Safety Data Sheet (SDS)

Revision Date: April 21, 2015

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Hopkalite

AR9842, AR911H

This product is intended for laboratory use.

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CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word: WARNING

SECTION 2— HAZARDS IDENTIFICATION

Hazard Categories: Acute toxicity (category 4), skin corrosion/irritation: skin irritant (category 2), and serious eye damage/eye irritation (category 2).

Hazard Statements: Harmful if swallowed, harmful if inhaled, causes serious eye irritation, and causes skin irritation.

Precautionary Statements: Avoid breathing dust/fume/gas/mist/vapors/spray, wear protective gloves/protective clothing/ eye protection/ face protection, call a poison center/doctor if you feel unwell, if eye irritation persists: get medical advice/attention.

SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

Hazardous substance required for disclosure.

Component	CAS #	Common %
Manganese Dioxide	1313-13-9	<90
Copper Oxide	1317-38-0	<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). 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 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

Appropriate Extinguishing Media: Use regular dry chemical or water spray.Inappropriate Extinguishing Media: N/ASpecific Hazards Arising from Chemical: Keep away from heat.Fire Fighting Instructions: Evacuate area. Firefighters should use standard protective equipment including self-
contained breathing apparatus. Water spray can be a good way to cool fire exposed surfaces and protect
personnel.Flash Point: N/AAuto-ignition temperature: N/A

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use suitable personal protective equipment when cleaning up any spills. Provide adequate ventilation. If dust formation occurs, use appropriate respiratory protection.

Environmental Precautions: Do not allow to be released into drains or water ways.

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.

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. Avoid allowing container to leak into water ways. Keep away from heat/sparks/flames/hot surfaces and no smoking. Avoid static discharge by all means necessary.

Storage: This product should be stored in a cool, dry place and kept sealed (P233) when not in use. Avoid sources of ignition.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limit Values:

Cupric Oxide (CAS#1317-38-0) OSHA (PEL); 0.1mg/m^3ACGIH (TLV); 0.2mg/m^3Manganese Dioxide (CAS# 1313-13-9) OSHA (PEL); 5mg/m^3ACGIH (TLV); 5mg/m^3

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

Respiratory 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.

Environmental: Don't release this material into water ways or drains. If this material is released, contact the proper authorities.

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: Greyish/black granules Melting Point: N/A Vapor pressure: N/A Flash point: N/A Explosive limits, LEL (vol.%): N/A Odorless

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

SECTION 10 — STABILITY AND REACTIVITY

Stable material at normal laboratory conditions.

Avoid: Keep away from incompatible materials and moisture.

Incompatible: Violent reaction with alcohols, amines, and solvents. Reacts explosively with Potassium chlorate and Peroxides.

Hazardous Decomposition: None Hazardous Polymerization: None

SECTION 11 — TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: no data available 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 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 Potential health effects Inhalation May be harmful if inhaled. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: no data available

SECTION 12 — ECOLOGICAL INFORMATION

Eco-toxicity Data: No data **Mobility in Soil**: No data

Bio-accumulative Potential: No data

Persistence and Degradability: No data

DO NOT empty into drains or aquatic environments.

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

Not regulated for land/air/sea transport by DOT/TDG/IMDG/IATA

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: Yes CHRONIC HEALTH: No FIRE: No **REACTIVE: No** PRESSURE: No State Regulations: California Proposition 65: Not listed. 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.