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mercury
thermometers
C 19255
C 24798
C 28178
C 27366

Syrvet Inc.
MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet has been prepared to comply with the EC Directive, Canadian WHMIS and OSHA Hazard Communication Regulations.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Syrvet Inc.
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Phone: 515-987-5554
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Production Name: Mercury Thermometer

MSDS#: 99-0094

MSDS Date of Preparation: 04/02/08

SECTION 2: COMPOSITION/ INFORMATION INGREDIENTS

Chemical Name	CAS# / EINECS#	%	EU Classification (67/548/EEC)
Mercury	7439-97-6	Varies	T, N R23, R33, R50/53
Glass	Mixture	Balance	Not Applicable

See Section 16 for further information on EU Classification.

SECTION 3: HAZARDS IDENTIFICATION

Odorless, silvery liquid with a metallic luster contained in a glass thermometer.

Emergency Overview: Contact with mercury liquid may cause eye irritation. Inhalation of mercury vapors may cause poisoning. Thermometers may shatter at high temperatures.

EU Preparation Classification (1999/45/EC): Toxic (T), Dangerous for Environment (N) R23, R33, R50/53

SECTION 4: FIRST AID

Eye Contact: Immediately flush with water for at least 15 minutes, lifting the upper and lower lids. Get prompt medical attention.

Skin Contact: Immediately remove contaminated clothing and wash thoroughly with soap and water. Get medical attention. Launder contaminated clothing before reuse.

Inhalation: Immediately remove victim to fresh air. Give artificial respiration if breathing has stopped. Get immediate medical attention.

Ingestion: Get immediate medical attention by calling a Poison Control Center of hospital emergency department. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to or induce vomiting in a person who is unconscious or convulsing.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Use any media suitable for the surrounding fire.

Special Fire Fighting Procedures: Firefighters should wear approved self-contained breathing apparatus and full protective clothing for all fires involving chemicals.

Unusual Fire And Explosion Hazards: Mercury is not combustible but will vaporize when heated, creating toxic fumes. Thermometers may shatter at high temperatures.

Hazardous Combustion Products: May emit highly toxic mercury vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Wear appropriate protective clothing (see Section 8). Ventilate the area. Collect spilled mercury using a mercury spill kit or suction pump and aspirator bottle. Cover fine droplets with calcium polysulfide or excess sulfur. Thoroughly clean the spill area. Collect into closed container. Prevent from entering sewers or waterways.

SECTION 7: HANDLING AND STORAGE

Work Practices: Avoid eye and skin contact. Avoid breathing vapors. Wash thoroughly after contact. Spilled mercury gives off odorless, toxic vapors. Thoroughly clean up all mercury if thermometer breaks.

Special Precautions: Do not allow glass thermometers to be exposed to extreme heat.

Storage: Store in a cool area. Protect from breakage. Broken containers may be hazardous when empty since they retain mercury residues. Observe all warnings and precautions for the product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
Mercury	0.1 mg/m ³ Ceiling OSHA PEL 0.025 mg/m ³ TWA (skin) ACGIH TLV 0.1 mg/m ³ TWA DFG-MAK
Glass	Not Applicable

Ventilation: No special ventilation is required for normal use.

Respiratory Protection: None needed for normal use. Wear a NIOSH approved respirator with a mercury vapor cartridge or self contained breathing apparatus if exposures exceed the TLV or for spill clean-up.

Gloves: None needed for normal use. Wear latex, PVC or nitrile gloves for spill clean-up.

Eye Protection: None needed for normal use. Wear safety glasses or goggles for spill clean-up.

Other Protective Equipment: None needed for normal use. Wear impervious clothing if needed for spill clean-up.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Odorless, silvery liquid with a metallic luster contained in a glass thermometer.

pH: N/A

Boiling Point: 674°F/357°C

Melting Point: -38°F/-39°C

Solubility In Water: Insoluble

Octanol/Water Coefficient: Not determined

Flash Point: Not combustible

Autoflignition Temperature: N/A

Specific Gravity: 13.55

Vapor Pressure: 0.0018 mmHg @ 25°C

Vapor Density: 7.0

Percent Volatile: 100% @ 21°C

Method: N/A

Flammable Limits: LEL: N/A UEL: N/A

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: High temperatures.

Incompatibility: Acetylene, ammonia, ethylene oxide, chlorine dioxide, azides, metal oxides, methyl silane, lithium, rubidium, oxygen, metal carbonyls.

Hazardous Decomposition Products: At high temperatures, mercury vaporizes to form highly toxic mercury vapors.

Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION**Potential Health Effects:**

Eye Contact: May cause irritation, redness and blurred vision. May cause permanent eye damage.

Skin Contact: May cause irritation and allergic reaction. May be absorbed through the skin in toxic amounts with symptoms similar to those listed under ingestion.

Inhalation: Vapors may cause sore throat, coughing, pain, breathing difficulties, shortness of breath, headache, muscle weakness, anorexia, gastrointestinal disturbances, ringing in the ears, liver changes, fever, bronchitis, and pneumonitis. Allergic reaction, kidney & brain damage may also occur.

Ingestion: Burning of the mouth and throat, thirst, nausea and vomiting. Metallic mercury is not usually well enough absorbed to cause acute effects.

Chronic Health Effects: Prolonged overexposure to mercury may cause mercurialism, which is characterized by fine tremors and erethism (manifested by abnormal shyness, depression, despondency, irritability or excitability). In severe cases hallucinations, loss of memory and mental deterioration may occur. Other effects include kidney damage, stomatitis, loosening of the teeth, blue lines on the gums, diarrhea, weight loss, and sensitization. Mercury is reported to cause adverse reproductive effects in lab animals.

Carcinogen Status: Mercury is not listed as a carcinogen or potential carcinogen by IARC, NTP, OSHA or the EU Directives.

Medical Conditions Aggravated by Exposure: Pre-existing respiratory, kidney and nervous system disorders may be aggravated by exposure. Persons with known allergies or known sensitization to mercury may be aggravated by exposure.

Acute Toxicity Data: Mercury: No applicable data available

Irritancy Data: Mercury is an eye, skin and respiratory irritant.

Sensitization: Mercury has been reported to cause sensitization in humans and animals.

Reproductive Toxicity: Mercury has been reported to cause reproductive toxicity in laboratory animals. It is reported to cause birth defects and decrease fertility in males and females

Teratogenicity: Mercury has been reported to cause teratogenicity in laboratory animals.

Mutagenicity: Mercury is mutagenic in some test systems.

Synergistic Effects: Other heavy metals with the same target organs may cause additive adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION

Very toxic to aquatic organisms with possible long-term effects.

Mercury: The LC50/96-hour values for fish are less than 1 mg/l.

SECTION 13: DISPOSAL

Dispose in accordance with all local, state and federal regulations.

RCRA Hazardous Waste Codes: U151

SECTION 14: TRANSPORTATION DATA

DOT Shipping Name: Mercury, Contained In Manufactured Article

DOT Hazard Class: 8, PG III

UN Number: UN2809

DOT Labels Required (49CFR172.101): Corrosive

Hazardous Substance (49CFR172.101): Mercury

Reportable Quantity: 1 pound

Emergency Response Guide Number: 172

Note: See 173.164 for exceptions.

N/D=Not Determined

Mercury Thermometer

MSDS NO: 99-0094

IATA Shipping Name: Mercury, Contained In Manufactured Article

IATA Hazard Class: 8, PG III

UN Number: UN2809

IATA Hazard Labels Required: Corrosive (Passenger And Cargo Aircraft See 805)

SECTION 15: OTHER REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

SARA 311/312: Hazard Categories for SARA Section 311/312 Reporting: Acute health, Chronic health.
SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313 (40 CFR 372):

Mercury 7439-97-6 Various Amount

CERCLA Section 103 Reportable Quantity: 1 lb.

US Toxic Substances Control Act: All of the components of this product are listed on the EPA TSCA Inventory.

STATE REGULATIONS:

California Proposition 65: This product contains the following substances known to the State of California to cause Developmental Toxicity (birth defects): Mercury.

INTERNATIONAL REGULATIONS:

Australian Inventory Of Chemical Substances: All of the components of this product are listed on the AICS Inventory.

Canadian Environmental Protection Act: All of the components of this product are listed on the Canadian Domestic Substances List.

Canadian WHMIS Classification:



Class D - Division 2A (Very Toxic Material causing other toxic effects)

This product has been classified in accordance with the hazard criteria in the CPR and the MSDS contains all the information required by the CPR.

European Inventory Of Commercial Chemical Substances: All of the components of this product are listed on the EINECS Inventory.

European Community Labeling: Contains Mercury



R23 Toxic by inhalation
R33 Danger of cumulative effects
R50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
S38 In case of insufficient ventilation, wear suitable respiratory equipment.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 This material and/or its container must be disposed of as hazardous waste.

Mercury Thermometer

MSDS NO: 99-0094

Japan MITI: All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

Korean Existing Chemical List: All of the components of this product are listed on the KECL Inventory.

Philippines Inventory of Chemicals and Chemical Substances: All of the components in this product are listed on the PICCS Inventory.

China: All of the components of this product are listed on the Chinese Inventory.

SECTION 16: OTHER INFORMATION

NFPA Hazard Rating: HEALTH: 3 FIRE: 0 REACTIVITY: 0

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):

T Toxic

N Dangerous for the Environment

R23 Toxic by inhalation.

R33 Danger of cumulative effects.

R50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Date of Previous MSDS Revision: 07/16/03

Revision Summary: Revised Section 4, 6, 8, 9, 11, 14, 15

The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Syrvet Inc., it is the user's obligation to assure safe use of this product.