

EXTREMULTUS K2000 CEMENT

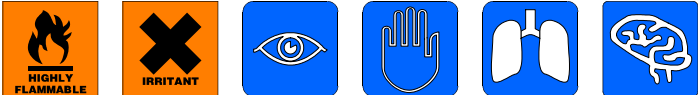
1. Product And Company Identification	
Supplier Forbo Siegling, LLC 12201 Vanstory Dr. Huntersville, NC 28078-8395 Company Contact: Mr. Jay Leighton Telephone Number: 704-948-0800	Supplier Emergency Contacts & Phone Number CHEMTREC: (800) 424-9300
Issue Date: 02/01/2007 Product Name: EXTREMULTUS K2000 CEMENT CAS Number: Not Avail. Chemical Family: aromatic/alcohol mixture MSDS Number: 668 Synonyms K2000 Cement	

2. Composition/Information On Ingredients			
Ingredient Name	CAS Number		Percent Of Total Weight
ethanol	64-17-5		48.5
polyamide (Nylon) compound	NE		3
resorcinol	108-46-3		48.5

EMERGENCY OVERVIEW

WARNING! HIGHLY 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)



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.

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.

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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: 55 °F 13 °C

Autoignition Point: 797 °F 425 °C

Flammability Class: 1B

Lower Explosive Limit: 1.4

Upper Explosive Limit: 15.0

Fire And Explosion Hazards

Highly 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.

Extinguishing Media

Carbon dioxide, AFFF/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.

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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 dries. 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)



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

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

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9. Physical And Chemical Properties - Continued

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
Viscosity: 225 mPas

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.

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

Acute Toxicity - Fish And Invertebrates

Very toxic to fish and aquatic organisms.

EXTREMULTUS K2000 CEMENT**12. Ecological Information - Continued****Other Environmental Information**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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, nos, (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, nos, (ethyl alcohol, resorcinol)

Maritime Transport IMDG -

IMDG Class: 3.2

Page: 3232

UN Number: 1992

Packing Group: II

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.

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14. Transport Information - Continued

DOT (Pictograms)



TDG - Canada (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 #108-46-3
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

Ingredient(s) - Canadian Regulatory Information

ethanol
WHMIS - Ingredient Disclosure List
resorcinol
WHMIS - Ingredient Disclosure List

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

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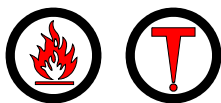
15. Regulatory Information - Continued

European Union (EU) Regulatory Information - Continued

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: A I

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

Personal Protection: B

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 02/06/2004

Reference Documentation

Primary references used in the creation of this document:

- o Extremultus K2000 Cement MSDS (Siegling GmbH, 4/3/98)
- o CHEMINFO - Ethanol, Resorcinol (Canadian Centre for Occupational Health and Safety)
- o IARC Monographs Supplement 7
- o TOXNET Hazardous Substance Database (HSDB)- resorcinol, ethanol
- o Guide to Occupational Exposure Values (ACGIH, 2006)
- o First Aid Manual for Chemical Accidents, 2nd Edition
- o Rapid Guide to Chemical Incompatibilities, 1997
- o Quick Selection Guide to Chemical Protective Clothing, 2nd Edition
- o Fire Protection Guide on Hazardous Materials, NFPA, 9th Edition

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

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16. Other Information - Continued

Other Information - Continued

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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