

Revision Date 17-Jan-2013

Revision Number 5

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier
Product Description:
Cat No.
Synonyms
Mercury
M/3750/50, M/3750/53, M/3750/60, M/3750/48

Quicksilver

Relevant identified uses of the substance or mixture and uses advised against
Recommended Use

Laboratory chemicals

Uses advised against

No Information available

Details of the supplier of the safety data sheet
Company

 Fisher Scientific UK
 Bishop Meadow Road
 Loughborough, Leicestershire,
 LE11 5RG, United Kingdom
 Tel: 01509 231166

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

Tel: 01509 231166

Chemtrec US: (800) 424-9300

Chemtrec EU: 001 (202) 483-7616

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Acute Inhalation Toxicity - Vapors	Category 2
Reproductive Toxicity	Category 1B
Specific target organ toxicity - (repeated exposure)	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16
Symbol(s)

T+ - Very toxic

N - Dangerous for the environment

R-phrases(s)

R61 - May cause harm to the unborn child

R26 - Very toxic by inhalation

Risk Combination Phrases

R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation

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

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SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H410 - Very toxic to aquatic life with long lasting effects

H330 - Fatal if inhaled

H360D - May damage the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Mercury 7439-97-6	EEC No. 231-106-7	100	7439-97-6	T+; R26 T; R48/23 N; R50-53 Repr.Cat.2; R61	Acute Tox. 2 (H330) Repr. 1B (H360D) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-

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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES**Description of first aid measures****Eye Contact**

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

Ingestion

Call a physician immediately. Clean mouth with water.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

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Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Wear self-contained breathing apparatus and protective suit. Do not let this chemical enter the environment.

SECTION 7. HANDLING AND STORAGE
Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use only in area provided with appropriate exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep locked-up.

Specific End Uses
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters
Exposure limits
Component
Mercury

European Union	The United Kingdom	France	Belgium	Spain
TWA: 0.02 mg/m ³ 8 hr	TWA: 0.02 mg/m ³ 8 hr	TWA: 0.02 mg/m ³ 8 heures. VME Skin	TWA: 0.02 mg/m ³ 8 uren Huid	Skin TWA: 0.025 mg/m ³ 8 horas

Component
Mercury

Italy	Germany	Portugal	The Netherlands	Finland
	TWA: 0.02 mg/m ³ 8 Stunden. MAK Skin Peak: 0.16 mg/m ³ TWA: 0.1 mg/m ³ 8 Stunden. AGW	TWA: 0.025 mg/m ³ 8 horas Pele		TWA: 0.05 mg/m ³ 8 tunteina Skin

Component
Mercury

Austria	Denmark	Switzerland	Poland	Norway
Skin STEL: 0.05 ppm 15 Minuten STEL: 0.5 mg/m ³ 15 Minuten TWA: 0.005 ppm 8 Stunden TWA: 0.05 mg/m ³ 8 Stunden	TWA: 0.025 mg/m ³ 8 timer Skin	Skin STEL: 0.04 ppm 15 Minuten STEL: 0.4 mg/m ³ 15 Minuten TWA: 0.005 ppm 8 Stunden TWA: 0.05 mg/m ³ 8 Stunden	TWA: 0.02 mg/m ³ 8 godzinach Skóra	TWA: 0.02 mg/m ³ 8 timer STEL: 0.06 mg/m ³ 15 minutter.

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Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Mercury	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³ 8 satima. GVI	TWA: 0.025 mg/m ³ 8 hr.		TWA: 0.05 mg/m ³ 8 hodinách. Potential for cutaneous absorption Ceiling: 0.15 mg/m ³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Mercury	Skin notation TWA: 0.03 mg/m ³ 8 tundides. fume		skin - potential for cutaneous absorption TWA: 0.1 mg/m ³	STEL: 0.32 mg/m ³ 15 percekben. CK TWA: 0.08 mg/m ³ 8 órában. AK potential for cutaneous absorption	TWA: 0.025 mg/m ³ 8 klukkustundum. vapor Skin notation Ceiling: 0.05 mg/m ³ vapor

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Mercury	TWA: 0.02 mg/m ³	TWA: 0.03 mg/m ³ vapor IPRD			Skin notation TWA: 0.05 mg/m ³ 8 ore STEL: 0.15 mg/m ³ 15 minute

Component	Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
Mercury	TWA: 0.005 mg/m ³ STEL: 0.01 mg/m ³ vapor	Ceiling: 0.8 mg/m ³ TWA: 0.1 mg/m ³	TWA: 0.02 mg/m ³ 8 urah	LLV: 0.03 mg/m ³ 8 timmar. Skin notation	

Biological limit values

Component	European Union	United Kingdom	France	Spain	Germany
Mercury		Mercury: 20 µmol/mol creatinine urine random	Total inorganic Mercury: 0.015 mg/L blood end of shift at end of workweek Total inorganic Mercury: 0.050 mg/g creatinine urine prior to shift	Total inorganic mercury: 35 µg/g Creatinine urine pre-shift Total inorganic mercury: 15 µg/L blood end of workweek	Mercury: 25 µg/L whole blood no restriction Mercury: 100 µg/L urine no restriction

Component	Italy	Portugal	Netherlands	Finland	Denmark
Mercury				Mercury: 140 nmol/L urine prior to shift. Mercury: 50 nmol/L blood end of workweek.	

Component	Bulgaria	Gibraltar	Latvia	Luxembourg	Romania
Mercury	Mercury: 100 mg/L urine		Mercury: 15 µg/L blood Mercury: 35 µg/g creatinine urine Mercury: 50 µg/L urine		Mercury: 10 µg/L blood end of shift Mercury: 35 µg/g creatinine urine beginning of shift

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Component	Slovak Republic	Turkey
Mercury	Mercury: 25 µg/L blood not critical	

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas
Personal protective equipment
Eye Protection Goggles
Hand Protection Protective gloves
Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection 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

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Silver
odor	odorless
pH	No information available.
Vapor Pressure	0.01 hPa @ 20 °C
Vapor Density	
Viscosity	1.554 cP at 20 °C
Boiling Point/Range	356.5°C / 673.7°F
Melting Point/Range	-38.9°C / -38°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	Insoluble
Specific Gravity	13.540
Molecular Formula	Hg
Molecular Weight	200.59

SECTION 10. STABILITY AND REACTIVITY
Reactivity
Chemical Stability

Stable under normal conditions.

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Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization does not occur.
Hazardous Reactions . No information available.

Conditions to Avoid

Incompatible products.

Incompatible Materials

Strong oxidizing agents, Halogens.

Hazardous Decomposition Products

Highly toxic fumes.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on Toxicological Effects****Acute Toxicity**

Product Information No acute toxicity information is available for this product

Component Information**Chronic Toxicity**

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.
Mutagenic Effects No information available
Reproductive Effects No information available.
Developmental Effects No information available.
Target Organs No information available.
Other Adverse Effects See actual entry in RTECS for complete information
Endocrine Disruptor Information None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Ecotoxicity effects Do not empty into drains

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SECTION 12. ECOLOGICAL INFORMATION

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Mercury		0.16 mg/L LC50 96 h 0.18 mg/L LC50 96 h 0.5 mg/L LC50 96 h 0.9 mg/L LC50 96 h		5.0 µg/L EC50 = 96 h

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment
Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS
Waste treatment methods
Waste from Residues / Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION
IMDG/IMO

UN-No	2809
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	MERCURY

ADR

UN-No	2809
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	MERCURY

IATA

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SECTION 14. TRANSPORT INFORMATION

UN-No 2809
Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III
Proper Shipping Name MERCURY

SECTION 15. REGULATORY INFORMATION
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Mercury	231-106-7	-		S	X	-	X	-	X	X	X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment
SECTION 16. OTHER INFORMATION
Full text of R-phrases referred to under sections 2 and 3

R26 - Very toxic by inhalation

R61 - May cause harm to the unborn child

R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation

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

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SECTION 16. OTHER INFORMATION**Revision Summary****Reason for revision** (M)SDS sections updated, 14.**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet