

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Mercury(II) chloride

Number : 000000020775

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH  
Wunstorfer Straße 40  
Seelze, 30926

For further information, please contact: : 1-800-368-0050  
+1-231-726-3171  
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or +1-703-527-3887**  
: **In Japan: +(81)-345209637**  
: (24 hours/day, 7 days/week)

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

Classification of the substance or mixture : Acute toxicity, Category 2, Oral  
Skin corrosion, Category 1B  
Serious eye damage, Category 1  
Germ cell mutagenicity, Category 2  
Reproductive toxicity, Category 2  
Specific target organ toxicity - repeated exposure, Category 1  
Short-term (acute) aquatic hazard, Category 1  
Long-term (chronic) aquatic hazard, Category 1

**GHS Label elements, including precautionary statements**

Symbol(s)

:



Signal word

: Danger

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

- Hazard statements** : Fatal if swallowed.  
Causes severe skin burns and eye damage.  
Suspected of causing genetic defects.  
Suspected of damaging fertility or the unborn child.  
Causes damage to organs through prolonged or repeated exposure.  
Very toxic to aquatic life with long lasting effects.
- Precautionary statements** : **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep only in original container.  
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
Wash skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.
- Response:**  
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/ doctor.  
Wash contaminated clothing before reuse.  
Absorb spillage to prevent material damage.  
Collect spillage.
- Storage:**  
Store locked up.  
Store in corrosive resistant container with a resistant inner liner.
- Disposal:**  
Dispose of contents/ container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**Formula : HgCl<sub>2</sub>

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Mercury(II) chloride	7487-94-7	100.00 %
Mercury(II) chloride		

**4. FIRST AID MEASURES**

- General advice : First aider needs to protect himself.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.
- Inhalation : If inhaled, remove to fresh air.  
Call a physician immediately.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes.  
Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.
- Eye contact : Protect unharmed eye.  
Rinse thoroughly with plenty of water, also under the eyelids.  
Call a physician immediately.
- Ingestion : If swallowed, rinse mouth with water (only if the person is conscious).  
Immediate medical attention is required.

**5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray jet  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder
- Specific hazards during firefighting : Fire may cause evolution of:  
Toxic metal oxide fumes  
Hydrogen chloride gas
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.  
No unprotected exposed skin areas.
- Further information : The product itself does not burn.  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

**6. ACCIDENTAL RELEASE MEASURES**

- |   |   |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Evacuate personnel to safe areas.<br>Wear personal protective equipment. Unprotected persons must be kept away.<br>Avoid dust formation.<br>Do not breathe dust.<br>Do not get in eyes, on skin, or on clothing.  |
| Environmental precautions   | : Prevent further leakage or spillage if safe to do so.<br>Clean contaminated floors and objects thoroughly while observing environmental regulations.<br>If the product contaminates rivers and lakes or drains inform respective authorities.                                   |
| Methods and materials for containment and cleaning up               | : Personal protection through wearing a tightly closed chemical protection suit and a self-contained breathing apparatus.<br>Use mechanical handling equipment.<br>Sweep up and shovel into suitable containers for disposal.<br>Dispose of in accordance with local regulations. |

**7. HANDLING AND STORAGE****Handling**

- |                               |  |
|-------------------------------|--|
| Precautions for safe handling | : Wear personal protective equipment.<br>Use product only in closed system.<br>Use only in area provided with appropriate exhaust ventilation.<br>Keep limited supplies at workplace.<br>Never return unused material to storage receptacle.<br>Plan first aid action before beginning work with this product.<br>Avoid exposure - obtain special instructions before use.<br>Do not breathe dust.<br>Do not get in eyes, on skin, or on clothing. |
|-------------------------------|--|

- |   |   |
|---|---|
| Advice on protection against fire and explosion | : Normal measures for preventive fire protection. |
|---|---|

**Storage**

- |  |  |
|--|--|
| Conditions for safe storage, including any incompatibilities | : Store in original container.<br>Keep containers tightly closed in a dry, cool and well-ventilated place.<br>Keep locked up or in an area accessible only to qualified or authorised persons. |
|--|--|

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Mercury(II) chloride Mercury(II) chloride	7487-94-7	TL : Threshold limits	0.025 mg/m3	04 2009	ISHL:Industrial Safety and Health Law OEL
Further information	:	Expressed as : as Hg			

		:	Included in the regulation but with no data values. See regulation for further details.	05 2014	Japan Society for Occupational Health:Japan Society for Occupational Health allowable concentration recommendation value
--	--	---	---	---------	--

		TL : Threshold limits	0.025 mg/m3	04 2009	ISHL:Industrial Safety and Health Law OEL
Further information	:	Expressed as : as Hg			

		:	Included in the regulation but with no data values. See regulation for further details.	05 2014	Japan Society for Occupational Health:Japan Society for Occupational Health allowable concentration recommendation value
--	--	---	---	---------	--

**Appropriate engineering controls**

Use product only in closed system.

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

Ensure adequate ventilation.

**Individual protection measures, such as personal protective equipment**

- |                          |   |
|--------------------------|---|
| Respiratory protection   | : In case of insufficient ventilation, wear suitable respiratory equipment.   |
| Hand protection          | : Wear nitrile rubber gloves to avoid contact with the skin.<br>Gloves must be inspected prior to use.<br>Replace when worn.  |
| Eye protection           | : Safety goggles  |
| Skin and body protection | : Protective suit   |
| Hygiene measures         | : Keep working clothes separately.<br>When using, do not eat, drink or smoke.<br>Separate rooms are required for washing, showering and changing clothes.<br>Written instructions for handling must be available at the work place.<br>Contaminated work clothing should not be allowed out of the workplace.<br>Regular cleaning of equipment, work area and clothing. |
| Protective measures      | : Ensure that eyewash stations and safety showers are close to the workstation location.<br>Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.<br>Avoid exposure - obtain special instructions before use.<br>Do not breathe dust.<br>Do not get in eyes, on skin, or on clothing.                      |

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- |                             |                           |
|-----------------------------|---------------------------|
| Physical state              | : solid                   |
| Colour                      | : white                   |
| Odour                       | : odourless               |
| pH                          | : Note: No data available |
| Melting point/range         | : 276 °C                  |
| Boiling point/boiling range | : 302 °C                  |

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

Flash point : Note: Not applicable

Flammability : The product is not flammable.

Lower explosion limit : Note: Not applicable

Upper explosion limit : Note: Not applicable

Vapour pressure :  
Note: No data available

Density : 5.44 g/cm<sup>3</sup> at 25 °C

Water solubility : 69 g/l at 20 °C  
  
480 g/l at 100 °C

Partition coefficient: n-octanol/water : Note: No data available

Ignition temperature : Note: Not applicable

Auto-ignition temperature : Note: not auto-flammable

Decomposition temperature : Note: Hazardous decomposition products formed under fire conditions.

Viscosity, dynamic : Note: Not applicable

Viscosity, kinematic : Note: No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : 271.5 g/mol

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

Bulk density : Note: No data available

**10. STABILITY AND REACTIVITY**

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Corrosive in contact with metals

Conditions to avoid : Protect from contamination.  
Keep away from reducing agents.Incompatible materials to avoid : Corrodes aluminium.  
Reactions with various metals.  
Copper  
Tin  
Zinc  
Alkali metalsHazardous decomposition products : Fire may cause evolution of:  
Toxic metal oxide fumes  
Hydrogen chloride gas**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Acute inhalation toxicity : Note: No data available

Acute dermal toxicity : Note: No data available

Skin irritation : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Eye irritation : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Sensitisation : Note: No data available



**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

Repeated dose toxicity	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Genotoxicity in vitro	: Note: No data available
Carcinogenicity	: Species: not specified Note: No data available
Reproductive toxicity	: Species: not specified Note: Classification based on Annex VI of regulation 1272/2008/EC.
Aspiration toxicity	: No data available
Further information	: Note: Symptoms of mercury poisoning are headache, weakness of memory, loss of appetite, nausea, shortness of breath and exhaustion.

**12. ECOLOGICAL INFORMATION****Toxicity**

Toxicity to fish	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Toxicity to daphnia and other aquatic invertebrates	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Toxicity to algae	: Note: Classification based on Annex VI of regulation 1272/2008/EC.

**Persistence and degradability**

Biodegradability	: Note: No data available
------------------	---------------------------

**Other adverse effects**

Additional ecological	: The methods for determining biodegradability are not
-----------------------	--

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

information

applicable to inorganic substances.

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

**13. DISPOSAL CONSIDERATIONS**

Disposal methods : In accordance with local and national regulations.

**14. TRANSPORT INFORMATION****ADR**

UN/ID No. : UN 1624  
Description of the goods : MERCURIC CHLORIDE  
  
Class : 6.1  
Packing group : II  
Classification Code : T5  
Hazard Identification Number : 60  
Labels : 6.1

**IATA**

UN/ID No. : UN 1624  
Description of the goods : Mercuric chloride  
Class : 6.1  
Packing group : II  
Labels : 6.1  
Packing instruction (cargo aircraft) : 676  
Packing instruction (passenger aircraft) : 669  
Packing instruction (passenger aircraft) : Y644

**IMDG**

UN/ID No. : UN 1624  
Description of the goods : MERCURIC CHLORIDE  
Class : 6.1  
Packing group : II  
Labels : 6.1  
EmS Number 1 : F-A  
EmS Number 2 : S-A

Marine pollutant : yes

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

**15. REGULATORY INFORMATION****National regulatory information**

- Vessel Safety Law : Toxic and infectious substances (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)  
JP VSL
- Aviation Law : Toxic and infectious substances (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)  
JP AVL
- Poisonous Substances - : Listed - Regulation also applies to preparations.  
Cabinet Order  
JP PS CO 17
- Substances Subject to be :  
Notified Names Threshold Concentration: 0.1 % wt 315  
JP MSDSD
- Substances Subject to be : Article 18  
Indicated Names Threshold limits: 0.3 % wt 315  
JPISHL LR
- Fire Service Law : Not relevant
- Poisonous and Deleterious : Poisonous substance not for pharmaceutical use  
Substances Control Law 17  
Listed  
Mercury(II) chloride 7487-94-7

**Other international regulations****Notification status**

- US. Toxic Substances : On TSCA Inventory  
Control Act
- Australia. Industrial Chemical : On the inventory, or in compliance with the inventory  
(Notification and  
Assessment) Act
- Canada. Canadian : All components of this product are on the Canadian DSL  
Environmental Protection Act

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

(CEPA). Domestic  
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals  
Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of  
Chemicals and Chemical  
Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing  
Chemical Substances  
(IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of  
Chemicals (NZIoC), as  
published by ERMA New  
Zealand : On the inventory, or in compliance with the inventory

**16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 3*	3
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

\* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

**Further information**

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

**Mercury(II) chloride****31005-100G**

Version 1.3

Issuing date

Revision Date 04/14/2021

Print Date 08/05/2021

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 11/13/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group