

Issue Date: 07/01/2021  
Last Revision Date: N/A  
Superseded Date: N/A  
Version Number: 01

## SAFETY DATA SHEET

Product Code: 40-105-6

PAGE 1 OF 9

### SECTION 1 PRODUCT IDENTIFICATION

#### 1.1. Product identifier

**Product Identity** Mercury (Metallic)  
**Alternate Names** Quicksilver; Hydrargyrum; Liquid Silver

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use** See Technical Data Sheet.  
**Application Method** See Technical Data Sheet.

### SECTION 2 HAZARD IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Acute Tox. 2;H330 Fatal if inhaled.  
Repr. 1B;H360D May damage the unborn child.  
STOT RE 1;H372 Causes damage to organs through prolonged or repeated exposure. Specific Target Organs: (Central Nervous System)  
Aquatic Chronic 1;H410 Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

#### Pictograms:



Skulls and Crossbones



Health Hazard



Environment

#### Signal Word: **Danger**

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.

#### [Prevention]:

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe mist / vapors / spray.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.

**Issue Date:** 07/01/2021  
**Last Revision Date:** N/A  
**Superseded Date:** N/A  
**Version Number:** 01

# SAFETY DATA SHEET

**Product Code:** 40-105-6

**PAGE 2 OF 9**

P281 Use personal protective equipment as required.

P284 Wear respiratory protection.

## [Response]:

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER or doctor / physician.

P314 Get Medical advice / attention if you feel unwell.

P320 Specific treatment is urgent (see information on this label).

P391 Collect spillage.

## [Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

## [Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

## SECTION 3

## COMPOSITION/INFORMATION ON INGREDIENTS

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	GHS Classification	Notes
<b>Mercury</b> <b>CAS Number: 0007439-97-6</b>	<b>Repr. 1B;H360D</b> <b>Acute tox. 2;H330</b> <b>STOT RE 1;H372</b> <b>Aquatic Acute 1;H400</b> <b>Aquatic Chronic 1;H410</b>	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

## SECTION 4

## FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General

In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

#### Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

#### Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

#### Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Issue Date: 07/01/2021  
Last Revision Date: N/A  
Superseded Date: N/A  
Version Number: 01

# SAFETY DATA SHEET

**Product Code: 40-105-6****PAGE 3 OF 9**

**Ingestion** If swallowed, wash out mouth with water, obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

## 4.2. Most important symptoms and effects, both acute and delayed

### Overview

**Eye:** Contact with eyes may cause severe irritation, and possible eye burns. Vapors may cause eye irritation.

**Skin:** May cause skin irritation. May be absorbed through the skin in harmful amounts. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Chronic exposure to mercury may cause permanent central nervous system damage, fatigue, weight loss, tremors, and personality changes.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause effects similar to those for inhalation exposure.

**Inhalation:** Causes respiratory tract irritation. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. May cause central nervous system effects including vertigo, anxiety, depression, muscle incoordination, and emotional instability. May cause severe respiratory tract irritation.

**Chronic:** Chronic exposure to mercury may cause permanent central nervous system damage, fatigue, weight loss, tremors, and personality changes.

**Notes to Physician:** Treat symptomatically and supportively.

**Antidote:** The use of Dimercaprol or BAL (British Anti-Lewisite) as a chelating agent should be determined by qualified medical personnel. The use of d-Penicillamine as a chelating agent should be determined by qualified medical personnel. See section 2 for further details.

**Inhalation** Fatal if inhaled.

## SECTION 5 FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Mercury/mercury oxides.

Do not breathe mist / vapors / spray.

### 5.3. Advice for fire-fighters

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

**ERG Guide No.** 172

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

**Issue Date:** 07/01/2021  
**Last Revision Date:** N/A  
**Superseded Date:** N/A  
**Version Number:** 01

# SAFETY DATA SHEET

**Product Code:** 40-105-6

**PAGE 4 OF 9**

## 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

## 6.3. Methods and material for containment and cleaning up

Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section).

## SECTION 7 HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Acetylene, ammonia, boron phosphodiiodide, chlorine, chlorine dioxide, methyl azide, sodium carbide, halogens, strong oxidizers.

Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from metals. Poison room locked.

See section 2 for further details. - [Storage]:

### 7.3. Specific end use(s)

No data available.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0007439-97-6	Mercury	OSHA	TWA 0.1 mg/m3
		ACGIH	Alkyl compounds TWA: 0.01 mg/m3 STEL 0.03 mg/m3 Skin Aryl compounds TWA: 0.05 mg/m3 C 0.1 mg/m3 Skin Elemental/Inorganic 0.025mg/m3 Skin
		NIOSH	No Established Limit
		Supplier	No Established Limit

**Issue Date:** 07/01/2021  
**Last Revision Date:** N/A  
**Superseded Date:** N/A  
**Version Number:** 01

# SAFETY DATA SHEET

**Product Code:** 40-105-6

**PAGE 5 OF 9**

## Carcinogen Data

CAS No.	Ingredient	Source	Value
0007439-97-6	Mercury	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

## 8.2. Exposure controls

### Respiratory

Follow the OSHA respirator regulations found in 29CFR §1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

### Eyes

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

### Skin

Wear appropriate protective clothing to prevent skin exposure. Wear appropriate gloves to prevent skin exposure.

### Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

### Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

## SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

### Appearance

Silver Liquid

### Odor

Odorless

### Odor threshold

Not Measured

### pH

Not Applicable

### Melting point / freezing point

-38.87 deg C

### Initial boiling point and boiling range

356.5 deg C @ 760.00mmHg

### Flash Point

Not Measured

### Evaporation rate (Ether = 1)

Not Available

### Flammability (solid, gas)

Not Applicable

### Upper/lower flammability or explosive limits

**Lower Explosive Limit:** Not Measured

**Upper Explosive Limit:** Not Measured

### Vapor pressure (Pa)

0.002 mmHg @ 25C

### Vapor Density

7 (Air=1)

### Specific Gravity

13.5400g/cm3 (Water=1)

### Solubility in Water

Insoluble

**Issue Date:** 07/01/2021  
**Last Revision Date:** N/A  
**Superseded Date:** N/A  
**Version Number:** 01

# SAFETY DATA SHEET

**Product Code:** 40-105-6

**PAGE 6 OF 9**

<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Available
<b>Viscosity (cSt)</b>	1.554 cP 20.00
<b>Molecular Formula</b>	Hg
<b>Molecular Weight</b>	200.59

## 9.2. Other information

No other relevant information.

## SECTION 10 STABILITY AND REACTIVITY

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### 10.2. Chemical stability

Stable under normal circumstances.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

High temperatures, incompatible materials, metals.

### 10.5. Incompatible materials

Acetylene, ammonia, boron phosphodiiodide, chlorine, chlorine dioxide, methyl azide, sodium carbide, halogens, strong oxidizers.

### 10.6. Hazardous decomposition products

Mercury/mercury oxides.

## SECTION 11 TOXICOLOGICAL INFORMATION

### Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Mercury - (7439-97-6)	37.00, Rat - Category: 2	No data available	No data available	No data available	No data available

**Note:** When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

**Issue Date:** 07/01/2021  
**Last Revision Date:** N/A  
**Superseded Date:** N/A  
**Version Number:** 01

# SAFETY DATA SHEET

**Product Code:** 40-105-6

**PAGE 7 OF 9**

Classification	Category	Hazard Description
Acute toxicity (oral)	2	Fatal if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	2	Fatal if inhaled.
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	1B	May damage the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	1	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	---	Not Applicable

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Mercury - (7439-97-6)	Not Available	0.0052, Daphnia magna	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.



**Issue Date:** 07/01/2021  
**Last Revision Date:** N/A  
**Superseded Date:** N/A  
**Version Number:** 01

# SAFETY DATA SHEET

**Product Code:** 40-105-6

**PAGE 8 OF 9**

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

## SECTION 14 TRANSPORT INFORMATION

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>14.1. UN number</b>	UN2809	UN2809	UN2809
<b>14.2. UN proper shipping name</b>	UN2809, Mercury, 8, III	Mercury	Mercury
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> 8 (6.1)	<b>IMDG:</b> 8 <b>Sub Class:</b> 6.1	<b>Air Class:</b> 8
<b>14.4. Packing group</b>	III	III	III
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: Yes ( Mercury )		
<b>14.6. Special precautions for user</b>	No further information		

## SECTION 15 REGULATORY INFORMATION

<b>Regulatory Overview</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.		
<b>Toxic Substance Control Act ( TSCA )</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.		
<b>WHMIS Classification</b>	D1A		
<b>US EPA Tier II Hazards</b>	<b>Fire:</b> No <b>Sudden Release of Pressure:</b> No <b>Reactive:</b> No <b>Immediate (Acute):</b> Yes <b>Delayed (Chronic):</b> Yes		
<b>EPCRA 311/312 Chemicals and RQs (lbs):</b>	Mercury ( 1.00 )		
<b>EPCRA 302 Extremely Hazardous:</b>	To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.		
<b>EPCRA 313 Toxic Chemicals:</b>	Mercury		



Issue Date: 07/01/2021  
Last Revision Date: N/A  
Superseded Date: N/A  
Version Number: 01

# SAFETY DATA SHEET

**Product Code: 40-105-6****PAGE 9 OF 9****Proposition 65 - Carcinogens (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**

Mercury

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**New Jersey RTK Substances (>1%):**

Mercury

**Pennsylvania RTK Substances (>1%):**

Mercury

**SECTION 16****OTHER INFORMATION**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H330 Fatal if inhaled.

H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

## END OF SDS