

## Ransom &amp; Randolph

**1. Product and Company Identification**

<i>Product Name</i> Keycote™ Concentrate	<i>MSDS Code Number</i> 348
<i>Trade Name &amp; Synonyms</i>	<i>Date of Last Revision</i> 07/2006
<i>Chemical Name</i>	<i>Manufacturer</i> Ransom & Randolph
<i>C.A.S. Number</i>	<i>Address</i> 3535 Briarfield Blvd, Maumee, OH 43537
<i>Grades or Minor Variant Identities</i>	<i>Information Telephone Number</i> 419/865-9497 FAX 419/865-9997
<i>Product Use</i> Ceramic shell molds	<i>Emergency Telephone Number</i> 419/865-9497

**2. Composition of Ingredients**

<u>Hazardous Components</u>	<u>C.A.S. Number</u>	<u>%</u>
Butanedionic Acid, Sulf-, 1,4-Bis(2-ethylhexyl) Ester, Sodium Salt	577-11-7	<10%
Ethoxylated,2,4,7,9 – Tetramethyl 5 Decyn-4,7 -Diol	9014-85-1	<10%
Acetylenic Diol	N/A	<10%
Silicone emulsion	N/A	<10%
Vinyl-acrylic copolymer	N/A	<35%

**3. Hazardous Identification***Emergency Overview*

Inhalation of vapor or mist can cause headache, nausea, and irritation of the nose, throat, and lungs. May cause eye irritation. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing.

<i>Routes of Exposure</i>	<i>Signs &amp; Symptoms</i>	<i>Single, Repeated, or Lifetime Exposure</i>	<i>Severity (Mild, Moderate, Severe)</i>	<i>Acute and Chronic Health Effect(s)</i>	<i>Target Organ(s)</i>
<i>Eye</i>	Irritation				
<i>Skin</i>	Irritation				
<i>Inhalation</i>	Irritation to nose and throat, nausea				
<i>Ingestion</i>					
<i>Other</i>					

*Medical Conditions Aggravated by Exposure*

None known

*Carcinogenicity (IARC, NTP)*

Not listed by IARC, NTP

*Potential Environmental Effects***4. First Aid Measures**

<i>Routes of Exposure</i>	<i>First Aid Instructions</i>	<i>Immediate Medical Attention</i>	<i>Delayed Effects</i>
<i>Eye</i>	Flush with flowing water at least 15 minutes		If irritation persists, see a physician.
<i>Skin</i>	Flush with water		If irritation persists, see a physician.
<i>Inhalation</i>	Move to fresh air		

<i>Ingestion</i>	Contact a physician		
<i>Other</i>	Never give fluids or induce vomiting if patient is unconscious or having convulsions.		
<i>Note to Physicians (Treatment, Testing, and Monitoring)</i>			
<b>5. Fire and Explosion Data</b>			
<i>Flashpoint: (Method)</i>	<i>Flammable (Explosive) Limits in Air</i>		<i>Autoignition Temperature:</i>
	LEL: N/A	UEL: N/A	Other This product is not combustible
<i>Flame Propagation or Burning Rate (for solids):</i>	<i>Properties Contributing to Fire Intensity</i>	<i>Flammability Classification NFDA Rating:</i>	
<i>Extinguishing Media</i> Water spray, foam, dry chemical, carbon dioxide		<i>Extinguishing Media to Avoid</i>	
<i>Protection and Procedures for Firefighters:</i> Avoid eye and skin contact. Do not breathe fumes.			
<i>Unusual Fire and Explosion Hazards:</i> Material can splatter above 212°F (100°C). Dried product can burn.			
<b>6. Accidental Release Measures</b>			
<i>Containment Techniques</i> Dike around spilled material.			
<i>Spill/Leak Clean-Up Procedures and Equipment</i> Soak up with absorbent materials and remove to container for disposal. Wash area thoroughly with a detergent and water.			
<i>Evacuation Procedures</i>			
<i>Special Instructions</i>			
<i>Reporting Requirements</i>			
<b>7. Handling and Storage</b>			
<i>Handling Practices and Warnings</i> Normal warehouse handling.			
<i>Storage Practices and Warnings</i> Keep from freezing. Binder stored in transparent or translucent containers should be sheltered from direct sunlight.			
<b>8. Exposure Controls/Personal Protection</b>			
<i>Ventilation</i> Local exhaust	<i>Other Engineering Controls</i> General ventilation		
<i>Routes of Entry:</i>	<i>Personal Protective Equipment (PPE) for Normal Use:</i>	<i>PPE for Emergencies:</i>	
<i>Eye/Face</i>	Safety glasses		
<i>Skin</i>	Protective gloves		
<i>Inhalation</i>			

*General Hygiene Considerations and Work Practices*

*Other Protective Measures and Equipment*

Eye wash and shower.

**9. Physical and Chemical Characteristics**

<i>Appearance</i> Milky white liquid		<i>Odor</i> Mild	
<i>Normal Physical State:</i>  Liquid    X       Gas  Solid		<i>Boiling Point</i> 212°F	<i>Melting Point</i> 32°F (0°C)
		<i>Freezing Point</i> 32°F (0°C)	
<i>Specific Gravity or Density (H<sub>2</sub>O=1)</i> 1.02	<i>Solubility in Water</i> Dispersible		<i>pH</i> 9.0
<i>Vapor Pressure (mm Hg.)</i> N/A	<i>Vapor Density (AIR = 1)</i>		<i>Evaporation Rate (Water=1)</i> No data

*Other*  
% Volatile by Volume: 75 - 85% (water)

**10. Stability and Reactivity**

*Incompatibility (Materials to Avoid)*  
Strong oxidizers

*Hazardous Products Produced During Decomposition*  
CO<sub>x</sub>

<i>Hazardous Polymerization?</i>	<i>May Occur</i>	<i>May Not Occur</i>	<i>Conditions to Avoid</i>
<i>Stability?</i>	<i>Stable</i> X	<i>Unstable</i>	<i>Conditions to Avoid</i> Do not freeze

**11. Toxicological Information**

*Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data*

**12. Ecological Information**

*Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements*  
No ecotoxicity data is available. This product is not expected to present an environmental hazard.

### 13. Disposal Considerations

*Regulations*

Waste material must be disposed of in accordance with federal, state, and local environmental regulatory controls.

*Properties (Physical/Chemical) Affecting Disposal*

### 14. Transport Information

*Regulated for shipping?*

Yes      No    X

*Proper Shipping Name*

Cement – High temp bonding - bulk

*Packing Group*

N/A

*Do changes in quality, packaging, or shipment method change product classification?*

Yes      No    X

*Hazard Class*

N/A

*Identification Number*

N/A

*Other*

### 15. Regulator Information

*Federal Regulations*

*International Regulations*

*Other*

This product contains trace amounts of ethylene oxide, a chemical known to the State of California to cause cancer and reproductive toxicity.

### 16. Other Information

<b>NFPA Hazard Rating</b>	<b>Health:</b> 1	<b>Flammability:</b> 0	<b>Reactivity:</b> 0
<b>HMIS Hazard Rating</b>	<b>Health:</b> 1	<b>Flammability:</b> 0	<b>Reactivity:</b> 0
<b>Personal Protection:</b> H - splash goggles, gloves synthetic apron - vapor respirator. Use NIOSH/OSHA approved respirator.			

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