ATC foam, alcohol type foam, dry chemical. Water may be used to cool fire exposed containers.

**Fire Fighting Instructions**
Always wear full fire fighting protective gear and respiratory protection when fighting fires. During fire highly irritating and toxic gases and smoke are present from decomposition/combustion products.

6. Accidental Release Measures
Ensure adequate ventilation. Wear skin, eye and respiratory protection for large spills. Remove sources of ignition. Soak up liquid with a suitable absorbent such as paper towels, sand, sawdust and speedy dry. Do not flush with water or aqueous cleansing agents. Be sure to clean up all material, as cement may be sticky while it drys. Do not allow material to enter sewers or waterways, etc. Inform authorities in case of seepage into waterways or sewage system.

7. Handling And Storage

**Handling And Storage Precautions**
Store away from ignition sources; protect against electrostatic charges. No smoking. Keep containers closed when not in use. Store in a cool, dry, well ventilated area. Prevent from freezing. Keep away from food, beverages and animal feeds.

**Work/Hygienic Practices**
Wash thoroughly with soap and water after handling. Launder contaminated clothing before reuse.

### Protective Clothing (Pictograms)

![Image of protective clothing pictograms]

8. Exposure Controls/Personal Protection

**Engineering Controls**
Use with adequate general and local exhaust ventilation so as to maintain ingredient concentrations below their exposure limits.

**Eye/Face Protection**
Use safety glasses, goggles or face shield to prevent accidental eye contact.

**Skin Protection**
Wear nitrile or butyl rubber gloves to prevent skin contact.

**Respiratory Protection**
Not normally required. However, if material is sprayed or applied at elevated temperatures, a chemical cartridge respirator equipped with organic vapor cartridges may be necessary.

Respiratory protection should not be necessary under normal conditions of anticipated use in small quantities; however, such decisions should be made by qualified professionals with knowledge of the working conditions.

### Ingredient(s) - Exposure Limits

- **ethanol**
  - ACGIH TLV-TWA: 1000 ppm
  - OSHA PEL-TWA: 1000 ppm
- **polyamide (Nylon) compound**
  - No exposure limits established
3. Hazards Identification - Continued

**Ingestion Hazards**
May cause irritation and burns to the mouth and throat. Symptoms may include dizziness, drowsiness, a drop in body temperature, fall in blood pressure, decreased respiration rate, tremors and destruction of red blood cells in rare cases.

**Inhalation Hazards**
Inhalation of aerosols or vapors may be irritating to the nose, throat and upper respiratory system.

**First Aid (Pictograms)**

4. First Aid Measures

**Eye**
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure adequate flushing. Get immediate medical attention.

**Skin**
Remove contaminated clothing. Wash affected areas with tepid water and mild soap. Rinse for at least 15 minutes. Dry skin gently with clean, soft towel. Seek medical attention in case of irritation or redness.

**Ingestion**
Remove person from contaminated area to a quiet, well-ventilated area. Contact a physician or the Poison Control Center for advice. If conscious, rinse mouth out several times with cold water and spit out. Give 1 to 2 cups of water or milk to drink. Stop if person becomes nauseated. Never give liquids to an unconscious person. If unconscious or person has difficulty breathing, lay on his side and open collar. Check airways for obstruction. Support breathing or administer oxygen by mask as necessary. Note, symptoms of poisoning may occur after several hours. Medical observation is recommended for at least 48 hours.

**Inhalation**
Immediately remove inhalation victim to fresh air. Give CPR or artificial respiration if breathing stops. Immediately seek medical attention. Once CPR has been initiated, do not stop until relieved by medical personnel. Keep victim calm and warm.

**Fire Fighting (Pictograms)**

5. Fire Fighting Measures

**Flash Point:** 13 °C
**Flammability Class:** 1B
**Lower Explosive Limit:** 1.4
**Upper Explosive Limit:** 15.0

**Fire And Explosion Hazards**
Flammable! Keep away from flame, heat sources and fire. If allowed to dry, resorcinol within product may burn at elevated temperatures. May accumulate static electrical charges which may ignite vapor upon discharge.

Vapors may form flammable/explosive mixtures with air in confined areas with poor ventilation. Vapors may flow along surfaces to distant ignition sources and flash back.
8. Exposure Controls/Personal Protection - Continued

Ingredient(s) - Exposure Limits - Continued
resorcinol
  ACGIH TLV-TWA: 10 ppm
  ACGIH TLV-STEL: 20 ppm

9. Physical And Chemical Properties

Appearance
  A clear amber liquid.

Odor
  A characteristic alcohol-like odor

Chemical Type: Mixture
Boiling Point: 78 °C
Specific Gravity: 0.975 @ 20C
Percent Volatiles: 48.5
Percent VOCs: 48.50
Vapor Pressure: 59 hPa @ 20C
Vapor Density: >1
Solubility: negligible in water

10. Stability And Reactivity

Stability: Stable
Hazardous Polymerization: Will Not Occur

Conditions To Avoid (Stability)
  Heat, flame, sources of ignition when dried.

Incompatible Materials
  Can react vigorously with oxidizers such as nitric & sulfuric acids, bases, aliphatic amines and isocyanates.

Hazardous Decomposition Products
  May emit toxic combustion products of unknown identity.

11. Toxicological Information

Chronic Carcinogenicity
  Product Carcinogenicity - OSHA: No  NTP: No  IARC: No

Resorcinol is listed as an IARC Group 3 substance - A chemical, industrial process, or occupational exposure that
cannot be classified as to its carcinogenicity in humans due to limited or inadequate human & animal data.

Reproductive Effects
  Consumption of large amounts of ethanol, which are unlikely to occur during accidental occupational ingestion,
may result in Fetal Alcohol Syndrome and other effects to the reproductive system.

Miscellaneous Toxicological Information
  Note: The health effects of this product as noted above are based on extrapolations from the available data for the
pure components. To the best of our knowledge, adverse health effects have not been determined for the final
product formulation as a whole. Under the normal anticipated conditions of use of this product (in small quantities
and for brief and intermittent exposures) it is believed that the likelihood of experiencing adverse health effects is
small.

Resorcinol cause central nervous system excitation including seizures followed by CNS depression (coma) and
even death. Also cardiovascular tachycardia, hypotension, supraventricular, and ventricular arrhythmias may be
noted.
11. Toxicological Information - Continued

**Miscellaneous Toxicological Information - Continued**

Ingestion of large amounts of ethanol in alcoholic beverages has been well documented to cause depression of the central nervous system, lack of coordination, impaired judgement, reduced reaction time, nausea/vomiting, unconsciousness progressing to death from respiratory or circulatory failure. Long-term ingestion is associated with serious health problems, such as cirrhosis of the liver; diseases of the gastrointestinal, cardiovascular, respiratory and nervous systems. Mental problems include a wide range of neurological changes, depression and other mental disorders. These symptoms are unlikely to occur through typical occupational exposures.

12. Ecological Information

**Other Environmental Information**

- Water hazard class 1 (German Regulation) (self assessment): slightly hazardous for water.
- Do not allow undiluted product or large quantities to reach groundwater, waterways or sewer systems.

13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations. Do not dispose with household garbage or in sewage systems.

Flash point is below 140 deg F. Spilled material should be disposed of as an ignitable hazardous waste (EPA RCRA).

14. Transport Information

**Proper Shipping Name**

Flammable liquid, toxic, n.o.s., (ethyl alcohol, resorcinol)

**Hazard Class**

3, PG II

**DOT Identification Number**

UN1992

**DOT Shipping Label**

FLAMMABLE LIQUID

Air Transport -
- ICAO/IATA Class: 3
- UN ID# 1992
- Packing Group II

Proper Shipping Name - Flammable liquid, toxic, n.o.s., (ethyl alcohol, resorcinol)

Land Transport ADR/RID -
- ADR/RID Class: 3 Flammable liquids
  - Item: 19b
  - Danger code: 336
  - UN Number: 1992
  - Description: Flammable liquid, toxic, n.o.s., (ethyl alcohol, resorcinol)

Maritime Transport IMDG -
- IMDG Class: 3.2
- Page: 3232
- UN Number: 1992
- Packing Group: II
14. Transport Information - Continued

**DOT Shipping Label - Continued**

EMS Number: 3-03
MFAG: 310
Maritime Poll.: No

Product shipped in glass bottles (10g, 50g or 500g) within expanded plastic boxes. Meets the DOT small quantity exception when the conditions of 49 CFR 173.4 are met.

**DOT (Pictograms)**

![Pictograms]

**TDG - Canada (Pictograms)**

![Pictograms]

15. Regulatory Information

**SARA Hazard Classes**
- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

**State Regulations**
- Universal Right-To-Know Label -
  - ethanol CAS #64-17-5
  - resorcinol CAS #108-48-3
  - nylon

**Ingredient(s) - State Regulations**
- ethanol
  - New Jersey - Workplace Hazard
  - New Jersey - Special Hazard
  - Pennsylvania - Workplace Hazard
  - California - Proposition 65
  - Massachusetts - Hazardous Substance
  - New York City - Hazardous Substance
- resorcinol
  - New Jersey - Workplace Hazard
  - Pennsylvania - Workplace Hazard
  - Pennsylvania - Environmental Hazard
  - Massachusetts - Hazardous Substance
  - New York City - Hazardous Substance

**Canadian Regulatory Information**
- Class B - Combustible or Flammable Material
- Class D, Div 2 - Poisonous or Infectious Material; other toxic effects

Page 6 of 8
15. Regulatory Information - Continued

**Ingredient(s) - Canadian Regulatory Information**
- ethanol
- resorcinol

**European Union (EU) Regulatory Information**
- European Union Risk Phrases -
  - R11 - Highly Flammable
  - R22 - Harmful if swallowed
  - R36/37/38 - Irritating to eyes, respiratory system and skin

- European Union Safety Phrases -
  - S9 - Keep container in a well-ventilated place
  - S16 - Keep away from sources of ignition - no smoking
  - S20 - When using, do not eat or drink
  - S24 - Avoid contact with skin
  - S25 - Avoid contact with eyes
  - S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
  - S36/37 - Wear suitable protective clothing and gloves

**VbF Classification:** A1

**WHMIS - Canada (Pictograms)**

**DSCL - Europe (Pictograms)**

16. Other Information

**NFPA Rating**
- Health: 2
- Fire: 3
- Reactivity: 0

**HMIS Rating**
- Health: 2
- Fire: 3
- Reactivity: 0

**Revision/Preparer Information**
This MSDS Supersedes A Previous MSDS Dated: 10/09/2000

**Reference Documentation**
Primary references used in the creation of this document:
- Extremultus K2000 Cement MSDS (Siegling GmbH, 4/3/98)
16. Other Information - Continued

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>o CHEMINFO - Ethanol, Resorcinol (Canadian Centre for Occupational Health and Safety)</td>
</tr>
<tr>
<td>o IARC Monographs Supplement 7</td>
</tr>
<tr>
<td>o TOXNET Hazardous Substance Database (HSDB) - resorcinol, ethanol</td>
</tr>
<tr>
<td>o Guide to Occupational Exposure Values (ACGIH, 2003)</td>
</tr>
<tr>
<td>o First Aid Manual for Chemical Accidents, 2nd Edition</td>
</tr>
<tr>
<td>o Rapid Guide to Chemical Incompatibilities, 1997</td>
</tr>
<tr>
<td>o Quick Selection Guide to Chemical Protective Clothing, 2nd Edition</td>
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</table>

Other Information

Glossary -

ACGIH = American Conference of Governmental Industrial Hygienists
API = American Petroleum Institute
DOT = U.S. Department of Transportation
EPA = U.S. Environmental Protection Agency
IARC = International Agency For Research On Cancer
MSHA = Mine Safety and Health Administration
NFPA = National Fire Protection Association
NIOSH = National Institute of Occupational Safety and Health
NTP = National Toxicology Program
OSHA = U.S. Occupational Safety & Health Administration
PEL = Permissible Exposure Limit (OSHA)
REL = Recommended Exposure Limit (NIOSH)
STEL = Short-Term Exposure Limit
TLV = Threshold Limit Value (ACGIH)
TWA = Time Weighted Average (8 hr.)
WHMIS = Canadian Workplace Hazardous Materials Information System

AP = approximately  <  = Less than  >  = Greater than
N/A = Not Applicable  NE = Not Established  ND = Not Determined

Disclaimer

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Siegling America, Inc.