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## MATERIAL SAFETY DATA SHEET

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1 Gunnebo Dr.  
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Telephone: 501-676-2222  
Inside Continental US: 800- 336-1640  
24 hr. Emergency: 800-424-9300

### Product Identification

Product Class : Polyester Resin Adhesive  
Product Name: Liquid Roc 300 Polyester Hammer Capsules  
Description: Polyester system packaged in sealed glass tubes. Part A is in the long end of the capsules and Part B is in the short end.

### Hazardous ingredients

Ingredients:	CAS Number:	Exposure limits:
<u>Part A</u>		
Styrene	100-42-5	PEL = 100 ppm PEL-C = 200 ppm TLV = 50 ppm STEL = 100 ppm
Silicon dioxide, amorphous	7631-86-9	PEL = 6 mg/m <sup>3</sup>
<u>Part B</u>		
Dibenzoyl peroxide	94-36-0	PEL = 5 mg/ m <sup>3</sup> TLV = 5 mg/ m <sup>3</sup>

PEL = OSHA permissible exposure limit. TLV = ACGIH threshold limit value. This is an 8 hour time weighted average unless otherwise indicated by "C" ( ceiling ) or "STEL" ( Short term exposure limit) .

### Physical Data

Appearance and Odor:	Part A: light yellow viscous liquid with coarse sand, styrene odor Part B: white powder
Boiling Point:	Part A: 293°F (145°C) (styrene) Part B: decomposes above 150°F (decomposes >60°C SADT)
Melting Point:	Part A: -24°F (-31°C) (styrene) Part B: 131°F (55°C)
Vapor Pressure:	5 mm Hg @ 68°F (styrene) (7 mbar/20°C styrene)
Evaporation Rate:	Not determined
Solubility in water:	Unsoluble
PH:	Part B: 7

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### Fire and Explosion Hazard Data

Flammability Classification: OSHA Class IC - Flammable Liquid  
Flash Point: 93°F (31°C) (styrene)  
Flammable limits: LEL = 1.1 UEL = 8.9  
Extinguishing media: Carbon dioxide, dry chemical, foam, water  
Special fire fighting procedures: Cool with water spray. Use self-contained breathing apparatus.  
Unusual fire and explosion hazards: Isolate from heat, electrical equip., sparks, and open flame. Decomposition and combustion products, may be toxic. Glass tubes may explode when exposed to extreme heat.

### Reactivity Data

Stability: Stable at temperature below 122° F (50°C)  
Incompatibility: Strong acids, peroxides and other oxidizing agents.  
Hazardous decomposition products: Carbon dioxide, carbon monoxide  
Hazardous polymerization: Will not occur  
Conditions to avoid: Styrene will polymerize at elevated temperatures. Benzoyl peroxide will decompose at temperature > 150°F (66°C)

### Health Hazard Data

Carcinogenicity: Crystalline silica is considered by IARC to be an animal carcinogen and is known to cause silicosis by inhalation of airborne dusts. If the silica is encapsulated in the adhesive no exposure to airborne dusts is to be expected. However, during removal by mechanical abrasion appropriate safety practices should be followed to prevent inhalation of airborne dusts. Styrene is a suspected carcinogen in animals with inconclusive data on humans. The nature and use of this product should not pose a cancer risk to humans.

Primary routes of exposure: Dermal, inhalation

Signs and symptoms of exposure: Causes eye burns. Skin irritant. Can have a narcotic effect if inhaled. Can cause allergic skin and respiratory condition. "Styrene sickness" consisting of drowsiness, nausea, headache, fatigue, and dizziness has been mentioned in workers exposed at 200-700 ppm.

Medical conditions aggravated by exposure: Skin and eye conditions.

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### Emergency and First Aid Procedures

Eyes: Immediately flush with plenty of water for at least 15 minutes. Call a physician.  
Skin: Wash with soap and water. Remove contaminated clothing and launder before reuse.  
Inhalation: Move victim to fresh air. Give oxygen and/or artificial respiration if needed. Call a physician.  
Ingestion: Give plenty of water to drink. Do not induce vomiting. Call a physician. Never give anything by mouth to an unconscious person.  
Other: Referral to a physician is recommended if there is any questions about the seriousness of the injury/exposure.

### Safe Handling and Personal Protective Equipment

Respiratory Protection: Use NIOSH approved organic vapor respirator when vapor concentrations exceed recommended exposure limits.  
Ventilation: General (natural or mechanically induced fresh air movements that maintain vapor concentrations below recommended exposure limits).  
Eye Protection: Safety Glasses (side shields recommended).  
Protective Gloves: Impermeable (Neoprene or rubber).

### Precautions For Safe Handling And Use

Precautionary Labeling: Warning! Flammable. Causes eye burns and skin irritation. Can have an anesthetic effect if inhaled. Can cause allergic skin and respiratory reactions. Keep away from heat, sparks, and open flame. Avoid contact with eyes, skin and clothing. Avoid breathing in vapor. Avoid prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling.  
Handling and Storing: Keep in a cool dry place out of direct rays of sun. Store below 75°F (24°C). Keep away from ignition sources such as excess heat, sparks, and open flame.  
Spill Procedures: Remove all sources of ignition. Cover with absorbent material and place in salvage container for proper disposal.

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### Regulatory Information

OSHA Hazard Communication: This material safety data sheet has been prepared in compliance with the Federal OSHA hazard communication standard and this product is considered to be a hazardous chemical under that standard.

DOT proper shipping name: Polyester Resin Kit/ UN 3269  
Label Code 3, PG III

TCSA Inventory Status: Chemical components listed on TSCA inventory.

Sara (Title III)- Sections 302, 311,312 & 313:

Section 302: Extremely Hazardous Substances (40 CFR 355)

This product does not contain ingredients listed in Appendix A of 40 CFR as an extremely hazardous substance.

Section 311 & 312: MSDS Requirements (40 CFR 370)

This product contains ingredients listed under 29 CFR 1910.1200 (c) as referenced in 40 CFR 370.

Section 313: List of Toxic Chemicals (40 CFR 372)

This product contains ingredients listed under 40 CFR 372.65.

Waste Disposal Methods: Consult with local regulatory agencies or corporate personnel for disposal methods that comply with local, state and federal health and environmental regulations.

### User Notification

To the best of our knowledge the information contained herein is correct. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. **NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION CONTAINED HEREIN OR THE CHEMICAL TO WHICH THE INFORMATION REFERS.**