MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Alphanal

AR 079, AR079Q, AR 079G

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	%W	CHEMICAL NAMES	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
9036-19-5	<97	Octyphenoxypolyethoxyethanol	Not Estab.	Not Estab.
25322-68-3	<3	Polyethylene Glycol	10	Not Estab.

3. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS
EYES: Causes severe irritation, experienced as discomfort or pain, excess blinking and tear production, marked excess redness and swelling of the conjuctiva, and chemical burns of the cornea. Iritis may occur.
SKIN: Brief contact is not irritating. Prolonged or repeated contact may cause discomfort and local redness.
INHALATION: Mist may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, with chest pain and coughing.
INGESTION: Moderately toxic. May cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.
CHRONIC OVEREXPOSURE: None known.
MEDICAL CONDITIONS AGGRAVATED: None known.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water and continue washing for at least 15 minutes. DO NOT remove contact lenses, if worn. Obtain medical attention without delay, preferably from an ophthalmologist. Flush with large amounts of water. Get medical attention if irritation persists.
INHALATION: If any symptoms develop, remove to fresh air.
SKIN: Remove contaminated clothing. Wash skin with soap and water. Obtain medical attention if irritation persists. Wash clothing before reuse.
INGESTION: If patient is fully conscious, give two glasses of water. DO NOT INDUCE VOMITING. Obtain medical attention. .

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
Non-flammable

Flash Point: 485 F (251 C) Method Used: Pensky-Martens Closed Cup ASTM D93
Flash Point: 555 F (290 C) Method Used: Cleveland Open Cut ASTM D92
Flammable Limits: (% by Volume in Air): Lower: N/A Upper: N/A

AUTO-IGNITION TERMERATURE: N/A
HAZARDOUS COMBUSTION PRODUCTS: Burning can produce the following products: Carbon monoxide and/or Carbon dioxide. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. .
EXTINGUISHING MEDIA: Extinguish fires with water spray or apply alcohol-type or all purpose type foam by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires.
FIREFIGHTING INSTRUCTIONS: Use self contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEARURES

SMALL/LARGE SPILL: Contain spills immediately with inert materials. Transfer liquids and solid diking material to suitable containers for recovery or disposal . To avoid gelling and foaming problems, do not use water to flush away spills. Avoid discharge to natural waters.

7. HANDLING AND STORAGE

HANDLING: Do not get in eyes. Do not swallow. Avoid contact with skin and clothing. Do not handle or empty in presence of flammable vapor. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

STORAGE: Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Adequate local exhaust ventilation.

PROCESS HAZARD
Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of hot air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published "auto-ignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this produce in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe and conditions. Further information is available in a technical bulletin entitled "Ignition Hazards of Organic Chemical Vapors."

RESPIRATORY PROTECTION: None expected to be needed. However, where misting may occur, wear a MSHA/NIOAH approved half mask air purifying respirator.
SKIN AND HAND PROTECTION: Polyvinyl chloride coated. .
EYE AND FACE PROTECTION: Chemical goggles.
OTHER PROTECTIVE EQUIPMENT: Provide a safety shower equipped with an eyewash fountain in the immediate vicinity of any potential exposure. Due to its high melting point, the handing of molten benzoic acid can result in thermal burns. The use of full protective clothing, including face shield, goggles, helmet, jacket, pants and boots is highly recommended

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: liquid, transparent pale yellow

BOILING POINT: >200 C
FREEZE-MELT POINT: 252 F (122 C)
VAPOR PRESSURE: N/A
VAPOR DENSITY: 1
SOLUBILITY IN WATER: soluble
SPECIFIC GRAVITY: 1.32 at 75 F (solid) or 1.06 at 302 F (molten)
pH: 9.7
ODOR: mild
PERCENT VOLATILES: 0.0065
EVAORATION RATE: 0.01

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.
INCOMPATIBILITY: Normally unreactive; however, avoid strong bases at high temperatures, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds. .
HAZARDOUS DECOMPOSITION PRODUCTS: None. .
HAZARDOUS POLYMERIZATION: None.

11. TOXICOLOGICAL INFORMATION

In studies with rabbit sustained occluded skin contact of the undiluted surfactant can cause inflammatory changes in the lung.

Developmental effects including extra ribs and other skeletal variations were observed in the fetuses of rats treated with maternally toxic levels of a 9-mole ethoxylate or octylphenol, or a 4-mole or 9-mole exyolylate or nonylphenol. The significance of these findings to humans is unclaear as several human studies did not show any association of congenital effects in children and material exposure to spermicides containing octyl or noylphenol ethoxylates.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

Bod (% Oxygen Consumption)	5 day	10 day	15 day	20 day	30 day
	20%	40%	n/	51%	n/a

EXOTOXICITY:

Toxicity to micro-organisms: Bacterial Inhibition; IC50 Result Value: 5,0000 mg/L
Toxicity to Aquatic Invertebrates: Daphinia; 48h; LC50 Result Value: 26 mg/L
Toxicity of fish: Fathead Minnow; 96 h; LC50 Result Value: 8.9 mg/L
Theoretical Oxygen Demand (THOD) – measured: 2.18 mg/mg

13. DISPOSAL CONSIDERATION

Dispose of in accordance with federal, state and local regulations. Empty containers should be recycled or disposed of through an approved waste management facility. FOR DISPOSAL OF AQUEOUS SURFACTANT SOLUTIONS: Aerobic biological wastewater treatment systems are effective in treating aqueous solutions or surfactants. Removal efficiency will depend upon treatment plant conditions. As with any wastewater, consultation with local treatment plant staff is recommended (and may be required by law) before disposal. In typical activated sludge treatment systems, inlet concentrations below 5 mg/: have been treated without foaming problems. – FOR

DISPOSAL OF NEAT, UNUSED SURFACTANT: Incinerate in a furnace where permitted under Federal, State and local regulations.

14. TRANSPORTATION INFORMATION

USA DOT: Not regulated

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS
TSCA STATUS: On toxic Substance Control Inventory

CERCLA Reportable Quantity:	Glycol Ether	No CAS	<=2.0000%
	1,4-Dioxane	000123-91-1	<=0.0055%
	Ethylene Oxide	000075-21-8	<=0.0010%

RCRA Status: Not regulated
SARA TITLE III:
Section 302 Extremely Hazardous Substances: None
Section 311/312 Hazardous Categories: Delayed Hazard, Immediate Health Hazard
Section 313 Toxic Chemicals: Glycol Ether No CAS <=2.0000%
CEPA/DSL STATUS: The components of this product are on the Domestic Substances List.
PENNSYLVANIA RTK: Glycol Ether
MASSACHUSETTS RTK: 1,4-Dioxane and Ethylene Oxide
CAL PROP 65: 1,4-Dioxane and Ethylene Oxide

CANADAIN REGULATIONS
WHMIS: D2A

16. OTHER INFORMATION

Hazard Index: (0-4, 4= Extreme)
Health: 3 Fire: 1 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