Alpha Resources Inc.

Safety Data Sheet (SDS)

Revision Date: April 9, 2015

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

HT/LT Catalyst (High/Low temperature catalyst)

AR140011, AR140014

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: WARNING

SECTION 2— HAZARDS IDENTIFICATION

Hazard Category: Acute toxicity, oral (Category 4), acute aquatic toxicity (Category 1), and chronic aquatic toxicity (Category 1).

Hazard Statements: Harmful if swallowed (H302), very toxic to aquatic life (H401), and very toxic to aquatic life with long last effects (H410).

Precautionary statements: Avoid release to the environment (P273) and dispose of contents/container to an approved waste disposal plant (P501).

Classification according to EU Directives 67/548/EEC or 1999/45/EC:

Xn, N Harmful, Dangerous for the environment R22, R50/R53





SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

Hazardous substance required for disclosure.

Component	CAS#	Common %
CuO	1317-38-0	<90
Cr2O3	1308-38-9	<90
Al ₂ O ₃	N/A	<90

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). If not breathing give artificial respiration. Get 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 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. Call a doctor or poison center.

SECTION 5 — FIRE FIGHTING MEASURES

Non-flammable

Appropriate Extinguishing Media: Use regular dry chemical, alcohol resistant, or water spray.

Special hazard arising from substance or mixture: Copper Oxides

Fire Fighting Instructions: Not flammable or explosive. Wear protective clothing and if necessary use a self-

contained breathing apparatus.

Flash Point: none Auto-ignition temperature: none

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use suitable personal protective equipment when cleaning up any spills. Avoid dust creation. If vapors, mist or gas is present avoid inhalation.

Environmental Precautions: Prevent any further leaks or spills in safe situation. Don't let this material enter sewers or water ways. Release into environment must be avoided at all costs.

Clean-up Method: Collect the material and dispose of according to local, regional, state, and federal regulations. Using damp cloth wipe up spill area. Avoid dust generation. Keep spill contained in closed vessel until disposal.

SECTION 7 — HANDLING AND STORAGE

Handling: Proper ventilation is required when using this product. Keep dust formation and inhalation to a minimum. Avoid contact with eyes and skin.

Storage: This product should be stored in a cool, dry well-ventilated place, and kept sealed when not in use.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limit Values: N/A

Engineering Controls: Proper ventilation must be available to be certain exposure limits are not exceeded. Good hygiene and safe laboratory practices should be used when handling these materials. Wash hands before breaks and at end of day.

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.

Environment Exposure: Avoid any release that could enter drains or water ways.

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: green granules (LT) brown granules (HT) Odorless

Melting Point: N/A Vapor pressure: N/A

Explosive limits, LEL (vol.%): N/A

Relative Density: N/A Solubility: Insoluble in water Explosive limits, UEL (vol.%): N/A Specific Gravity: N/A Vapor Density: N/A Boiling Point: N/A Evaporation rate: N/A

<u>SECTION 10 — STABILITY AND REACTIVITY</u>

Stable material at normal laboratory conditions.

Avoid: Keep away from incompatible materials.

Incompatible: Reducing agents, Hydrogen Sulfide gas, Aluminum, Alkali metals, and powdered metals.

Hazardous Decomposition: None

Hazardous Polymerization: None

SECTION 11 — TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: LD50 Oral, Rat; 10mg/kg Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: Carcinogenicity-Hamster-Intratracheal

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Sense Organs and Special Senses (nose, eye, ear, and taste):

Olfaction: Tumors. Lungs, Thorax, or Respiration: Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confined human carcinogen by IARC

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

Ingestion or inhalation of bulk amounts could result in a feverish reaction and leukocytosis, diarrhea.

SECTION 12 — ECOLOGICAL INFORMATION

Eco-toxicity Data:

Toxicity to fish: LC50, Oncorhynchus mykiss (rainbow trout); 25.4mg/l (96hr) Toxicity to daphnia and other aquatic invertebrates: EC50, Daphnia magna (water flea); 0.011-0.039mg/l (48hrs)

Mobility in Soil: No data

Bio-accumulative Potential: No data

Persistence and Degradability: Not applicable for inorganic substances. **Other adverse effects**: Very toxic to aquatic life with long lasting effects.

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.

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SECTION 14 — TRANSPORT INFORMATION

ADR/RID UN#3077 Class:9 Packing group:III Environmental hazard: yes

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S (Copper oxide)

IMDG UN#3077 Class:9 Packing group:III Marine pollutant: yes

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S (Copper oxide)

IATA UN#3077 Class:9 Packing group:III Environmental hazard: yes

UN proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Copper oxide)

Further Information: EHS-Mark required for single packagings and combination packagings containing inner packagings with Dangers Goods >5L for liquids >5kg for solids.

SECTION 15 — REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation specific for the substance or mixture: No data

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.