

## Safety Data Sheet


### Section 1: Product & Company Identification

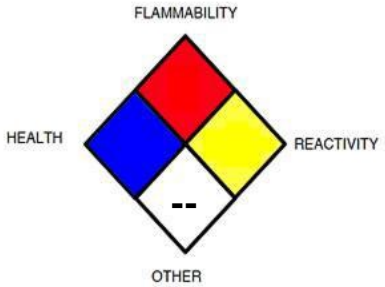
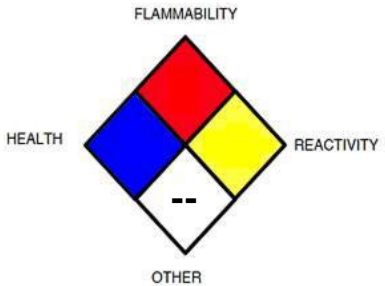
<b>Product Name:</b>	PRImeZOL™ Reagent
<b>Product #:</b>	P-3345
<b>Synonyms:</b>	Aqueous solution of Phenol and Guanidinium Thiocyanate
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Phenol	108-95-2	203-632-7	25-50
Guanidinium thiocyanate	593-84-0	209-812-1	10-25
All other components not listed here are either not dangerous or their concentrations do not exceed specified limits.			

### Section 3: Hazards Identification

<b>Symbols</b>	
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<b>HMIS Classification</b>	
<b>NFPA Classification</b>	

## Section 4: First Aid Measures

<b>General Overview:</b>	Danger! Toxic
<b>Inhalation:</b>	Toxic by inhalation. Supply fresh air. Call a doctor/physician immediately. If not breathing, give artificial respiration. In case of unconsciousness, place patient stably in side position for transportation.
<b>Skin:</b>	Immediately wash skin with soap and flush with large amounts of water. Remove all contaminated clothing. Call a doctor/physician immediately.
<b>Eyes:</b>	Immediately rinse opened eyes with large amounts of water for at least 15 minutes. Remove contact lenses. Get medical attention in case eye(s) remain irritated.
<b>Ingestion:</b>	Call a doctor/physician or Poison Control Center immediately. Rinse mouth with water repeatedly. Drink large amounts of water. Do not induce vomiting without medical advice.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	No data available
<b>Extinguishing Media:</b>	Carbon dioxide, powder, water spray, or alcohol-resistant foam.
<b>Hazardous thermal (de)composition products:</b>	No data available

<b>Special Fire Fighting Procedures:</b>	Wear suitable respiratory equipment and protective clothes.
<b>Flash Point:</b>	No data available




## Section 6: Accidental Release Measures


<b>Personal Precautions:</b>	Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Ensure adequate ventilation. Eliminate all ignition sources.
<b>Environmental Precautions:</b>	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-up:</b>	Absorb with appropriate absorbent material and place in closed adequate containers for proper disposal.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Recommended storage temperature: 2 – 8°C. Protect from light. Keep away from open flames and hot surfaces. Remove all sources of ignition.
<b>Handling:</b>	Avoid exposure. Prevent contact with skin, eyes, and clothing. Remove all sources of ignition.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>In case of insufficient ventilation wear suitable respiratory equipment.</p>
<b>Skin and Body:</b>	  <p>Protective work clothing and protective gloves</p>
<b>Eyes:</b>	

	 <p>Tightly sealed goggles</p>
<b>Ventilation/Engineering Measures:</b>	Ensure adequate ventilation.
<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Other:</b>	N/A

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Slightly red liquid. Characteristic odor – phenol, sweet, tarry, pungent.
<b>Formula</b>	N/A
<b>Molecular Wt.</b>	N/A
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Solubility in water: miscible
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Toxic vapors, caustic vapors, carbon/sulfur/nitrogen oxides, hydrogen cyanide
<b>Materials to Avoid:</b>	Strong oxidizing agents, strong acids, isocyanates, heat nitrides, alkali metals, alkaline earth metals, butadiene.
<b>Conditions to avoid:</b>	Flames, high temperatures

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	Phenol

	<ul style="list-style-type: none"> <li>• Oral LD50 = 270 mg/kg (Mouse)</li> <li>• Dermal LD50 = 630 mg/kg (Rabbit)</li> <li>• Oral LDL = 140 mg/kg (Human)</li> </ul> <p>Guanidinium thiocyanate</p> <ul style="list-style-type: none"> <li>• Oral LD50 = 571 mg/kg (Rat)</li> <li>• Dermal LD50 = 2,000 mg/kg (Rat/Rabbit)</li> </ul>
<b>CHRONIC Toxicity:</b>	<p>Potential Health Effects:</p> <ul style="list-style-type: none"> <li>• Eyes: Corrosive. Causes burns. Risk of serious damage to the eyes including blindness.</li> <li>• Skin: Toxic. Corrosive. Causes burns. Components of this product may be absorbed through the skin and cause irreversible effects on target organs.</li> <li>• Inhalation: Toxic. Corrosive. Causes burns.</li> <li>• Ingestion: Toxic. Corrosive. Causes burns. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.</li> <li>• Target Organs: Skin, lungs, liver, spleen, kidney</li> </ul>
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	<p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	<p>Aquatic Toxicity: Short-term toxicity may be seen. Toxic effects expected to be limited to immediate area of environmental release. Any effects expected to be pronounced in microorganisms.</p> <p>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 even if small quantities leak into the ground. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.</p>
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	Inherently biodegradable.

	Anaerobic Biodegradation Index (BOD20/Th OD): 93% (2.22/2.38 p/p); phenol Aerobic Biodegradation Index (BOD20/Th OD): >40%, phenol
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Dispose in accordance to all National and local environmental regulations. This product is sold in an amber glass bottle. May be incinerated in a hazardous waste incinerator. Product should be removed to a hazardous waste landfill only if no other disposal method is available. Do not empty into drains. Use appropriate containment to avoid environmental contamination.
<b>Contaminated Packaging:</b>	Dispose the empty bottle as unused product.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	2810
<b>ADR / RID (LAND):</b>	Class: 6.1 Toxic substances Danger Code (Kemler): 60 UN: 2810 Packaging Group: II UN proper shipping name: 2810 TOXIC LIQUID, ORGANIC, N.O.S. (PHENOL) Tunnel Restriction Code: D/E
<b>DOT regulations:</b>	N/A
<b>IMDG/IMO (SEA):</b>	Class: 6.1 UN: 2810 Label: 6.1 Packaging Group: III EMS Number: F-A, S-A Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (PHENOL)
<b>IATA/DGR (AIR):</b>	Class: 6.1 UN: 2810 Label: 6.1 Packaging Group: II Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. (PHENOL) Special precautions for user: Warning - toxic substances

<b>Special Provisions:</b>	Warning - toxic substances
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<b>SECTION 15: Regulatory Information</b>	
<b>Health Phrases:</b>	<p>Danger!</p> <p>H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H341 Suspected of causing genetic defects.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure</p> <p>H412 Harmful to aquatic life with long lasting effects</p>
<b>Risk Phrases:</b>	<p>P280 Wear protective gloves / protective clothing/eye protection /face protection</p> <p>P281 Use personal protective equipment as required</p> <p>P284 Wear respiratory protection</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P260 Do not breath dust/fume/gas/mist/vapors/spray</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P264 Wash hands thoroughly after handling</p> <p>P273 Avoid release to the environment</p>
<b>Safety Phrases:</b>	<p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</p> <p>P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P303+P361+ P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P309+P311 IF exposed or if you feel unwell: call a POISON CENTER or doctor/physician.</p>
<b>EU Regulations:</b>	EUH032 Contact with acids liberates very toxic gas
<b>US Regulations:</b>	<p>TSCA: N/A</p> <p>California Proposition 65: N/A</p>
<b>U.S. Federal Regulations:</b>	<p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found.</p> <p>SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>Clean Water Act (CWA) 307: No products were found.</p> <p>Clean Water Act (CWA) 311: No products were found.</p>

	<p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: Acute toxicity - oral (Cat. 3), Acute toxicity - dermal (Cat. 3), Acute toxicity - inhalation of dusts/mists (Cat. 2), Skin corrosion/irritation (Cat. 1B), Serious eye damage/eye irritation (Cat. 1), Specific target organ systemic toxicity - repeated exposure (Cat. 2), Mutagenicity (Cat. 2)</p>
<b>WHMIS (Canada):</b>	N/A

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*