

## 1. Chemical Product and Company Identification

Trade Name: NYACOL<sup>®</sup> MagSol  
Chemical Name: Magnesium Hydroxide  
Synonyms: Colloidal magnesium hydroxide; magnesium dihydroxide  
Product Code: MagSol  
Use: Non-hazardous alkali; fire retardant-smoke suppressant.  
Manufacturer: Nyacol Nano Technologies, Inc.  
Megunko Road, P.O. Box 349, Ashland, MA 01721 U.S.A.  
Emergency Telephone: 508-881-2220

## 2. Composition / Information on Ingredients

<u>Component</u>	<u>CAS #</u>	<u>Exposure Limit</u>	<u>Percent By Weight</u>
Magnesium Hydroxide	1309-42-8	None listed.	30-50
Water	7732-18-5	None.	50-70
<u>Component</u>	<u>EINECS #</u>	<u>RTECS #</u>	<u>REACH #</u>
Magnesium Hydroxide	215-170-3	OM3570000	Not registered by NNT.
Water	231-791-2	ZC0110000	None.

## 3. Hazard Identification

Emergency Overview Translucent white liquid. No odor. Not flammable. May be slightly irritating to eyes and skin. Keep spills out of surface waters.

Classification: Not hazardous.  
Symbol: None.  
Risk Phrases: None.  
Safety Phrases: None.

### Potential Health Effects / Health Hazard Identification

Eye: May cause slight irritation.  
Skin: May cause slight irritation.  
Ingestion: May cause slight irritation.  
Inhalation: May cause slight irritation.  
Chronic Exposure: Not listed by NTP, IARC or OSHA as a carcinogen.

## 4. First Aid Measures

Eye Contact: Do not rub eyes. Flush with water for at least 15 minutes. Include eyelid creases. If irritation occurs seek medical care.  
Skin Contact: Wash thoroughly with soap and water.  
Ingestion: Rinse mouth with water. Drink some water. If large quantities ingested, obtain medical advice.  
Inhalation: Not expected to be an inhalation hazard.  
Advice to Physicians: Mechanical irritation. Treat symptomatically.

## 5. Firefighting Measures

Flammability: Not flammable or combustible.  
Unusual Hazards: Containers can build pressure if exposed to heat or fire.  
Extinguishing Media: Appropriate to primary source of fire.  
Protective Equipment: Appropriate to primary source of fire.  
Special Exposure Hazard: None known.

## 6. Accidental Release Measures

Leaks and Spills: Keep spills out of surface waters. Collect or soak up, or allow to dry and sweep up.  
Personal Protection: No special precautions. Wash contaminated clothing to avoid possible irritation.

## 7. Handling and Storage

Handling: Glove and eye protection should be worn.  
Storage: Store away from strong acids and interhalogens.

## 8. Exposure Controls / Personal Protection

Engineering Control: If allowed to dry to dust, use exhaust ventilation to keep airborne concentrations below exposure limits.  
Respiratory Protection: When respiratory protection is required or concentrations are unknown, use approved air-purifying respirator with particulate filter cartridge.  
Skin Protection: Clean body-covering clothing; impervious gloves such as neoprene.  
Eye Protection: Wear approved safety glasses.

## 9. Physical and Chemical Properties

Appearance: Translucent white liquid  
Odor: None  
Physical State: Liquid. MagSol is a water-based material.  
pH: 10.5 – 11.0 (10% in water)  
Boiling Point: 100°C (water component)  
Vapor Pressure: 2260 kPs (17 mm Hg.) at 20°C water  
Solubility in Water: Negligible  
Vapor Density: Not applicable.  
Specific Gravity: 1.28  
Volatile by Volume: 50–70  
Evaporation Rate: Not applicable.  
Flash Point: Not applicable.  
Flammable Limits: Not applicable.

## 10. Stability and Reactivity

Chemical Stability: Stable.  
Incompatibility With Other Materials: Strong acids. Interhalogens. Phosphorous. Maleic anhydride.  
Hazardous Decomposition Products: None.  
Hazardous Polymerization: Will not occur.

## 11. Toxicological Information

Material LD<sub>50</sub>, Rat, Oral  
Magnesium Hydroxide: 8500 mg/kg  
Acute Effects: May cause slight eye and skin irritation. No sensitization.

## 12. Ecological Information

Ecotoxicity: No data.  
Persistence: No data.

## 13. Disposal Considerations

Disposal Considerations: Dispose in accordance with all federal, state and local environmental regulations.  
United States: Not a RCRA hazardous waste.

## 14. Transport Information

<u>Regulations</u>	<u>Shipping Name</u>	<u>Hazard Class</u>	<u>Packing Group</u>	<u>U.N. Number</u>
U.S. D.O.T.:	Not applicable.	Not applicable.	Not applicable.	Not applicable.
ICAO / IATA:	Not applicable.	Not applicable.	Not applicable.	Not applicable.
IMO / IMDG:	Not applicable.	Not applicable.	Not applicable.	Not applicable.
ADR:	Not applicable.	Not applicable.	Not applicable.	Not applicable.

## 15. Regulatory Information

### U.S. Federal Regulations

EPA TSCA Inventory: All ingredients listed.  
SARA Section 313: This product does not contain ingredients at a level of 1% or greater on the list of Toxic Chemicals.  
D.O.T. Regulations: See Section 14.

### U.S. State Regulations

California Proposition 65: No ingredients listed.  
State Right-to-Know Laws: Section 2 of this MSDS lists all components of MagSol.

### Canadian Regulations

Controlled Products Regulations: This MSDS contains all the information items specified in Schedule 1, Column 3 of the CPR in a 16-heading format.  
WHMIS: Not a controlled product.  
DSL: Listed.

### EC Regulations

Classification: Not hazardous.  
Symbol: None.  
Risk Phrases: None.  
Safety Phrases: None.

## 16. Other Information

Recommended Use: MagSol is recommended for use as a non-hazardous alkali; as a fire retardant-smoke suppressant in coatings, plastics and roofing.

HMS Hazard ID: Health: 0, Flammability: 0, Reactivity: 0

NFPA Hazard ID: Health: 0, Flammability: 0, Reactivity: 0

Work Alert: Workers using MagSol should read and understand this MSDS and be trained in the proper use of this material.

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