

DATE: 11/08/05 ACCT: 569284001 PAGE: 1
INDEX: G53113468 CAT NO: 151712 PO NBR: 26345

**** MATERIAL SAFETY DATA SHEET ****

Mercury
14020

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Mercury

Catalog Numbers:

S71967, S71968, M139-1LB, M139-5LB, M140-14LB, M140-1LB, M140-5LB, M141-1LB,
M141-6LB, NC9534278, S40672B, S41542, S41599, S41599B, S41599E, S41599G,
S41599J, S41599K, S41599M, S41600P, S41600S, S41600W, S41630A, S41630B,
S41630C, S41631, S41631A, S41631B, S41631C, S41645, S45245, S46981, S50443,
S71966, S78777

Synonyms:

Colloidal mercury; Hydrargyrum; Metallic mercury; Quick silver;
Liquid silver

Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
7439-97-6	Mercury	ca.100	231-106-7

Hazard Symbols: T N

Risk Phrases: 23 33 50/53

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: silver liquid.

Danger! Harmful if inhaled. Corrosive. This substance has caused
adverse reproductive and fetal effects in animals. May be absorbed
through intact skin. May cause central nervous system effects. May
cause liver and kidney damage. Inhalation of fumes may cause
metal-fume fever. May cause severe respiratory tract irritation with
possible burns. Causes eye and skin irritation and possible burns.
May cause severe digestive tract irritation with possible burns.
Possible sensitizer.

Target Organs: Blood, kidneys, central nervous system, liver, brain.

Potential Health Effects

Eye:

Exposure to mercury or mercury compounds can cause discoloration on
the front surface of the lens, which does not interfere with vision.
Causes eye irritation and possible burns. Contact with mercury or
mercury compounds can cause ulceration of the conjunctiva and
cornea.

Skin:

May be absorbed through the skin in harmful amounts. May cause skin
sensitization, an allergic reaction, which becomes evident upon
re-exposure to this material. Causes skin irritation and possible
burns. May cause skin rash (in milder cases), and cold and clammy
skin with cyanosis or pale color.

Ingestion:

May cause severe and permanent damage to the digestive tract. May
cause perforation of the digestive tract. May cause effects similar
to those for inhalation exposure. May cause systemic effects.

Inhalation:

Causes chemical burns to the respiratory tract. Inhalation of fumes
may cause metal fume fever, which is characterized by flu-like
symptoms with metallic taste, fever, chills, cough, weakness, chest
pain, muscle pain and increased white blood cell count. May cause
central nervous system effects including vertigo, anxiety,
depression, muscle incoordination, and emotional instability.
Aspiration may lead to pulmonary edema. May cause systemic effects.
May cause respiratory sensitization.

Chronic:

May cause liver and kidney damage. May cause reproductive and fetal
effects. Effects may be delayed. Chronic exposure to mercury may
cause permanent central nervous system damage, fatigue, weight loss,
tremors, personality changes. Chronic ingestion may cause
accumulation of mercury in body tissues. Prolonged or repeated
exposure may cause inflammation of the mouth and gums, excessive
salivation, and loosening of the teeth.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Get medical aid immediately. Do NOT allow victim to rub or keep eyes
closed. Extensive irrigation with water is required (at least 30

2,825

DATE: 11/08/05 ACCT: 569284001 PAGE: 2
INDEX: G53113468 CAT NO: 151712 PO NBR: 26345

minutes).

Skin:

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

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4
cupsful of milk or water. Never give anything by mouth to an
unconscious person. Get medical aid immediately. Wash mouth out with
water.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh
air immediately. If breathing is difficult, give oxygen. Do NOT use
mouth-to-mouth resuscitation. If breathing has ceased apply
artificial respiration using oxygen and a suitable mechanical device
such as a bag and a mask.

Notes

to Physician:
The concentration of mercury in whole blood is a reasonable measure
of the body-burden of mercury and thus is used for monitoring
purposes. Treat symptomatically and supportively. Persons with
kidney disease, chronic respiratory disease, liver disease, or skin
disease may be at increased risk from exposure to this substance.

Antidote:

The use of d-Penicillamine as a chelating agent should be determined
by qualified medical personnel. The use of Dimercaprol or BAL
(British Anti-Lewisite) as a chelating agent should be determined by
qualified medical personnel.

**** 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. Water runoff can cause environmental damage. Dike
and collect water used to fight fire. During a fire, irritating and
highly toxic gases may be generated by thermal decomposition or
combustion.

Extinguishing Media:

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

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 0

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated
in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth),
then place in suitable container. Avoid runoff into storm sewers and
ditches which lead to waterways. Clean up spills immediately,
observing precautions in the Protective Equipment section. Provide
ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Remove contaminated clothing and
wash before reuse. Minimize dust generation and accumulation. Keep
container tightly closed. Do not get on skin or in eyes. Do not
ingest or inhale. Use only in a chemical fume hood. Discard
contaminated shoes. Do not breathe vapor.

Storage:

Keep container closed when not in use. Store in a tightly closed
container. Store in a cool, dry, well-ventilated area away from
incompatible substances. Keep away from metals. Store protected from
azides.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Facilities storing or utilizing this material should be equipped
with an eyewash facility and a safety shower. Use only under a
chemical fume hood.

Chemical Name	Exposure Limits		
	ACGIH	NIOSH	OSHA - Final PELs
Mercury	0.025 mg/m3; skin - potential for cutaneous absorption	0.05 mg/m3 TWA (vapor) 10 mg/m3 IDLH	1 mg/10m3 Ceiling (vapor)

2,826

DATE: 11/08/05 ACCT: 569284001 PAGE: 5
INDEX: G53113468 CAT NO: 151712 PO NBR: 26345

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

- R 23 Toxic by inhalation.
- R 33 Danger of cumulative effects.
- R 50/53 Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

- S 1/2 Keep locked up and out of reach of children.
- S 7 Keep container tightly closed.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 60 This material and/or its container must be disposed of as hazardous waste.
- S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

WGK (Water Danger/Protection)

CAS# 7439-97-6: 3

United Kingdom Occupational Exposure Limits

CAS# 7439-97-6: OES-United Kingdom, TWA 0.025 mg/m3 TWA

United Kingdom Maximum Exposure Limits

Canada

CAS# 7439-97-6 is listed on Canada's DSL List.

This product has a WHMIS classification of D2A, E.

CAS# 7439-97-6 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 7439-97-6: OEL-ARAB Republic of Egypt:TWA 0.05 mg/m3
OEL-AUSTRALIA:TWA 0.1 mg/m3;Skin
OEL-BELGIUM:TWA 0.1 mg/m3;Skin
OEL-FINLAND:TWA 0.05 mg/m3
OEL-FRANCE:TWA 0.05 mg/m3;Skin (vapor)
OEL-FRANCE:TWA 0.1 mg/m3;Skin
OEL-HUNGARY:TWA 0.02 mg/m3;STEL 0.04 mg/m3
OEL-POLAND:TWA 0.05 mg/m3
OEL-SWEDEN:TWA 0.05 mg/m3 (vapor)
OEL-SWITZERLAND:TWA 0.005 ppm (0.05 mg/m3);Skin (vapor)
OEL-SWITZERLAND:TWA 0.01 mg/m3;Skin
OEL-TURKEY:TWA 0.1 mg/m3;Skin
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV
OEL-AUSTRALIA:TWA 0.05 mg(Hg)/m3;Skin JANUARY 1993
OEL-BELGIUM:TWA 0.05 mg(Hg)/m3;Skin JANUARY 1993
OEL-CZECHOSLOVAKIA:TWA 0.05 mg(Hg)/m3;STEL 0.15 mg(Hg)/m3
OEL-DENMARK:TWA 0.05 mg(Hg)/m3 JANUARY 1993
OEL-FINLAND:TWA 0.05 mg(Hg)/m3 JANUARY 1993
OEL-FRANCE:TWA 0.05 mg(Hg)/m3 JANUARY 1993
OEL-GERMANY:TWA 0.01 ppm (0.1 mg(Hg)/m3) JANUARY 1993
OEL-HUNGARY:TWA 0.02 mg(Hg)/m3;STEL 0.04 mg(Hg)/m JANUARY 1993
OEL-JAPAN:TWA 0.05 mg(Hg)/m3 JANUARY 1993
OEL-THE NETHERLANDS:TWA 0.05 mg(Hg)/m3;STEL 0.15 mg(Hg)/m3
OEL-THE PHILIPPINES:TWA 0.05 mg(Hg)/m3 JANUARY 1993
OEL-POLAND:TWA 0.01 mg(Hg)/m3 JANUARY 1993
OEL-RUSSIA:TWA 0.05 mg(Hg)

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 6/15/1999 Revision #5 Date: 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if the company has been advised of the possibility of such damages.



**Fisher
Scientific**

**ACROS
ORGANICS**

MSDS

**IMPORTANT SAFETY INFORMATION -- DO NOT DISCARD.
PLEASE ROUTE TO COMPANY SAFETY OFFICER.**

MONROE COUNTY BOARD OF
EDUCATION
103 COLLEGE STREET

MADISON

TN 37354

2,824

**IF NAME AND/OR ADDRESS HAVE CHANGED, CONTACT YOUR
SALES REPRESENTATIVE OR LOCAL BRANCH.**

FOR EACH CHEMICAL, A MSDS SHEET WILL BE SENT ONLY ON THE
FIRST SHIPMENT UNLESS A SUBSTANTIAL REVISION OCCURS.

REQUIRED MATERIAL SAFETY DATA SHEETS (MSDS) NOT INCLUDED IN
THIS MAILING WILL FOLLOW UNDER SEPARATE COVER.

THIS PACKET MAY CONTAIN MSDS FOR PRODUCTS MANUFACTURED BY
OTHERS AND DISTRIBUTED BY FISHER SCIENTIFIC COMPANY OR ACROS
ORGANICS. THESE MSDS WERE PREPARED BY THE MANUFACTURER
AND FISHER/ACROS DISCLAIMS ALL LIABILITY FOR THE CONTENT.

**NEW!!! FISHER SCIENTIFIC AND ACROS ORGANICS MSDS ARE NOW
AVAILABLE ELECTRONICALLY THROUGH CHEMEXPRESS®.
CHEMEXPRESS IS OBTAINABLE ON CD OR DISKETTES; WINDOWS OR
MACINTOSH; SINGLE USER OR NETWORK. FOR PRICING AND
ORDERING INFORMATION, PLEASE CALL 1-800-766-7000.**

FISHER SCIENTIFIC HAS A COMPLETE LINE OF SAFETY PRODUCTS AND INFORMATION FOR THE LABORATORY.
CONTACT YOUR LOCAL FISHER BRANCH FOR FILMS, BROCHURES, CATALOGS AND PRODUCTS.
THE NEW ACROS ORGANICS CATALOG OFFERS ONE OF THE BROADEST LINES OF ORGANIC CHEMICALS
IN THE WORLD. CONTACT YOUR LOCAL FISHER BRANCH TO PLACE AN ORDER, TO RECEIVE A CATALOG
OR TO RECEIVE A FREE SUBSCRIPTION TO THE ACROS ORGANICS ACTA.