

Copper (I) Oxide

MSDS# 90236

Section 1 - Chemical Product and Company Identification

MSDS Name:

Copper (I) Oxide

Catalog Numbers:

C/8840/50, C/8840/53

Synonyms:

Cuprous Oxide; Dicopper Monoxide; Red Copper Oxide; Yellow Cuprocide.

Company Identification: Fisher Scientific UK

Bishop Meadow Road, Loughborough

Leics. LE11 5RG

For information in Europe, call: (01509) 231166

Emergency Number, Europe:

01509 231166

Section 2 - Composition, Information on Ingredients

CAS#: 1317-39-1

Chemical Name: Copper(+1) oxide

%: 100 %

EINECS#: 215-270-7

Hazard Symbols:

XN N

Risk Phrases:

22 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:

Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation. May be harmful if inhaled.

Chronic:

May cause reproductive and fetal effects.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical

aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in

the

Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage:

Store in a cool, dry place. Keep container closed when not in use. Storage under a nitrogen blanket has been recommended. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

CAS# 1317-39-1:

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29

CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Color: bright red
Odor: None reported.
pH: Not available
Vapor Pressure: Not available
Viscosity: Not available
Boiling Point: 1800.0 C (decomposes)
Freezing/Melting Point: 1232 deg C (2,249.60°F)
Autoignition Temperature: Not applicable
Flash Point: Not applicable.
Explosion Limits: Lower:Not available
Explosion Limits: Upper:Not available
Decomposition Temperature: Not available
Solubility in water: Insoluble in water.
Specific Gravity/Density: 6.0
Molecular Formula: Cu2O
Molecular Weight: 143.0914

Section 10 - Stability and Reactivity

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, moisture, exposure to air.
Incompatibilities with Other Materials
Not available
Hazardous Decomposition Products
Irritating and toxic fumes and gases, oxides of copper.
Hazardous Polymerization
Has not been reported.

Section 11 - Toxicological Information

RTECS#:
CAS# 1317-39-1: GL8050000
LD50/LC50:
RTECS: CAS# 1317-39-1: Oral, rat: LD50 = 470 mg/kg;.
Carcinogenicity:
Copper(+1) oxide -
Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:
See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other:
Do not empty into drains.

Section 13 - Disposal Considerations

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location.
Contact a specialist disposal company or the local authority or advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information

IATA

Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
Hazard Class: 9
UN Number: 3077
Packing Group: III

IMO
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
Hazard Class: 9
UN Number: 3077
Packing Group: III

RID/ADR
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S.
Hazard Class: 9
UN Number: 3077
Packing Group: III

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.
R 50/53 Very toxic to aquatic organisms, may cause
long-term adverse effects in the aquatic environment.

Safety Phrases:

S 22 Do not breathe dust.
S 60 This material and its container must be
disposed of as hazardous waste.

WGK (Water Danger/Protection)

CAS# 1317-39-1: Not available

Canada

CAS# 1317-39-1 is listed on Canada's DSL List

US Federal

TSCA

CAS# 1317-39-1 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:

7/06/1998

Revision #4 Date

5/16/2007

Revisions were made in Sections:

2, 3, 12, 14

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