

1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description MERCURY-202 METAL (202Hg)

Cambridge Isotope Laboratories, Inc. 50 Frontage Rd ANDOVER, MA 01810 USA

E-mail cilsales@isotope.com Web Site www.isotope.com

Phone Numbers

Emergency Contact Chemtrec

Emergency Phone 1-800-424-9300 (24 hours)

Customer Service

Phone

1-800-322-1174 (8:30-5:30 EST)

Transportation 1-202-483-7616 (24 hours)

2 HAZARDS IDENTIFICATION

OSHA Hazards

Target Organ Effect, Highly toxic by inhalation, Respiratory sensitizer Reproductive hazard

Target Organs

Kidney

GHS Classification

Acute toxicity, Inhalation (Category 1) Respiratory sensitization (Category 1)

Reproductive toxicity (Category 1A)

Specific Target Organ Toxicity - Repeated exposure (Category 1)

Hazardous to the aquatic environment, Chronic hazard (Category 1)

GHS Label Information

Signal Word Danger

Hazards Identification

Health hazard

Skull & crossbones

Environment

Page 2 of 8





Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810

MATERIAL SAFETY DATA SHEET

Hazard Statement(s)

Fatal if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

Obtain special instructions before use.

Do not breathe dust/fume/gas/mist/vapours/spray.

Avoid release to the environment.

Wear respiratory protection.

Immediately call POISON CENTER or doctor/physician.

Dispose of contents/container to an approved waste disposal plant.

HMIS Ratings

Chronic Health 0 Physical Flammability 0 Health

NFPA Codes

0 Fire Health 4 Reactivity 0

Potential Health Effects

Eyes May cause eye irritation. Ingestion May be harmful if swallowed.

Inhalation May be fatal if inhaled. May cause respiratory tract irritation.

May be harmful if absorbed through skin. May cause skin irritation. May be fatal if absorbed Skin

through skin.

COMPOSITION / INFORMATION ON INGREDIENTS 3

Composition / Information on Ingredients

Chemical Formula Hg Molecular Weight 201.94 CAS No. 14191-86-7 EC No. 231-106-7 080-001-00-0 Index No.

FIRST AID MEASURES

First Aid Measures



Eyes Flush eye with water for 15 minutes. Get medical attention.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a

physician.

Inhalation If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a

physician.

Skin Wash with soap and plenty of water. Consult a physician.

Additional Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of

Information dangerous area.

5 FIRE FIGHTING MEASURE

Fire Fighting Measures

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Fire Fighting

Equipment

Wear self contained breathing apparatus for fire fighting if necessary.

6 ACCIDENTAL RELEASE MEASURES

Accidental Release Measures

Personal Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate

Precautions ventilation. Evacuate personnel to safe area.

Environmental Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Precautions

cleanup

Methods and materials for containment and

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable,

closed containers for disposal.

7 HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

Conditions for Safe Storage



Storage Store at room temperature away from light and moisture.

8 EXPOSURE CONTROL / PERSONAL PROTECTION

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

CHEMICAL NAME OSHA PEL ACGIH TLV
MERCURY-202 METAL TWA 0.05 mg/M³ 0.02 mg/M³

Personal Protecton

Eyes - Face Wear safety glasses with side shields (or goggles) and a face shield.

Skin Choose body protection according to the amount and concentration of the dangerous substance at

the work place.

Respiratory When appropriate, use NIOSH/CEN approved respirator.

Protective Clothing Wear suitable protective clothing and gloves.

Work Hygienic Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks

Practices and at the end of workday.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form Liquid

pH No data available

Melting Point - 38.87 °C (- 37.97 °F) - lit Boiling Point 356.6 °C (673.9 °F) - lit

Flashpoint Not applicable Lower Explosion No data available

Limit

Upper Explosion No data available

Limit

Vapor Pressure < 0.01 hPa (< 0.01 mmHg) at 20 °C (68 °F)

Vapor Density 6.93 - (Air = 1.0)
Solubility in Water No data available
Auto Ignition No data available

Temperature

10 STABILITY AND REACTIVITY

Stability and Reactivity



Page 5 of 8

MATERIAL SAFETY DATA SHEET

Chemical Stability Stable if stored under recommended conditions.

Conditions to Avoid Not available

Hazardous decomposition products

Formed under fire conditions: Mercury/mercury oxides

Materials to avoid Strong oxidizing agents, Ammonia, Azides, Nitrates, Chlorates, Copper

11 **TOXICOLOGICAL INFORMATION**

Acute Toxicity

Serious No data available

Damage/Eye Irritation

Skin No data available

Corrosion/Irritation

Inhalation No data available

Respiratory or Skin

Sensitization

May cause allergic respiratory reaction.

Germ Cell

Mutagenicity

Not available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity on its

IARC, ACGIH, NTP, or EPA classification.

IARC 3 - Group 3: not classifiable as to its carcinogenicity to humans.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identifiable as a

carcinogen or potential carcinogen by ACGIH.

NTP *** - STATEMENT 942 ***

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive

Toxicity

Known human reproductive toxicant.

Specific Target Organ Toxicity

Single Exposure No data available

Repeated Exposure Inhalation - Causes damage to organs through prolonged or repeated exposure

Other Information

OV4550000 RTECS



ECOLOGICAL INFORMATION 12

Toxicity

Toxicity to Fish

LC50

Labeo rohita - 0.018 mg/l - 96 h

Persistance and

Degradability

Not available

Bioaccumulative

Potential

Bioaccumulation: Carassius auratus (goldfish) - 1,789 d

Bioconcentration factor (BCF): 155,986

Mobility in Soil Not available

PBT and vPvB

Assessment

Not available

Other Adverse

Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

DISPOSAL CONSIDERATIONS 13

Disposal Considerations

Product Disposal Waste materials should be disposed of under conditions which meet Federal, State, and Local

environmental control regulations.

14 TRANSPORT INFORMATION

Transportation Information-DOT/IATA/IMDG

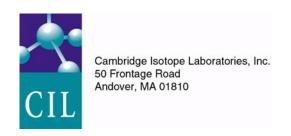
UN Number 2809 Prop. Ship. Name Mercury

Hazard Class 8 Packing Group Ш Reportable Quantity 1 lbs

(RQ) DOT US

Marine Pollutant No Poison Inhalation No

Hazard



15 REGULATORY INFORMATION

Regulatory Information

Target Organ Effect, Highly toxic by inhalation, Respiratory sensitizer Reproductive hazard

SARA

Sara 302 No chemicals in this material are subject to the reporting requirements.

Component

Sara 313 No chemicals in this material are subject to the reporting requirements.

Component

SARA 311/312 Hazards

Acute (Y/N) Y

Chronic (Y/N) Y

STATE REGULATIONS

Massachusetts Yes

Right to Know

Pennsylvania Right Yes

to Know

New Jersey Right Yes

to Know

California WARNING! This product contains a chemical known by the state of California to cause birth

Proposition 65 defects or other reproductive harm.

Canada

DSL Status All components are on the Canadian DSL list.

EU

Hazard Toxic. Dangerous for environment.

Safety Statements

Keep container tightly closed.

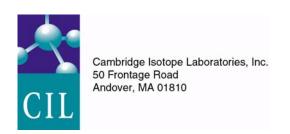
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment. Refer to special instructions/safety data sheet.

Risk Statements

Toxic by inhalation.



Danger of cumulative effects.

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

16 OTHER INFORMATION

Additional MSDS Information

This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Approved On Version Number 04/25/11

2