

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Ultrasonic Cleaner Solution

AM1110

Alpha Resources, Inc.
P.O. Box 199
Stevensville, MI 49127
Phone: 269-465-5559

2. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS NO. | CHEMICAL NAME | PERCENTAGE |
|------------|--|------------|
| 7732-18-5 | Water | 70-90 |
| 6834-92-0 | Sodium Metasilicate | 1-5 |
| 1300-72-7 | Sodium Xylene Sulfonate, solution | 1-10 |
| 68444-16-6 | Quaternary Ammonium Compound | 1-5 |
| 68603-25-8 | Ethoxylated Propoxylated C 8-10 Alcohols | 1-5 |

3. HAZARD IDENTIFICATION

PHYSICAL APPEARANCE AND ODOR: Green, clean material with mild odor.

WARNING STATEMENT: Good industrial hygiene practices should be used when handling this material.

POTENTIAL HEALTH EFFECTS

EYES: Direct contact causes irritation, redness and possible tearing. Use good ventilation to minimize exposure.

SKIN: Prolonged or repeated contact causes redness and drying of the skin.

INHALATION: Breathing high concentrations of vapors or mists will cause irritation to the respiratory tract.

INGESTION: Will cause irritation to the digestive tract and signs of nervous system depression.

CHRONIC EFFECTS: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probably or suspected human carcinogens.

4. FIRST AID MEASURES

EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention.

INHALATION: If respiratory irritation or distress occurs, move victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

SKIN: Wash thoroughly with water. If irritation or redness develops, seek medical attention.

INGESTION: Seek immediate medical attention. Do not induce vomiting.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Non-flammable

Flash Point: Not available

Flammable Limits: (% by Volume in Air): Lower: None Upper: None

AUTO-IGNITION TEMPERATURE: N/A

HAZARDOUS COMBUSTION PRODUCTS: (UNDER FIRE CONDITIONS) Oxides of nitrogen and carbon.

EXTINGUISHING MEDIA: Extinguish with dry chemical, Carbon Dioxide or a BC/ABC extinguisher.

SPECIAL FIREFIGHTING INSTRUCTIONS: None.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product will burn under fire conditions. Closed containers may explode due to build up of pressure when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

SMALL/LARGE SPILL: Biodegradable product. Mop up spill and dispose of by dilution to a sanitary sewer system as permitted by local, state and federal regulations.

ENVIRONMENTAL AND REGULATORY REPORTING: Not required.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin, eyes or clothing.

MINIMUM/MAXIMUM STORAGE TEMPERATURE: 39 – 100 F, protect from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL: These recommendations provide general guidance for handling of this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. When developing safe handling procedures, do not overlook the need to clean and dispose of the material. Waste resulting from the use of this product should be handled in accordance with Section 13: DISPOSAL CONSIDERATIONS.

EXPOSURE GUIDELINES: Exposure limits are recommended worker breathing limits. The following limits apply to this material:

| INGREDIENTS | LIMITS |
|---|------------------|
| Water | None established |
| Quaternary Ammonium Compound | 400 ppm OSHA/TWA |
| Sodium Metasilicate | None established |
| Ethoxylated Propoxylated C 8-10 Alcohol | None established |
| Sodium Xylene Sulfonate, solution | None established |

ENGINEERING CONTROLS: Normal room ventilation.

RESPIRATORY PROTECTION: For reasonable uses of this material, respiratory protection should not be necessary.

SKIN AND HAND PROTECTION: Rubber or plastic gloves to avoid drying and irritation to the skin.

EYE AND FACE PROTECTION: Safety glasses to protect from splashing.

WORK PRACTICE CONTROL: Normal hygiene in the work area should be taken when working with or handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: clear green liquid

BOILING POINT: 212F

FREEZE-MELT POINT: 30 F

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SOLUBILITY IN WATER: Soluble.

SPECIFIC GRAVITY: 1.05

pH: 12.4 as concentrate, 11.9 at 20% volume

ODOR: mild odor

PERCENT VOLATILES: Approx. 85% by volume

VOC (calculated): Less than 5.0 g/L

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY: Heat and open flame should be avoided. Strong acids, strong oxidizing agents, aluminum magnesium, zinc.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and ammonia vapor.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE EYE IRRITATION: Irritating to eyes.

ACUTE SKIN IRRITATION: No test data found for product.

ACUTE DERMAL TOXICITY: No test data found for product.

ACUTE RESPIRATORY IRRITATION: No test data found for product.

ACUTE INHALATION TOXICITY: No test data found for product.

ACUTE ORAL TOXICITY:

LD50 (rat) = 800 mg/kg for Sodium Metasilicate

LD50 (rat) = 2400 mg/kg for Ethoxylated Propoxylated C8-10 Alcohol

LD50 (rat) = Unknown for Quaternary Ammonium Compound

LD50 (rat) = Unknown for Sodium Xylene Sulfonate solution

CHRONIC TOXICITY: This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be a probable or suspected human carcinogen. No additional test data was found for this product.

12. ECOLOGICAL INFORMATION

None available.

13. DISPOSAL CONSIDERATION

This product is biodegradable and can be disposed in sanitary sewer system where permitted by federal, state and local regulations.

14. TRANSPORTATION INFORMATION

USA DOT: Not regulated

15. REGULATORY INFORMATION

Inventory issues: All components are listed on the US TSCA, Canadian DSL and European EINECS/ELINS chemical listings.

16. OTHER INFORMATION

Hazard Index: (0-4, 4= Extreme)

Health: 1 Fire: 0 Reactivity: 0

SUPPLEMENTAL INFORMATION

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: January 11, 2013

Prepared by: Ken Mantei