

**MATERIAL SAFETY DATA SHEET**  
**BioMagic 500**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MSDS Issue Date: 8 February 2010

Product Name: **BioMagic 500**

Responsible Party: BioMagic Inc.  
1030 West 17<sup>th</sup> Street  
Costa Mesa, California 92627-4503  
949-631-8845

**2. HAZARDOUS INGREDIENTS**

**Chemical Family:** Organic salt solution

**Composition:** A mixture of inorganic and organic salts in aqueous (water-based) solution (proprietary formula).

**CAS #:** none

**3. HAZARDS IDENTIFICATION**

**Health Hazards:** May cause irritation of eyes, skin, or respiratory system.  
May be dangerous if ingested.  
Avoid contact with eyes, skin and clothing.  
Wash thoroughly after handling.

**Physical Hazards:** None anticipated.  
Do not allow product to evaporate to dryness.

**NFPA HAZARD CLASS:**

<b>Health:</b>	1
<b>Flammability:</b>	0
<b>Reactivity:</b>	1

**POTENTIAL HEALTH EFFECTS:**

**Significant Routes of Exposure:**

Inhalation, Ingestion

**Eye:** Contact may cause eye irritation including stinging, watering, and redness.

**Skin:** Contact may cause mild skin irritation including redness.  
No harmful effects from skin absorption have been reported.

**Inhalation (Breathing):** May cause respiratory irritation.

**Ingestion (Swallowing):** May be dangerous if ingested.  
May interfere with the circulation and oxygen carrying capacity of the blood.

**Signs and Symptoms:** Effects of overexposure may include irritation of the nose, throat and digestive tract, headaches, coughing, nausea, vomiting, diarrhea, and transient disorientation.

**Other Comments:** Prolonged or repeated overexposure may result in effects on the blood (methemoglobinemia) and blood vessels (vasodilating and a fall in blood pressure). Symptoms of toxicity may include headache, fainting, fatigue, cyanosis, confusion, irregular heartbeats, and possible respiratory paralysis.

**Pre-Existing Medical Conditions:**

Pre-existing heart disease may be aggravated by exposure.

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**4. FIRST AID MEASURES**

- Eye:** If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water for at least 15 minutes. If symptoms persist, seek medical attention.
- Skin:** Remove contaminated clothing and shoes. Cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness persists, seek medical attention.
- Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration.
- Ingestion (Swallowing):** If swallowed, seek emergency medical attention. If victim is drowsy or unconscious and vomiting, place on left side with the head down and do not give anything by mouth. If victim is conscious and alert and ingestion occurred within the last hour, vomiting should be induced for ingestion of large amounts (more than 5 ounces in an adult) preferably under direction from a physician or poison center. If possible, do not leave victim unattended and observe closely for adequacy of breathing.
- Note To Physicians:** Large doses may cause significant vasodilation and hypotension. Pre-existing ischemic heart disease may be aggravated by these effects. In large ingestions, may cause methemoglobinemia. Methemoglobinemia should be suspected if cyanosis occurs.

**5. FIRE FIGHTING MEASURES**

- Flammable Properties:** The product is not flammable.
- Flash Point:** Not Applicable
- Lower Explosion Limit (LEL):** Not Applicable
- Upper Explosion Limit (UEL):** Not Applicable
- Autoignition Temperature:** Not Applicable

**Hazardous Decomposition Products:**

Material will not burn, but if involved in a fire, flammable/toxic gases (oxides of carbon and nitrogen, ammonia) may be generated after material evaporates to dryness. Exposure to heat may liberate ammonia fumes.

- Extinguishing Media:** Use extinguishing agent suitable for type of surrounding fire.

**Fire Fighting Instructions:**

For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear appropriate protective equipment. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant. Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk. Cool equipment exposed to fire with water, if it can be done with minimal risk. Do not allow product to evaporate to dryness.

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**6. ACCIDENTAL RELEASE MEASURES**

Stop spill/release if it can be done with minimal risk.  
Isolate immediate hazard area and keep unauthorized personnel out.  
Wear appropriate protective equipment including respiratory protection as conditions warrant.  
Dike and contain spilled material.  
Material is water-soluble and will disperse in water.  
Prevent spilled material from entering storm drains, other unauthorized treatment drainage systems, wells, sources of potable water, and natural waterways.  
Recover as much spilled material as possible.  
Spilled material may be pumped into suitable containers or absorbed into an appropriate absorbent material.  
Ensure that disposal of spilled/contaminated material complies with federal, state, and local regulations.  
Immediate cleanup of any spill is recommended.

**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with skin and eyes.  
Do not breathe mists.  
The use of appropriate respiratory protection is advised when airborne concentrations exceed any established exposure limits.  
Wash thoroughly after handling.  
Do not wear contaminated clothing or shoes.  
Use good personal hygiene practice.  
Keep out of reach of children.

**Storage:** Keep container(s) tightly closed.  
Use and store this material in cool, dry, well-ventilated areas.  
Store only in approved containers.  
Protect container(s) against physical damage.  
Keep away from any incompatible materials. Refer to Section 10.  
Protect against extremes in temperature. Heating above 140°F will promote hydrolysis; extreme cold (<35° F) will cause crystallization (salting out) of the product.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering controls:** If current ventilation practices are not adequate to minimize exposure, additional ventilation or exhaust systems may be required.

**Personal Protective Equipment (PPE):**

**Respiratory:** Respiratory protection is not usually required, however it may be required when ventilation is not adequate to prevent exposure.

**Skin:** The use of gloves impermeable to the specific material handled is recommended to prevent skin contact and possible irritation (see glove manufacturer literature for information on permeability).

**Eye/Face:** Approved eye protection, such as safety glasses with sideshields, to safeguard against potential eye contact, irritation, or injury is recommended.  
Depending on conditions of use, a face shield may also be necessary.

**Other Protective Equipment:**  
Impervious clothing should be worn as needed.  
A source of clean water should be available in the work area for flushing eyes and skin.

**Exposure Limits:**

**ACGIH TLV-TWA:** 10 mg/m<sup>3</sup> for Particulates Not Otherwise Classified (nuisance dusts)

**Note:** State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Note: Unless otherwise stated, values are determined at 20° C (68° F) and 760 mm Hg (1 atm).

<b>Physical State:</b>	Liquid	<b>Flash Point:</b>	Not applicable
<b>Appearance:</b>	Clear, to pale blue solution	<b>Lower Explosion Limit:</b>	Not applicable
<b>Odor:</b>	Slight odor of ammonia	<b>Upper Explosion Limit:</b>	Not applicable
<b>pH:</b>	6.8 – 7.3	<b>Autoignition Temperature:</b>	Not applicable
<b>Solubility in Water:</b>	100%	<b>Boiling Point:</b>	>212° F (>100°C)
<b>Vapor Pressure:</b>	17.2 mm Hg (vapor pressure of water)	<b>Freezing/Melting Point:</b>	< 32° F (< 0°C)
<b>Vapor Density (air=1):</b>	0.6 (water)	<b>Percent Volatile:</b>	Not determined
<b>Specific Gravity:</b>	1.34 – 1.44 g/mL at 65° F	<b>Evaporation Rate: (nBuAc =1)</b>	<1
		<b>Bulk Density:</b>	11.8 –12.2 lb/USgal

**10. STABILITY AND REACTIVITY**

**Chemical Stability:** Stable under normal conditions of storage and handling.

**Conditions To Avoid:** Do not allow product to evaporate to dryness. Refer to Section 5.

**Incompatible Materials:** Avoid contact with combustible, organic, or other readily oxidizable materials.  
Avoid contact with strong acids and chlorates or other strong oxidizers.  
Contact with alkaline materials may liberate ammonia.  
Avoid contact with metals.

**Hazardous Polymerization:**  
Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Target Organs:** Blood/circulatory system.

**Chronic Effects:**

**Cancer:** Does not contain ingredients known to be carcinogenic by IARC, NTP, OSHA, ACGIH, or EPA.

**Developmental:** Insufficient data available for this material.

**12. ECOLOGICAL INFORMATION**

The product itself and its products of degradation are not harmful under normal conditions of careful and responsible use. The product is non-persistent and non-cumulative when used according to directions. Avoid spills and releases to watercourses and sources of potable water. May cause irritation to the digestive tract of livestock or wildlife that ingest the material.

**13. DISPOSAL CONSIDERATIONS**

This material, if discarded as produced, is not classified as a hazardous waste under the U. S. Resource Conservation and Recovery Act (RCRA). Use of the product that results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult federal, state, and local regulations regarding the proper disposal of this material.

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**14. TRANSPORT INFORMATION**

**Hazard Class or Division:** Not classified as a hazardous material under U. S. Department of Transportation (DOT) Hazardous Material Regulations.

**15. REGULATORY INFORMATION**

**Carcinogenicity:** Does not contain ingredients known to be carcinogenic by IARC, NTP, OSHA, ACGIH, or EPA.

**California Proposition 65** (CA Health & Safety Code Section 25249.5):  
This product does not contain chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.

**Clean Water Act (CWA):** This product does not contain ingredients considered to be priority pollutants under the Clean Water Act.

**CERCLA/SUPERFUND:** This product does not contain ingredients that have Reportable Quantity (RQ) requirements under U.S. 40 CFR 117.302.

**16. DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

The information in this document is believed to be correct as of the date issued.

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