SAFETY DATA SHEET
in accordance with Community Regulation 2006/1907 EC REACH
Replace version on 30/06/2020
Reviewed on 12/10/2022

Mercury 99.9995% min

SECTION I- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product name: **Mercury metal purity≥ 99.9995% ; 100% recycled raw materials**

1.2 Application: **Polarography,porosimetry, dental amalgam, UV tubes and lamp, epitaxial growth…**

1.3 Supplier: **Ophram Laboratoire 34 rue Charles Martin-69190 Saint Fons (France)**
Phone : 00 472 89 16 16- email- contact@ophram.com

1.4 Emergency téléphone number
Centre anti poison Paris : + 33 1 40 05 48 48

SECTION 2 Hazards Identification

2.1 –Classification of the substance or mixture

Toxic by inhalation

According the directive 1272/2008 CLP

GHS CLASSIFICATION

RUBRIQUE	HAZARD CATEGORY	HAZARD CLASS AND CATEGORY	HAZARD NOTICE
3.11	Acute toxicity by inhalation	Acute Tox 2	H330
3.7	Reproductive toxicity	Repro.1B	H360D
3.9	Specific target organ toxicity- repeated exposure	STOT RE 1	H372
4.1A	Very toxic to aquatic organisms	Aquatic acute 1	H400
4.1C	Hazardous to the aquatic environment	Chronic toxicity 1	H 410

2.2 LABEL ELEMENTS

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Pictograms

GHS06- GHS08- GHS09

Hazard statements

H330: Fatal if inhaled
H360D:may damage the unborn child
H372:Causes damage to organs through prolonged or repeated exposure
H410: Very toxic to aquatic life with long lasting effects

Precautionary statements

P201: Obtain special instructions before use
P260 Do not breathe mist/vapours/spray
P273:Avoid release to the environment
P304-P340: IF INHALED: Remove person to fresh air and keep comfortable for breathingP310: immediately call a POISON CENTER or doctor/physician
Precautionary statements- storage

P233 Keep container tightly closed.

2.3 Other hazards

Results of PBT and vPvB assessment

According to the result of its assessment, this substance is not a PBT OR vPvB

SECTION 3 – Composition/Information on ingredients

Substance: mercury 100% Symbol: Hg

CAS-number: 7439-97-6

EINECS number: 231-106-7

Index number: 080-001-00-0

SECTION 4 – FIRST-AID MEASURES.

Eye contact: Rinse immediatly with plenty of water, seek medical advice if necessary.

Skin contact: Remove contaminated cloting, rinse immediatly with plenty of water or shower, wash skin with soap and water, seek medical advice if necessary.

Inhalation: Move into fresh air and keep at rest under observation.Seek medical advice.

Ingestion: Do not induce vomiting; do not drink; rinse mouth and take immediatly to hospital

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable Extinguishing media:

5.1 water spray, dry extinguishing powder, BC-powder, carbon dioxide (CO_2)

5.2 Non combustible

5.3 Advice for firefighters, In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains
or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained

breathing apparatus

SECTION 6 – ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions protective equipment and emergency procedure

In case of vapours development, wear appropriate respiratory protection

6.2 Environmental Precautions: Do not allow product to contaminate ground, drains and rivers. prevent the spillage from reaching the outlets.

6.3 Methods and material for containment and cleaning up:
clean up spillage. Vacuum remainder with special equipment. Cover remainder with zinc/copper powder or special absorbents, then carefully collect. Measure mercury vapour concentration.

SECTION 7- HANDLING AND STORAGE

7.1 Handling Precaution :

Use extractor hood (laboratory). Handle and open container with care. Avoid exposure. Provide adequate ventilation as well as local exhaustion at critical locations. Clear contaminated areas thoroughly.

Keep cool. Ventilation at floor level, use a mask with filter for mercury vapour

Wash hands before breaks and after work

Keep container tightly closed.

7.2 Storage:.

Keep tightly closed in a well-ventilated place. Avoid contact with halogens and nitric acid.

SECTION 8- EXPOSURE CONTROL/PERSONAL PROTECTION.

Not classified as a human carcinogen

8.1 National limit values

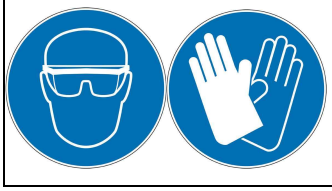
Occupational exposure limit values (Workplace Exposure Limits)

Pays	substance	N° CAS	Identifier	VLEP 8h mg/m3 Source INRS	VME mg/m³	VLCT mg/m³
	Mercury	7439-97-6	IOELV	0.02	0.02	

EU TWA 0.02 mg/m3 source 2022/431 EU

8.2 Exposure controls

Individual protection measures (personal protective equipment)



Hands protection vinyl gloves are be used

Eyes protection: Safety glasses may be used.

Skin protection : . Guard against spillage. Wear protective clothing, gloves, glasses and respiratory protection

Personal protection. Employees who handle mercury should wash their hands thoroughly with soap and water before eating, smoking or using toilet facilities

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties

Appearence: Silver liquid	**Exposition properties:** N.A
Odour: Odourless	**Vapour pressure:** 1.5 x 10^{-3} at 20°C
pH : N.A	**Vapour density:** 6,9 (air = 1)
Melting point: -38.5°C	**Density:** 13.6 g/ cm³ at 20 °C
Boilling point : 357°C	Solubility : water 0,05 mg/l at 25°C
Decomposition temperature : N.A	**9.2 Other: -** non explosive
Flash point: N.A	

SECTION 10- STABILITY AND REACTIVITY

10.1- REACTIVITY : This material is not reactive under normal ambient conditions

10.2 CHEMICAL STABILITY: - This material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions : Reacts violently with nitric acid, acethylene,ammoniac,chlorine,

10.4 condition to avoid: avoid contact with aluminium

10.5 Imcompatible materials: made amalgams with silver, golg copper, zinc,tin

10.6 Hazardous decomposition products: Emits toxic vapours when heated

SECTION 11- TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Exposure route	ENDPOINT	VALUE	SPECIES	SOURCE
Inhalation Vapour	**LC50**	**>26.6mg/m³/h**	**rat**	**ECHA**

Skin corrosion/irritation : Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation : Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation : Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity : Shall not be classified as germ cell mutagenic.

Carcinogenicity : Shall not be classified as carcinogenic.

Reproductive toxicity May damage the unborn child.

Specific target organ toxicity - single exposure Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics •

Specific target organ toxicity - Causes damage to organs through prolonged or repeated exposure

Inhalation: Score throat, headache,nausea,coughing: risk of kidney damage**.**

Skin contact: Redness; risk of kidney damage.

Eye contact: Irritation, redness

ingestion: May cause neurotoxic/nephrotoxic effects
Inhalation: May cause bronchiolitis, pneumonitis pulmonary edema

Effects for prolonged exposure: Chronic mercury poisoning results in nervous irritability, weakness, tremors, gengivitis, erethism and greying of lens of the eye. Medical conditions aggravated: Kidney disorders.

SECTION 12- ECOLOGICAL INFORMATION

12.1 Toxicity Very toxic to aquatic life with long lasting effects

Biodegradation: The methods for determining the biological degradability are not applicable to inorganic substances

Ecotoxicity: High, very toxic for fish. LC50(Labeo rohita 96hours) 0.018mg/l

LC50 (inhalation rabbit for 2 hours 27mg/m³) 15 days

12.2 Process of degradability: slow degradation by oxidation

12.3 Bioaccumulative potential : n-octanol/water (log KOW) 0,62 (Exp. Lit.)

Do not allow to run into surface waters, wastewater or soil

12.4 Mobility in soil : Data are not available

12.5 : Results of PBT and vPvB assessment Data are not available

12.6 Endocrine disrupting properties Data are not available

SECTION 13 – DISPOSAL CONSIDERATION.

used mercury metal can be recycled by distillation or disposed of as waste in a treatment center
Do not empty into drains. Do not release to the environment. Refer to special instructions/safety data
do not use a vacuum cleaner to pick up mercury spilled on the ground

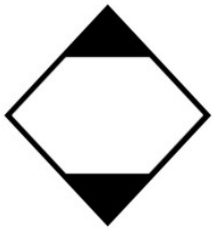
SECTION 14-TRANSPORT INFORMATIONS

14.1 UN NUMBER ADR/RID/IATA/IMDG/OACI-IT **UN2809**

14.2 UN proper shipping name : ADR/RID/IATA/IMDG/OACI-IT **MERCURY**

14.3 Transport hazard class : ADR/RID/IATA/IMDG/OACI-IT **8- 6.1**

14.4 Packing group ADR/RID/IATA/IMDG/OACI-IT **III**



Limited Qty : **5 Kg per inner container** - Label

14.5 Environmental Hazards : Danger label(s) 8+6.1,+ "Fish and tree"

SECTION 15- REGULATORY INFORMATION

GHS Labelling (EC 1272/2008)

Hazard Pictograms

Signal word :**DANGER**

Hazard statements

H330: Fatal if inhaled
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H372:Causes damage to organs through prolonged or repeated exposure
H410: Very toxic to aquatic life with long lasting effects

Precautionary statements

P201: Obtain special instructions before use
P273:Avoid release to the environment
P309:If exposed or if you feel unwell
P310: immediately call a POISON CENTER or doctor/physician
P501: Dispose of contents/container in accordance with local/ regional/international/ regulations

SECTION 16- OTHER INFORMATION

Indication of changes (revised safety data sheet) Alignment to regulation: Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

The most important adverse physicochemical, human health and environmental effects: Delayed or immediate effects can be expected after short or long-term exposure. Spillage and fire water can cause pollution of watercourses.

Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTLY, 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 product for their purpose.