

## Section 1. Identification

### 1.1 Product Identifier 0415

Product Name	MERCURY (II) CHLORIDE pure
CAS Number	7487-94-7
REACH Registration No	A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.
Molecular Formula	$\text{HgCl}_2$ =271.50

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

Uses of Material	Chemical for industrial and laboratory use. Not suitable for domestic use.
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### 1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate  
Richardshaw Road  
Pudsey  
West Yorkshire  
LS28 6QW  
UNITED KINGDOM

Phone	44 0113 2362811
Fax	+44(0)113 2362703
Email	safety@viclabs.co.uk
Website	www.viclabs.co.uk

### 1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

#### Classification according to regulation 1272/2008/EC

Acute toxicity, category 2 (oral)	H300: Fatal if swallowed.
Skin corrosion/irritation, category 1B	H314: Causes severe skin burns and eye damage.
Germ cell mutagenicity, category 2	H341: Suspected of causing genetic defects.
Reproductive toxicity, category 2	H361: Suspected of damaging fertility or the unborn child.
Spec target organ tox - repeat, category 1	H372: Causes damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling according to regulation 1272/2008/EC

Signal word	Danger
Hazard Pictograms	



**Hazard Statements** Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child. Fatal if swallowed. Causes damage to organs through prolonged or repeated exposure. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.

**Precautionary Statements** Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. **IF SWALLOWED:** Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Mercury & its inorganic diva	7487-94-7	231-299-8		>99.9%	Acute Tox. 2 (O), Skin Corr. 1B, Muta. 2, Repr. 2, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. Unless contact has been slight <b>OBTAIN MEDICAL ATTENTION</b>
Skin	Wash off skin thoroughly with water. <b>OBTAIN MEDICAL ATTENTION.</b>
Inhalation	Remove from exposure. Keep warm and at rest. <b>OBTAIN MEDICAL ATTENTION.</b>
Ingestion	Wash out the patients mouth thoroughly with water. <b>OBTAIN MEDICAL ATTENTION URGENTLY.</b>
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

### 4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Nothing specified.

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

Hazards	May evolve toxic fumes if involved in a fire.
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### 5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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## Section 6. Accidental Release Measures

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

Personal Protection	Avoid breathing vapour. Evacuate area immediately. Use approved personal protective equipment. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.
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## 6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

## 6.3 Methods and material for containment and cleaning up

Major Spillage Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.

Minor Spillage Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.

## 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

# Section 7. Storage & Handling

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

## 7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

## 7.3 Specific end use(s)

See section 1.2.

# Section 8. Workplace Exposure & Personal Protection

## 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)	Short Term 15min period		
Mercury & its inorganic diva	7487-94-7	>99.9%	-	0.02 mg/m-3	-	-

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

## 8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.

Hand Protection Wear gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin.

Special Hazards No special precautions required.

# Section 9. Physical & Chemical Properties

## 9.1 Information on basic physical and chemical properties

Appearance White crystalline solid.  
Odour No specific odour.  
pH Not applicable  
Boiling Point 302°C  
Melting Point 276°C  
Flash Point Not applicable  
Upper Flammable Limit Not applicable  
Lower Flammable Limit Not applicable

Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	Not available
Water Solubility	7.4%

## 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatible Materials	Forms explosive compounds with ammonia, acetylenic compounds, azides and ethylene oxide.
10.6	Hazardous Decomposition Products	Decomposes to emit highly toxic fumes of mercury.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Contact with the solid or solution may be irritating to the eyes.
Skin	Contact with the solid or solution may be irritating to the skin. Very toxic in contact with skin.
LD50 Skin	23mg/kg Mouse
Ingestion	Toxic if swallowed. Chronic poisoning leads inflammation of mouth and gums, excessive salivation, loosening of teeth, kidney damage, muscle tremors, jerky gait, and spasms of extremities. Personality changes may occur including, depression, irritability and nervousness.
LD50 Oral	37mg/kg Rat
Inhalation	Very toxic by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Has been found to cause cancer in laboratory animals.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

12.1	Toxicity	Mercury and its compounds are highly toxic to the environment. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Add a mixture of equal amounts of slaked lime (calcium hydroxide) and flowers of sulphur wetted with enough water to form a thin paste prior to disposal via an authorised toxic waste service.
Contaminated Packaging	Use a licensed waste disposer.

## Section 14. Transport Information

14.1 UN Number	1624
14.2 Proper Shipping Name	Mercuric chloride
14.3 Transport classes	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	D/E
14.4 Packing Group	II
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Acute toxicity, category 2 (oral); Skin corrosion/irritation, category 1B; Germ cell mutagenicity, category 2; Reproductive toxicity, category 2; Spec target organ tox - repeat, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H341, H361, H300, H372, H314, H400+H410 Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child. Fatal if swallowed. Causes damage to organs through prolonged or repeated exposure. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects.
Precautionary Statements	P260, P271, P264, P270, P301+P312, P330 Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 03 February 2023

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