Alpha Resources Inc.

Safety Data Sheet (SDS)

Revision Date: April 30, 2015

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

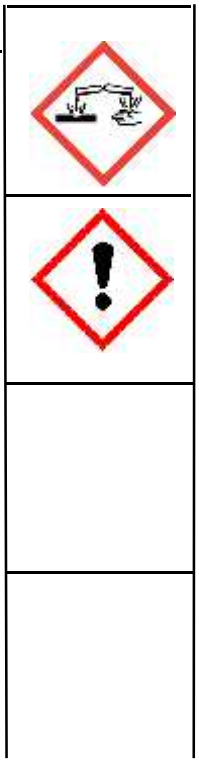
Coolant

AR5933, AM1106, AM1107, AM1108, AM1109
This product is intended for laboratory use.

Alpha Resources Inc. 3090 Johnson Rd. Stevensville, MI 49127 (269)465-5559

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word: DANGER



SECTION 2— HAZARDS IDENTIFICATION

Hazard Class: Corrosive to metals (category 1), acute toxicity, oral (category 5), skin corrosion/irritation (category 1A,1B,1C), and specific target organ toxicity, single exposure, respiratory tract irritation (category 3).

Hazard Statements: May be corrosive to metals (H290), may be harmful if swallowed (H303), causes severe skin burns and eye damage (H314), and may cause respiratory irritation (H335).

Precautionary Statements: Keep only in original container (P234), don't breathe dust/fume/gas/mist/vapors/spray (P260), avoid breathing dust/fumes/gas/mist/vapors/spray (P261), wash thoroughly after handling (P264), use only outdoors or in a well-ventilated area (P271), wear protective gloves/protective clothing/eye protection/face protection (P280), store locked up (P405), and dispose of contents/container according to international regulations (P501).

First-aid Statement: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. (P304+P340+P312), IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331), IF ON SKIN (or hair): remove/take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353), and wash contaminated clothing before reuse (P363).

SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

Hazardous substance required for disclosure.

Component	CAS #	Common %
Triethanol Amine	102-71-6	<25
Ethanolamine	141-43-5	<15
Dicarboxylic acid mixture	72162-23-3	<10
Sebacic acid	111-20-6	<10

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provision of paragraph (i).

SECTION 4— FIRST AID MEASURES

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). Seek medical attention
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).
If on skin: Wash with plenty of soap and water. (P302+P352). If persists seek medical attention and bring label.
If swallowed: Wash out mouth with water if the person is able to do so. DO NOT induce vomiting. Call a doctor or poison center.

SECTION 5 — FIRE FIGHTING MEASURES

Appropriate Extinguishing Media: Use media appropriate for surroundings.
Inappropriate Extinguishing Media: N/A
Specific Hazards Arising from Chemical: May produce irritating, corrosive and/or toxic gases.
Fire Fighting Instructions: Evacuate area. Firefighters should use standard protective equipment including self-contained breathing apparatus. Don't breathe in fumes. Evacuate area.
Flash Point: N/A **Auto-ignition temperature**: N/A

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use suitable personal protective equipment when cleaning up any spills. Don't breathe in mist or vapors. Be sure that adequate ventilation is set up.
Clean-up Method: Absorb with sand, earth or other non-combustible material. Collect the material and dispose of according to local, regional, state, and federal regulations. Using damp cloth wipe up spill area. Avoid discharge into water ways or drains.

SECTION 7 — HANDLING AND STORAGE

Handling: Avoid any contact with bare skin, clothing, and eyes. Wash all areas after handling material. Proper ventilation is required when using this product. Don't breathe in dust/fume/gas/mist/vapor/spray. Avoid prolonged exposure. Keep away from open flames, hot surfaces and sources of ignition.

Storage: This product should be stored in a cool, dry place and kept sealed (P233) when not in use. Don't add sodium nitrite or other nitrosating agents to the mixture to avoid forming nitrosamines.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limit Values:

US. ACGIH Threshold limit values

Ethanolamine (CAS#141-43-5) STEL-6ppm TWA-3ppm
Triethanol Amine (CAS#102-71-6) TWA-5mg/m^3

US. OSHA Table Z-1 Limits for Air Contaminants

Ethanolamine (CAS#141-43-5) PEL-6mg/m^3 3ppm

Engineering Controls: Proper ventilation must be available to be certain exposure limits are not exceeded.

Personal Protection: Wear a NIOSH applicable certified respirator to limit exposure to materials.

Hand Protection: Glove suitability will differ depending on the end use of product.

Eye protection: Safety glasses with side shields are necessary if splashing is possible. Eye wash station should be in close proximity to work area. Safety shower should also be nearby.

Skin and Body Protection: Chemical and oil resistant clothing are recommended for extended periods of contact.

Hygiene: Wash hands and areas of possible exposure after handling material especially before eating, drinking, and smoking. The work clothing should also be washed regularly to remove any contaminants. Dispose of contaminated clothing that can't be deemed safe.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health, and environmental considerations only and may not represent the products specifications. Contact supplier for additional information.

Appearance: Clear liquid	Odorless	Specific Gravity: N/A
Melting Point: N/A	Relative Density: N/A	Vapor Density: N/A
Vapor pressure: N/A	Solubility: 100%	Boiling Point: N/A
Flash point: N/A	Auto-Ignition Temperature: N/A	
Explosive limits, LEL (vol.%): N/A	Explosive limits, UEL (vol.%): N/A	

SECTION 10 — STABILITY AND REACTIVITY

Stability: Stable material at normal laboratory conditions.

Avoid: Keep away from incompatible materials.

Incompatible: strong acids and strong oxidizing agents

Hazardous Decomposition: Carbon oxides, Nitrogen oxides

Hazardous Polymerization: None

SECTION 11 — TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological data:

Ethanolamine (CAS#141-43-5)

Acute: Dermal LD50 Rabbit: >20000mg/kg	Oral LD50 Guinea pig: 5300mg/kg
Oral LD50 guinea pig: 5300mg/kg	Oral LD50 Rat: 8g/kg
Other LD50 mouse: 50mg/kg	Other LD50 Rat: 67mg/kg

Triethanol Amine (CAS#102-71-6)

Acute: Dermal LD50 Rabbit: 1025mg/kg	Oral LD50 Guinea pig: 620mg/kg
Oral LD50 Rat: 10.2g/kg	Other LD50 mouse: 1450mg/kg

Acute toxicity: irritating to respiratory system, eyes, and skin.

Skin corrosion/irritation: may be irritating to the skin

Carcinogenicity: Triethanol amine 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

SECTION 12 — ECOLOGICAL INFORMATION

Eco-toxicity Data:

Ethanolamine (141-43-5): Fish LC50 Rainbow trout (Oncorhynchus mykiss) 114-196 mg/l (96hr)

Triethanol Amine (102-71-6): Crustacea EC50 water flea (ceriodaphnia dubia) 565.2-658.3 mg/l (48hr)

Fish LC50 fathead minnow (Pimephales promelas) 10610-13010 mg/l (96hr)

Mobility in Soil: No data

Bio-accumulative Potential: Ethanolamine Octanol/water partition coefficient log Kow -1.31
Triethanol amine Octanol/water partition coefficient log Kow -1

Persistence and Degradability: No data

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste disposal should be done in compliance with existing federal, state and local environmental regulations. Do not contaminate any streams, lakes, or ponds.

SECTION 14 — TRANSPORT INFORMATION

DOT Not regulated as a dangerous good.

IATA

UN# UN1760 Proper shipping name: Corrosive liquid, n.o.s. (contains ethanolamines)

Class: 8 Packing Group: III ERG Code: 8L Environmental hazard: No

IMDG

UN# UN1760 Proper shipping name: CORROSIVE LIQUID, N.O.S. (contains ethanolamines)

Class: 8 Packing Group: III EmS: F-A, S-B Marine Pollutant: No

SECTION 15 — REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Section 313 (40 CFR 372.65): Not regulated.

OSHA Process Safety (29 CFR 1910.119): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH: No

CHRONIC HEALTH: No

FIRE: No

REACTIVE: No

PRESSURE: No

State Regulations: California Proposition 65: Not listed.

US Massachusetts Right to Know: Ethanolamine (CAS#141-43-5) Triethanol Amine (CAS#102-71-6)

US Pennsylvania Right to Know: Ethanolamine (CAS#141-43-5) Triethanol Amine (CAS#102-71-6)

US New Jersey Right to Know: Ethanolamine (CAS#141-43-5) Triethanol Amine (CAS#102-71-6)

U.S. TSCA Inventory: Listed

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations: WHMIS Information is not provided for this material

SECTION 16 — OTHER INFORMATION

The data and information as stated was furnished by the manufacturer/vendor/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.