



# Material Safety Data Sheet

## HAZARDOUS

**Catalog Number: 202010**

**Revision date:** 18-Mar-2005

**Australia Hazardous Statement:** Hazardous according to criteria of NOHSC

### 1. COMPANY DETAILS

**Supplier:** MP Biomedicals Australasia Pty Limited  
Unit 12, 167 Prospect Hwy.  
Seven Hills, NSW 2147 Aust.

**Telephone Number:** (02) 9838 7422

**Fax Number:** (02) 9838 7390

**Emergency telephone number:** (02) 9838 7422: hours: 8.30 AM to 5.00 PM

**Australian Business Number (ABN):** 31 106 467 109

### 2. IDENTIFICATION

**Product name:** DIETHYL MERCURY

**Catalog Number:** 202010

**Synonyms:** Not Available

**UN/Id No:** 2024

**Proper shipping name:** Mercury compound, liquid, n.o.s.

**IATA Hazard Label(s):** Toxic

**Hazard Class:** 6.1

**-** Toxic substances - oral

**Subsidiary risk:** No Subsidiary Risk allocated

**Packing group:** III

**Emergency Action Code (Hazchem code):** 2X

**Poisons schedule No. (Aust)/Toxic Substance (NZ):** S7 Dangerous Poison.

**Recommended use:** Research product for non-human use

<b>Component</b>	<b>Australia (AICS):</b>
DIETHYL MERCURY 627-44-1 (100)	Present

### 3. PHYSICAL DESCRIPTION/PROPERTIES

**Appearance and Odor:** Colorless hazel-like odor

**Physical state:** Liquid

**Formula:** C<sub>4</sub>H<sub>10</sub>Hg

**Molecular weight:** 258.713

**Boiling point/range:** 159°C

**Melting point/range:** Not determined

**Density:** 2.4660 g/ml @ 20°C

**Vapor pressure:** Not determined

**Solubility (in water):** Not determined

**Catalog Number:** 202010

**Product name:** DIETHYL MERCURY

Flash point: Not determined  
 Autoignition temperature: Not determined  
 Flammable limits in air - lower (%): Not determined  
 Flammable limits in air - upper (%): Not determined

#### 4. INGREDIENTS

Components	CAS Number	Weight %	EC No.	Classification
DIETHYL MERCURY	627-44-1	100	--	T+; N

#### 5. HAZARDS IDENTIFICATION

**Australia Hazardous Statement:** Hazardous according to criteria of NOHSC



##### Indication of Danger:

T+ - Very toxic.  
 N - Dangerous For The Environment.

R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.

R33 - Danger of cumulative effects.

R50 - Very toxic to aquatic organisms.

R53 - May cause long-term adverse effects in the aquatic environment.

##### Safety Phrases:

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S36 - Wear suitable protective clothing.

S28 - After contact with skin, wash immediately with plenty of water.

S13 - Keep away from food, drink and animal feeding stuffs.

S60 - This material and its container must be disposed of as hazardous waste.

S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Category of Danger:** Very Toxic , Dangerous for the environment , Skin Sensitizer , Repr. cat. 2 , Carc. cat. 3

**Poisons schedule No. (Aust)/Toxic Substance (NZ):** S7 Dangerous Poison.

#### 6. HEALTH HAZARD INFORMATION

##### HEALTH EFFECTS

##### EMERGENCY OVERVIEW:

Harmful to flora, fauna, soil organisms and aquatic organisms. May cause sensitization by skin contact Very toxic: danger of very serious irreversible effects if swallowed. May also have serious irreversible effects through skin contact or inhalation.

##### Principle routes of exposure:

Skin

##### Inhalation:

Harmful: possible risk of irreversible effects through inhalation.

##### Ingestion:

Very Toxic: danger of very serious irreversible effects if swallowed.

##### Skin contact:

May cause allergic skin reaction Harmful: danger of serious damage to health by prolonged skin contact.

**Eye contact:** Risk of serious damage to eyes  
**Statements of hazard** MAY CAUSE ALLERGIC SKIN REACTION. Very toxic if swallowed

Components	Australian Exposure Standards - Carcinogens	Australia - Exposure Standards - Short
DIETHYL MERCURY	Not Listed	0.03 mg/m <sup>3</sup> STEL

Components	Australia - Exposure Standards - Skin E	Australia - Exposure Standards - Time W
DIETHYL MERCURY	skin absorption	0.05 mg/m <sup>3</sup>

## FIRST AID

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

**Inhalation:** Move to fresh air. Call a physician immediately.

**Skin contact:** Wash off immediately with soap and plenty of water. Consult a physician if necessary.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician. Drink 1 or 2 glasses of water. Induce vomiting if person is conscious.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Protection of first-aiders:** No information available

**Notes to physician:** None

**Medical conditions aggravated by exposure:** None known

## 7. PRECAUTIONS FOR USE

Components	Australian Exposure Standards - TWA	Australian Exposure Standards - Carcinogens	Australian List of Designated Hazardous Candidate Chemical
DIETHYL MERCURY			

**Section 8 Notes:** TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. According to current knowledge this concentration should neither impair the health or, not cause undue discomfort to, nearly all workers.

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

## PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** Self-contained breathing apparatus

**Hand protection:** Pvc disposable gloves

**Skin and body protection:** Impervious clothing Long sleeved clothing

**Eye protection:** Safety glasses

**Hygiene measures:** Avoid contact with skin, eyes and clothing.



## 8. SAFE HANDLING INFORMATION

**Storage:**  
ROOM TEMPERATURE

<b>Handling:</b>	Use only in area provided with appropriate exhaust ventilation.
<b>Safe handling advice:</b>	Wear personal protective equipment. Remove and wash contaminated clothing before reuse.
<b>Technical measures/storage conditions:</b>	Keep containers tightly closed in a cool, well-ventilated place. Keep container tightly closed in a dry and well-ventilated place.
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Polymerization:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Mercury (Hg)
<b>Materials to avoid:</b>	-
<b>Conditions to avoid:</b>	Exposure to air or moisture over prolonged periods.

### Spills and Disposal:

<b>Personal precautions:</b>	Use personal protective equipment.
<b>Environmental precautions:</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up:</b>	Soak up with inert absorbent material.
<b>Waste from residues / unused products:</b>	Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.
<b>Contaminated packaging:</b>	Do not re-use empty containers

### Fire/Explosion Hazards:

<b>Suitable extinguishing media:</b>	Use dry chemical, CO <sub>2</sub> , water spray or "alcohol" foam
<b>Specific hazards:</b>	combustible material
<b>Unusual hazards:</b>	None known
<b>Special protective equipment for firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
<b>Specific methods:</b>	Water mist may be used to cool closed containers.

## 9. TOXICOLOGICAL INFORMATION

### Product Information

#### Acute toxicity

Components	RTECS Number:	Selected LD50s and LC50s
DIETHYL MERCURY	OW2350000	Inhalation LC50 Rat : 258 mg/m <sup>3</sup> Inhalation LC50 Mouse : 91 mg/m <sup>3</sup> Oral LD50 Rat : 51 mg/kg Oral LD50 Mouse : 44 mg/kg

<b>Chronic toxicity:</b>	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
<b>Local effects:</b>	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>Specific effects:</b>	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
<b>Carcinogenic effects:</b>	Possible carcinogen
<b>Mutagenic effects:</b>	No data is available on the product itself.

**Reproductive toxicity:** Experiments have shown reproductive toxicity effects on laboratory animals.

Components	NIOSH - Health Effects	NIOSH - Target Organs
DIETHYL MERCURY	CNS damage; eye, respiratory, and skin irritation	skin, respiratory system, CNS, kidneys, eyes

## 10. ECOLOGICAL INFORMATION

**Mobility:** No data available  
**Bioaccumulation:** No data available  
**Ecotoxicity effects:** No data available  
**Aquatic toxicity:** May cause long-term adverse effects in the aquatic environment.

Components	U.S. DOT - Appendix B - Marine Pollutan	U.S. DOT - Appendix B - Severe Marine Pollutants	United Kingdom - The Red List:
DIETHYL MERCURY	Not Listed	DOT regulated severe marine pollutant	Original entry

Components	Germany VCI (WGK)	World Health Organization (WHO) - Drinking Water	Ecotoxicity - Fish Species Data
DIETHYL MERCURY	3	0.001 mg/L (total)	LC50 (96 hr) rainbow trout:0.16-0.90 mg/L.;LC50 (96 hr) bluegill sunfish:0.16-0.90 mg/L.;LC50 (96 hr) catfish:0.35 mg/L.:

Components	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Microtox Data	Ecotoxicity - Water Flea Data
DIETHYL MERCURY	Not Listed	Not Listed	LC50 (96 hr) water flea:5.0 ug/L:

Components	EPA - ATSDR Priority List	EPA - HPV Challenge Program Chemical List	California - Priority Toxic Pollutants
DIETHYL MERCURY	Rank (of 275): 003	Not Listed	Maximum and continuous concentrations = reserved

Components	California - Priority Toxic Pollutants	California - Priority Toxic Pollutants
DIETHYL MERCURY	Water and organisms = 0.050 ug/L; organisms only = 0.051 ug/L	Maximum and continuous concentrations = reserved

## 11. TRANSPORT INFORMATION

### IMDG/IMO

**Proper shipping name:** Mercury compound, liquid, n.o.s.  
**IMDG - Hazard Classifications** IMDG class or division = 8  
**IMDG - Marine Pollutants** Not Applicable  
**IMDG - Marine Pollutants** Not Applicable  
**IMDG - Regulated Substances** UN2809  
**IMDG - Severe Marine Pollutants** UN2024 (liquid); UN2025 (solid)

### IMO-labels:

**Packing group:** III  
**Proper shipping name:** Mercury compound, liquid, n.o.s.  
**UN/Id No:** 2024

**ADR/RID**

<b>Australia Hazardous Statement:</b>	Hazardous according to criteria of NOHSC
<b>Hazard Class</b>	6.1
<b>Item:</b>	DIETHYL MERCURY
<b>ADR/RID-labels:</b>	Toxic
<b>UN/Id No:</b>	2024
<b>Emergency Action Code (Hazchem code):</b>	2X
<b>Proper shipping name:</b>	Mercury compound, liquid, n.o.s.

**ICAO:**

<b>Hazard Class</b>	6.1
<b>Packing group:</b>	III
<b>Proper shipping name:</b>	Mercury compound, liquid, n.o.s.

**12. REGULATORY INFORMATION****International inventories:**

DIETHYL MERCURY

<b>Australia (AICS):</b>	Present
<b>EU EINECS List -</b>	211-000-7; C4H10Hg
<b>Korean KECL:</b>	KE-23117

**Philippines PICCS:** Present**Contains:** DIETHYL MERCURY**Indication of Danger:**

T+ - Very toxic.

N - Dangerous For The Environment.

**Risk Combination Phrases**

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**Safety Phrases:** S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

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**Poisons schedule No. (Aust)/Toxic Substance (NZ):** S7 Dangerous Poison.**13. OTHER INFORMATION****Prepared by:** Health & Safety

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**End of Safety Data Sheet**