

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Date of issue: 23/05/2011 Revision date: 18/04/2023 Supersedes version of: 10/04/2018 Version: 2.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Trade name : UN1624 Mercury (II) chloride AGR Chemical name : mercury dichloride; mercuric chloride

EC Index-No. : 080-010-00-X EC-No. : 231-299-8 CAS-No. : 7487-94-7 Product code : HGCH-00A Formula : HgCl2

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

1.2.1. Relevant identified uses

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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FS

T +34 937 07 79 70 - F +34 937 909 532 info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number

: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H300 Acute toxicity (oral), Category 1 Acute toxicity (dermal), Category 1 H310 Skin corrosion/irritation, Category 1B H314 Germ cell mutagenicity, Category 2 H341 Reproductive toxicity, Category 2 H361f Specific target organ toxicity — Repeated exposure, Category 1 H372

Hazardous to the aquatic environment — Acute Hazard, Category 1 H400 (M=100)

Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H and EUH statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) : H300+H310 - Fatal if swallowed or in contact with skin.

H314 - Causes severe skin burns and eye damage.

H341 - Suspected of causing genetic defects.

H361f - Suspected of damaging fertility.

H372 - Causes damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

GHS09

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
	CAS-No.: 7487-94-7 EC-No.: 231-299-8 EC Index-No.: 080-010-00-X	≥ 99,5

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial

respiration if necessary. Call a physician immediately.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Take off immediately all contaminated clothing.

If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do.

Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe burns. Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Fatal if

swallowed.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Dry powder. Carbon dioxide. Sand.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible. Hazardous decomposition products in case of fire : Corrosive vapours.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew

with proper protection.

Emergency procedures : Stop leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local

legislation. On land, sweep or shovel into suitable containers. Collect spillage. Minimise

generation of dust.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep containers closed.

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Store in a well-ventilated place. Keep container tightly closed.

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Storage area : Store away from heat. Store in a well-ventilated place.
Special rules on packaging : Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

UN1624 Mercury (II) chloride AGR (7487-94-7)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Mercuric chloride	
IOEL TWA	0,02 mg/m³	
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU	
France - Occupational Exposure Limits		
Local name	Mercure et composés bivalents du mercure, y compris l'oxyde de mercure et le chlorure mercurique	
VME (OEL TWA)	0,02 mg/m³	
Remark	Valeurs règlementaires contraignantes; certains ou tous ces composés sont classés C1a, C1b ou C2 et M1a, M1b ou M2	
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016)	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

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8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

Respiratory protection			
Device	Filter type	Condition	Standard
	Type P3		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

Avoid contact during pregnancy/while nursing.

Other information:

Colour

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance in accordance with Article 17 or 18 of the REACH regulation. Do not eat, drink or smoke during use. Wash hands with water as a precaution.

: Colourless. white.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

: 271,5 g/mol Molecular mass Odour : odourless. Odour threshold : Not available : 276,9 °C Melting point : Not available Freezing point Boiling point : 301,9 °C Flammability : Not available **Explosive limits** : Not applicable : Not applicable Lower explosion limit Upper explosion limit : Not applicable Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : Not available : 3,2 (1,5%, 20°C) pH solution : Not available : Not applicable Viscosity, kinematic

Solubility : Water: 69 g/100cm³ 20° C

Partition coefficient n-octanol/water (Log Kow)

Vapour pressure

Vapour pressure at 50 °C

Density

Relative density

Relative vapour density at 20 °C

Particle size

Solution

Not available

5,4 g/cm³ 20° C

Not available

Not available

Not available

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable in use and storage conditions as recommended in item 7.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Heavy metals.

10.4. Conditions to avoid

High temperature. Overheating. Protect from sunlight.

10.5. Incompatible materials

Bases. Acids. Sulfides (total sum of dimethyl disulfide, dimethyl sulfide and methyl mercaptan).

10.6. Hazardous decomposition products

Toxic vapours are released.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Fatal if swallowed.

Acute toxicity (dermal) : Fatal in contact with skin.

Acute toxicity (inhalation) : Not classified

UN1624 Mercury (II) chloride AGR (7487-94-7)

ONTOZA METCUTY (II) CHIOTIGE AGN (1401-54-1)		
LD50 oral rat	0,5 mg/kg	
Skin corrosion/irritation	: Causes severe skin burns. pH: 3,2 (1,5%, 20°C)	
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: 3,2 (1,5%, 20°C)	
Respiratory or skin sensitisation	: Not classified	

Germ cell mutagenicity : Suspected of causing genetic defects.

Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility.

STOT-single exposure : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Highly toxic to aquatic organisms.

Hazardous to the aquatic environment, short-term : Very toxic to aquatic life.

(acute)

Hazardous to the aquatic environment, long-term : Very toxic to aquatic life with long lasting effects.

(chronic)

UN1624 Mercury (II) chloride AGR (7487-94-7)	
LC50 - Fish [1]	0,214 mg/kg
EC50 - Daphnia [1]	0,003 mg/l
EC50 72h - Algae [1]	0,3 mg/l

12.2. Persistence and degradability

UN1624 Mercury (II) chloride AGR (7487-94-7)	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Must follow special treatment according to local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

 UN-No. (ADR)
 : UN 1624

 UN-No. (IMDG)
 : UN 1624

 UN-No. (IATA)
 : UN 1624

 UN-No. (ADN)
 : UN 1624

 UN-No. (RID)
 : UN 1624

14.2. UN proper shipping name

Proper Shipping Name (ADR) : MERCURIC CHLORIDE Proper Shipping Name (IMDG) : MERCURIC CHLORIDE

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Proper Shipping Name (IATA) : Mercuric chloride
Proper Shipping Name (ADN) : MERCURIC CHLORIDE
Proper Shipping Name (RID) : MERCURIC CHLORIDE

Transport document description (ADR) : UN 1624 MERCURIC CHLORIDE, 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG) : UN 1624 MERCURIC CHLORIDE, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY

HAZARDOUS

Transport document description (IATA) : UN 1624 Mercuric chloride, 6.1, II, ENVIRONMENTALLY HAZARDOUS

Transport document description (ADN) : UN 1624 MERCURIC CHLORIDE, 6.1, II, ENVIRONMENTALLY HAZARDOUS

Transport document description (RID) : UN 1624 MERCURIC CHLORIDE, 6.1, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 6.1
Danger labels (ADR) : 6.1



IMDG

Transport hazard class(es) (IMDG) : 6.1
Danger labels (IMDG) : 6.1



IATA

Transport hazard class(es) (IATA) : 6.1
Danger labels (IATA) : 6.1



ADN

Transport hazard class(es) (ADN) : 6.1 Danger labels (ADN) : 6.1

: 6. :



RID

Transport hazard class(es) (RID) : 6.1
Danger labels (RID) : 6.1



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

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14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : T5
Limited quantities (ADR) : 500g
Excepted quantities (ADR) : E4
Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : MP10
Portable tank and bulk container instructions (ADR) : T3
Portable tank and bulk container special provisions : TP33

(ADR)

Tank code (ADR) : SGAH
Tank special provisions (ADR) : TU15, TE19

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Special provisions for carriage - Packages (ADR) : V11

Special provisions for carriage - Loading, unloading : CV13, CV28

and handling (ADR)

Special provisions for carriage - Operation (ADR) : S9, S19 Hazard identification number (Kemler No.) : 60

Orange plates :

60 1624

Tunnel restriction code (ADR) : D/E EAC code : 2X

Transport by sea

Limited quantities (IMDG) : 500 g Excepted quantities (IMDG) E4 : P002 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) : B2, B4 Tank instructions (IMDG) : T3 Tank special provisions (IMDG) : TP33 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-A Stowage category (IMDG) : A

Properties and observations (IMDG) : White crystals or powder. Soluble in water. Toxic if swallowed, by skin contact or by dust

inhalation.

Air transport

: E4 PCA Excepted quantities (IATA) PCA Limited quantities (IATA) : Y644 : 1kg PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) : 669 PCA max net quantity (IATA) 25kg CAO packing instructions (IATA) : 676 CAO max net quantity (IATA) 100kg ERG code (IATA) 6L

Inland waterway transport

Classification code (ADN) : T5
Special provisions (ADN) : 802
Limited quantities (ADN) : 500 g

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Excepted quantities (ADN) : E4
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 2

Rail transport

Classification code (RID) : T5
Limited quantities (RID) : 500g
Excepted quantities (RID) : E4
Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4
Mixed packing provisions (RID) : MP10
Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special provisions : TP33

(RID)

Tank codes for RID tanks (RID) : SGAH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11

Special provisions for carriage - Loading, unloading : CW13, CW28, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE9
Hazard identification number (RID) : 60

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

REACH Annex XIV (Authorisation List)

UN1624 Mercury (II) chloride AGR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN1624 Mercury (II) chloride AGR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN1624 Mercury (II) chloride AGR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

UN1624 Mercury (II) chloride AGR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Mercury (II) chloride is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

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15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 2	Occupational diseases caused by mercury and its compounds

Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID

Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic

requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the

shipping route (according to § 10).

Hazardous Incident Ordinance (12. BlmSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen The substance is not listed

NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen - Borstvoeding NIET-limitatieve lijst van voor de voortplanting : Mercury (II) chloride is listed

giftige stoffen - Vruchtbaarheid NIET-limitatieve lijst van voor de voortplanting : The substance is not listed

giftige stoffen - Ontwikkeling

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H341	Suspected of causing genetic defects.
H361f	Suspected of damaging fertility.
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.
Muta. 2	Germ cell mutagenicity, Category 2

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Full text of H- and EUH-statements:	
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.