

Safety Data Sheet	revised: 19.01.2010
	Rev. Nr.: 2
trade name: Ultraviolet wave emitter filled with mercury lesser 2.5 %	Ident.- Nr.:

Informations about manufacturer/supplier

Heraeus Holding GmbH
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Composition/information on ingredients

Chemical characterization (substance)

Emitter consistent of quartz glass filled with small amounts of mercury (< 2.5 %).

CAS-No.	Compound	Content [%]
7439-97-6/	Mercury	< 2.5

Hazard identification

Hazard information

The emitter is not dangerous under regular conditions.

Overexposition of radiation to skin or eyes causes burns.

Mechanical destruction may cause danger by splinter of glass and liberation of mercury. Mercury is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Liberated mercury may cause chronic toxic effects to human (see chap. "Toxicological information").

First-aid measures

General information

Burns caused by overexposition of radiation or severe injuries caused by splinter of glass should be treated by a physician.

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	Rev. Nr.: 2
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Accidental release measures

Personal precautions:

If the emitter is mechanical destroyed amounts of mercury can be liberated. In this case provide sufficient air exchange and/or ventilation in working rooms.

Avoid any contact with mercury.

Balls of mercury take up with a special mercury tongs and put it in a closable containment out of plastic material.

Very small balls which can not take up with the tongs grit with zinc powder or a special mercury absorber to bind the mercury. These materials eliminate very accurately from the surfaces and put it in a closable containment as described before.

Mercury and the materials with the fixed mercury forward to disposal in accordance with locally valid waste-disposal-regulations.

(For the danger caused by vapours of mercury see chap. "Toxicological information".)

Environmental precautions:

Mercury do not allow to enter surface and ground water, the sewage system or soil.

Methods for cleaning up/taking up:

Clean up the decontaminated surfaces with wet cleaning rags. The rags forward to disposal as described before.

Further information:

Handling and storage

Handling

Advice on safe handling

Avoid mechanical stress (danger of broken glass).

Ensure adequate ventilation at the working place.

Storage

Requirements for storage rooms and vessels

Storage must be made according to legal regulations.

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	Rev. Nr.: 2
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Exposure controls / Personal protection

Advice on limits

Japan:	OEL:	0.05	mg/m ³	(Mercury)
Australia:	TWA:	0.1	mg/m ³	(Mercury)
Russia:	TWA:	0.005	mg/m ³	(Mercury)
France:	VME:	0.05	mg/m ³	(Mercury)
Germany:	MAK:	0.1	mg/m ³	(Mercury)
USA:	REL:	0.05	mg/m ³	(Mercury)
Mexico:	TWA:	0.05	mg/m ³	(Mercury)

Personal protective equipment

Respiratory protection:

If mercury is liberated and ventilation of the working place is not sufficient use filter with combination Hg-P3.

Hand protection:

If glass is broken use cut resistance gloves.

Eye protection:

If glass is broken use eye protection.

Body protection:

Protective and hygiene measures:

Skin contaminated with mercury wash immediately with soap and plenty of water.
Contaminated clothes change immediately.

Physical and chemical properties

Appearance

Form :	Solid
Colour :	Colourless
Odour :	Odourless

Aspects relevant for security

Test method

Melting point :	appr. 2000 °C	(quartz glass)
Boiling point :	not applicable	
Flash point :	not applicable	
Solubility in water :	insoluble	

Toxicological information

Safety Data Sheet	revised: 19.01.2010
	Rev. Nr.: 2
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Acute toxicity

No acute toxicity is caused by mercury.

Chronic toxicity

Inhalation of mercury vapour for a longer period of time can damage the central nerve system. Symptoms are: trembling of muscles, degeneration of muscles, emotional instability, lack of concentration, impaired vision.

(Important! Liberated mercury remove completely as described in chap. "Accidental release measures" .)

Ecological information

Mercury is harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Advice on disposal

Disposal

Dispose the product according to legal regulations.

Disposal of the materials which are generated in the case of a broken emitter (see chap. "Accidental release measures") must also be done according to legal regulations.

Disposal of packing

Packages which are not contaminated with mercury should be recycled.

Transport information

Contact the manufacturer/ supplier for the mercury content of the emitter.

Land transport

Transportation must be done according to the legal regulations of the concerned countries.

Marine transport (IMDG)

No dangerous good in the sense of IMDG if mass of Hg is lesser 1 Kg per emitter (chap. 3.3.1; special provision: 941).

Air transport (IATA/ICAO)

No dangerous good in the sense of IATA if mass of Hg is lesser 100 mg per emitter and additionally the quantity of mercury per package is 1 g or less (chap. 4.4; special provision: A69, transport as cargo).

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Otherwise following classification is correct:

UN-No.: UN 2809
Proper Shipping Name: MERCURY CONTAINED IN MANUFACTURED ARTICLES)
Main risk: 8
Subsidiary risk: ---
Packing group: III
Label: 8

Further information

The data given here is based on today`s stand of our knowledge and experience. The purpose of this Safety Data Sheet is to describe the product in terms of their safety requirements. The data does not signify any warranty with regard to the products properties.