ALONGLIFE® **Material Safety Data Sheet**

Manufactured By: Life Science Group, Inc. 662 Edinburgh Circle Highland. MI 48357

Information: 248-438-5323 National Poison Control: 800-222-1222

Material Name: **ALONGLIFE**

Issue Date: 5/22/2012

Section 1 - PRODUCT IDENTIFICATION

Product Name: ALONGLIFE

EPA No. 88930-1 EPA Est. No. 88930-MI-1

Section 2 - HAZARDOUS INGREDIENTS

Components:	CAS #	OSHA PEL	ACGIH TLV	<u>%</u>
Copper Sulfate Pentahydrate	7758-99-8	1 mg/m3	1 mg/m3	18.25 - 21.75

Section 3 - HEALTH HAZARDS IDENTIFICATION

Primary Routes of Entry: Inhalation, Absorption, and Ingestion

Eyes: Corrosive. Exposure may cause severe burns, destruction of eye tissue and possible permanent injury or blindness. Skin: Corrosive. Contact may cause reddening, itching, inflammation, burns, blistering and possibly tissue damage. Ingestion: Corrosive. May cause painful irritation and burning of the mouth and throat, painful swallowing, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection. Inhalation: Irritating. Overexposure may cause burns and tissue damage.

Section 4 – FIRST AID MEASURES

Eyes: flush immediately with large amounts of water for at least 20 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin: Immediately flush skin with plenty of water, for at least 20 minutes, while removing contaminated clothing and shoes. Get immediate medical attention.

Ingestion: If victim is conscious and alert, give 1-3 glasses of water to dilute stomach contents. Rinse mouth out with water. Do not induce vomiting unless directed by medical personnel. Get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Keep affected person warm and at rest. Get immediate medical attention.

Section 5 - FIRE AND EXPLOSION HAZARDS

Flash Point: N/E

General Fire Hazards: Water applied directly could result in spattering of acid solution.

Hazardous Combustion Products: May react with high carbon metals to produce hydrogen gas, which can form an explosive mixture.

Fire Fighting Equipment/Instructions: Firefighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

NFPA Ratings:	Fire: 0	Health: 2	Reactivity: 1	Other: X
HMIS III Ratings:	Fire: 0	Health: 2	Reactivity: 1	Other Protection: X

Section 6 - ACCIDENTAL RELEASE MEASURES

Containment Procedures: Flush with water into retaining area or container. Caution should be exercised regarding personal safety and exposure to released product.

Clean-up Procedures: Neutralize solution with bicarbonate of soda. (Baking Soda)

Evacuation Procedures: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind. Special Instructions: Notify local authorities and the National Response Center, if required.

UFL: N/E

LFL: N/E

Section 7 - HANDLING AND STORAGE

Procedures for Handling: Avoid contact with strong oxidizers. Do not use with materials or equipment sensitive to corrosive solutions.

Recommended Storage Methods: Avoid storage in excessive heat; expansion of container may occur creating spillage. Do not store in galvanized or nylon equipment.

Section 8 – PERSONAL PROTECTION

Respiratory Protection: Ventilation and other forms of engineering controls are the preferred means for controlling exposures. A NIOSH/MSHA approved air purifying respirator with an appropriate acid gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protective Gloves: Use appropriate chemical gloves that are in usable order.

Other Protective Clothing or Equipment: Eye and face protection is necessary, long sleeved shirts, long pants, socks and shoes..

Work/Hygienic Practices: Use good personal hygiene. Body shower for prolonged skin contact.

Section 9 – PHYSICAL & CHEMICAL PROPERTIES				
Appearance: Clear blue liquid	Odor: None			
Physical State: Liquid	Vapor Density (Air = 1): 1.0			
pH: 2.60	Evaporation Rate: N/A			
Vapor pressure: 0.1mm 68° F	Solubility in Water: Complete			
Boiling Point: 220° F	Specific Gravity $(H_2^0 = 1)$: 1.2			

Melting Point: N/A

Section 10 – <u>REACTIVITY INFORMATION</u>

Chemical Stability: stable

Conditions to Avoid: Avoid mixing with strong bases and strong reducing agents. **Incompatibility:** Incompatible with strong bases and strong reducing agents. **Hazardous Decomposition Products:** Sulfur dioxide and sulfur trioxide may be produced with decomposition. **Hazardous Polymerization:** Will not occur.

Section 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity / Chronic Toxicity: Continued overexposure to this solution may cause systemic toxicity. Carcinogenicity: N/A

Signs and Symptoms of Exposure: Overexposure may cause the following specific symptoms, depending on the concentration and duration of exposure; vomiting, shallow respiration and lung function changes.

Section 12 - DISPOSAL CONSIDERATIONS

Disposal Instructions: Neutralize with bicarbonate of soda or fertilizer grade lime and dispose of in accordance with all federal, state and local regulations.

Section 13 - TRANSPORTATION INFORMATION

DOT Information

Proper Shipping Name: UN3264 Corrosive Liquids, acidic, inorganic, NOS, (copper sulfate) 8, Pg III

All information contained in this Material Safety Date Sheet is furnished free of charge and is intended for your evaluation. In our opinion the information is, as of the date of the Material Safety Date Sheet, reliable, however, it is your responsibility to determine the suitability of the information for your use. You are advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exit or because of applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information gathered by you; and you must make independent determinations of the suitability and completeness of the information from all sources to assure bother proper use of the material described herein and the safety and health of employees. Accordingly, no guarantee expressed or implied is made by Life Science Group, Inc. as to the result to be obtained upon your use of the information, nor does Life Science Group, Inc. assume any liability arising out of the use of the information.