

Material Safety Data Sheet

SECTION I

PRODUCT NAME OR NUMBER (AS IT APPEARS ON LABEL):

AR 9842
Hopkalite Catalyst

MANUFACTURER: Alpha Resources, Inc. TELEPHONE: 616-465-5559
P.O. Box 199
Stevensville, MI 49127

MANUFACTURER'S DUNNS NO. 08 383 8045

HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD
CLASSES, HAZARD ID NO:

Manganese dioxide and copper oxide mixture, oxidizer

CHEMICAL FAMILY: n/a

FORMULA: MnO₂ - CuO

SECTION II - INGREDIENTS (LIST ALL INGREDIENTS)

CAS REGISTRY NO.	Wt. %	CHEMICAL NAMES	LISTED AS A CARCINOGEN IN NTP, IARC OR OSHA 1910(Z) SPECIFY
1313-13-9	> 10 %	Manganese dioxide	no
1317-38-0	> 10 %	Copper Oxide	no

SECTION III - PHYSICAL DATA

Boiling point: n/a SPECIFIC GRAVITY = n/a
(WATER = 1)

% Volatile by volume: n/a

Vapor pressure: n/a

Percent solid(s) by weight % = 100

Vapor density (air = 1): n/a

Evaporation rate: n/a

Solubility in water: n/a pH n/a

Melting point: n/a

Material is: Powder

Appearance and odor: Dark brown to black granules, odorless

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash point: Hopkalite catalyst is a non-flammable oxidizing agent; it reacts exothermally and may ignite certain organics

Flammable limits: LEL: n/a UEL: n/a

Extinguishing media: use extinguishers appropriate to other materials involved.

Special fire fighting procedures: Wear pressure demand self-contained breathing apparatus with full-face piece and full protective clothing. Disperse hopkalite catalyst and soak with water to prevent re-ignition.

Unusual fire and explosion hazards: n/a

SECTION V HEALTH HAZARD DATA

Threshold Limit Value: OSHA Standard - 5 mg/m³ (ceiling) manganese; 1 mg/m³ copper dusts and mists.

Permissible exposure limit: ACGIH TLV-TWA - 5 mg/m³ (ceiling) manganese, as Mn dust and compounds; 1 mg/m³ copper dusts and mists as Cu

Other limit: n/a

Effects of overexposure: Repeated inhalation for a period of a few months or longer may be harmful and may cause lung irritation or serious central nervous system disorders.

Signs and symptoms of overexposure: The symptoms of manganese poisoning are headache, weakness, sleeplessness, personality changes, hearing and vision problems, mental confusion. In the advanced stages, the symptoms are similar to those of Parkinson's. Copper oxide may cause lung irritation.

Primary routes of entry: Ingestion

Target organs: Central nervous system, lungs

Medical conditions generally recognized as being aggravated by exposure: no information

Emergency and first aid procedures: Move personnel to fresh air. Call a physician.

SECTION VI REACTIVITY DATA

Stability: Deactivated by water or moisture in the air

Incompatibility: (material to avoid) Flammable gases, organic solvents, organics with easily oxidized functional groups, temperatures above 1000 degrees F.

Hazardous decomposition products: n/a

Hazardous polymerizations: n/a

SECTION VII SPILL OR LEAK PROCEDURE

Steps to be taken in case material is released or spilled: Scoop into metal container. Cover loosely. Remove to chemical disposal area. Deactivate by soaking with water. Flush spill area with water.

Waste disposal:

Comply with state, federal, and local regulations. Landfill.

Reportable quantities in lbs.:

CERCLA n/a SARA n/a OTHER n/a

RCRA hazardous waste number(s): n/a

Volatile organic compounds (VOC) (as packaged minus water).

Theoretical (lbs/gal): n/a Analytical (lbs/gal): n/a

SECTION VIII SPECIAL PROTECTION

Eye protection: Wear chemical protective goggles, NIOSH/MSHA approved filter-type respirator, rubber gloves, coveralls.

Skin protection: Wear protective gear

Respiratory protection: Use with adequate ventilation. Avoid breathing dust. Remove dust fines from air or wear recommended respirator.

Ventilation Local Exhaust:

Special: Keep away from organic solvents and organics containing easily oxidized functional groups. Keep container closed; moisture will reduce the catalytic activity.

Requirements Mechanical (General) (Specify rate): Provide general and local ventilation. Exclude organic vapors from work area.

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing and/or other precautions:

Store in a dry place away from incompatible materials

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.

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