according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470 date of compilation: 2016-09-07 Version: 3.0 en Revision: 2024-03-02

Replaces version of: 2022-07-14

Version: (2)

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

Product identifier 1.1

Identification of the substance Mercury(II) oxide ≥99 %, p.a., red

Article number 4470

Registration number (REACH) It is not required to list the identified uses be-

cause the substance is not subject to registration

according to REACH (< 1 t/a).

Index number in CLP Annex VI 080-002-00-6 EC number 244-654-7 CAS number 21908-53-2

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

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

sicherheit@carlroth.de

Uses advised against: Do not use for squirting or spraying. Do not use

for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

Competent person responsible for the safety data Department Health, Safety and Environment

sheet:

1.4

Emergency telephone number

e-mail (competent person):

Street **Postal Telephone** Website **Name** code/city **National Poisons Information** Dublin 9 **Beaumont Road** +353 1 809 2166 https:// www.poisons.ie/ Centre Beaumont Hospital

Ireland (en) Page 1 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.10	Acute toxicity (oral)	2	Acute Tox. 2	H300
3.1D	Acute toxicity (dermal)	1	Acute Tox. 1	H310
3.1I	Acute toxicity (inhal.)	2	Acute Tox. 2	H330
3.9	Specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
4.1A	Hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	Hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of abbreviations: see SECTION 16

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.

2.2 Label elements

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

Signal word Danger

Pictograms

GHS06, GHS08, GHS09







Hazard statements

H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled

May cause damage to organs through prolonged or repeated exposure

H410 Very toxic to aquatic life with long lasting effects

Precautionary statements

Precautionary statements - prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements - response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

P302+P352 IF ON SKIN: Wash with plenty of soap and water

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

P310 Immediately call a POISON CENTER/doctor

Precautionary statements - storage

P405 Store locked up

Ireland (en) Page 2 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Symbol(s)







H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P302+P352

IF ON SKIN: Wash with plenty of soap and water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P405 Store locked up.

2.3 Other hazards

Results of PBT and vPvB assessment

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

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

SECTION 3: Composition/information on ingredients

3.1 **Substances**

Name of substance Mercury(II) oxide

Molecular formula HgO

Molar mass 216,6 ^g/_{mol} CAS No 21908-53-2 EC No 244-654-7 Index No 080-002-00-6

Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
STOT RE 2; H373: C ≥ 0,1 %	-	18 ^{mg} / _{kg} 5 ^{mg} / _{kg} >0,05 ^{mg} / _l /4h	oral dermal inhalation: dust/ mist

SECTION 4: First aid measures

4.1 **Description of first aid measures**



General notes

Take off immediately all contaminated clothing. Self-protection of the first aider.

Following inhalation

Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

Ireland (en) Page 3 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Following skin contact

After contact with skin, wash immediately with plenty of water.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Nausea, Vomiting, Diarrhoea, Gastrointestinal complaints, Irritability, Lack of coordination, Blood pressure drop, Circulatory collapse, Cardiac arrhythmias, Renal impairment, Effects on special senses (such as sight, hearing and sense of smell), Impaired memory function

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media



Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water, foam, dry extinguishing powder, ABC-powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Non-combustible.

Hazardous combustion products

In case of fire may be liberated: Mercury (Hg)

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. Wear full chemical protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures



For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe dust.

Ireland (en) Page 4 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains. Take up mechanically.

Advice on how to clean up a spill

Take up mechanically. Control of dust.

Other information relating to spills and releases

Place in appropriate containers for disposal.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use extractor hood (laboratory). Handle and open container with care. Clear contaminated areas thoroughly. Measures to prevent aerosol and dust generation.

Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

When using do not eat or drink. Thorough skin-cleansing after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Protect against external exposure, such as

direct light irradiation

Consideration of other advice:

Store locked up.

Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

7.3 Specific end use(s)

No information available.

Ireland (en) Page 5 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
EU	mercury compounds, divalent inorganic	21908-53-2	IOELV	0,02			Hg	2022/431/ EU
IE	dusts, non-specific		OELV	10			i	S.I. No. 619 of 2001
IE	dusts, non-specific		OELV	4			r	S.I. No. 619 of 2001
IE	mercury compounds, divalent inorganic	21908-53-2	OELV	0,02			Hg	S.I. No. 619 of 2001

Notation

Ceilina-C Ceiling value is a limit value above which exposure should not occur

Calculated as Hg (mercury) Hg

Inhalable fraction Respirable fraction

STEL

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 TWA

hours time-weighted average (unless otherwise specified)

8.2 **Exposure controls**

Individual protection measures (personal protective equipment)

Eye/face protection





Use safety goggle with side protection.

Skin protection





hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

type of material

NBR (Nitrile rubber)

Page 6 / 18 Ireland (en)

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

material thickness

>0,11 mm

breakthrough times of the glove material

>480 minutes (permeation: level 6)

other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection





Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P3 (filters at least 99,95 % of airborne particles, colour code: White). Type: Hg-P3 (combined filters against mercury vapour and particles, colour code: Red/White).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state solid
Colour red

Odour odourless

Melting point/freezing point >400 °C (slow decomposition)

Boiling point or initial boiling point and boiling

range

not determined

Flammability non-combustible
Lower and upper explosion limit not determined
Flash point not applicable
Auto-ignition temperature not determined

Decomposition temperature >400 °C

pH (value) not applicable Kinematic viscosity not relevant

Solubility(ies)

Water solubility (practically insoluble)

Partition coefficient

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

Vapour pressure not determined

Ireland (en) Page 7 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Density and/or relative density

Density 11,14 ^g/_{cm³} at 20 °C

Relative vapour density Information on this property is not available.

Bulk density $\sim 2.000 \, \mathrm{kg/m^3}$

Particle characteristics No data available.

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics: There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

May cause decomposition by long-term light influence.

10.3 Possibility of hazardous reactions

Dangerous/dangerous reactions with: Alkali metals, Alcohols, Reducing agents, Sulphur trioxide, Hydrogen sulphide (H₂S), Strong acid

10.4 Conditions to avoid

Direct light irradiation. UV-radiation/sunlight. Keep away from heat. Decompostion takes place from temperatures above: >400 °C.

10.5 Incompatible materials

Light metals

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Fatal if swallowed. Fatal in contact with skin. Fatal if inhaled.

Ireland (en) Page 8 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	18 ^{mg} / _{kg}	rat		TOXNET
dermal	LD50	315 ^{mg} / _{kg}	rat		TOXNET

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

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

May cause 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

If swallowed

Data are not available.

• If in eyes

Data are not available.

If inhaled

Data are not available.

• If on skin

Data are not available.

Other information

Other adverse effects: Central nervous system, Liver and kidney damage, Nausea, Vomiting, Abdominal pain, Diarrhoea, Circulatory collapse, Blood pressure drop, Cardiac arrhythmias, Agitation, Irritability, Effects on special senses (such as sight, hearing and sense of smell), Impaired memory function

11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.

Ireland (en) Page 9 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

11.3 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

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

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Properties of waste which render it hazardous

HP 5 specific target organ toxicity (STOT)/aspiration toxicity

HP 6 acute toxicity

HP 14 ecotoxic

Ireland (en) Page 10 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADRRID UN 1641 IMDG-Code UN 1641 UN 1641 UN 1641

14.2 UN proper shipping name

ADRRID MERCURY OXIDE IMDG-Code MERCURY OXIDE ICAO-TI Mercury oxide

14.3 Transport hazard class(es)

ADRRID 6.1 IMDG-Code 6.1 ICAO-TI 6.1

14.4 Packing group

ADRRID II
IMDG-Code II
ICAO-TI II

14.5 Environmental hazards hazardous to the aquatic environment

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name MERCURY OXIDE

Particulars in the transport document UN1641, MERCURY OXIDE, 6.1, II, (D/E), environ-

mentally hazardous

Classification code T5

Danger label(s) 6.1, "Fish and tree"



Environmental hazards yes (hazardous to the aquatic environment)

Ireland (en) Page 11 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Special provisions (SP) 802(ADN)

Excepted quantities (EQ) E4

Limited quantities (LQ) 500 g

2 Transport category (TC) D/E Tunnel restriction code (TRC)

Hazard identification No 60

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code **T5**

6.1, "Fish and tree" Danger label(s)

Environmental hazards Yes

Hazardous to water

Special provisions (SP) 802(ADN)

Excepted quantities (EQ) E4 Limited quantities (LQ) 500 g **Transport category (TC)** 2

Hazard identification No 60

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name **MERCURY OXIDE**

Particulars in the shipper's declaration UN1641, MERCURY OXIDE, 6.1, II, MARINE POL-

LUTANT

Marine pollutant yes (P) (hazardous to the aquatic environment)

Danger label(s) 6.1, "Fish and tree"

Special provisions (SP)

Excepted quantities (EQ) E4 Limited quantities (LQ) 500 g **EmS** F-A, S-A

Stowage category

7 - Heavy metals and their salts Segregation group

11 - Mercury and mercury compounds

Ireland (en) Page 12 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Mercury oxide

Particulars in the shipper's declaration UN1641, Mercury oxide, 6.1, II

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 6.1

Excepted quantities (EQ) E4

Limited quantities (LQ) 1 kg

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)

Name of substance	Name acc. to inventory	CAS No	Restriction	No
Mercury(II) oxide	mercury compounds		R18	18

Legend

R18 Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use:

(a) to prevent the fouling by micro-organisms, plants or animals of:

the hulls of boats,

- cages, floats, nets and any other appliances or equipment used for fish or shellfish farming,

any totally or partly submerged appliances or equipment;

(b) In the preservation of wood;
(c) in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture;
(d) in the treatment of industrial waters, irrespective of their use.

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not listed.

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	plication of lower	(tonnes) for the ap- and upper-tier re- ments	Notes
H1	acute toxic (cat. 1)	5	20	40)

Notation

40) Category 1, all exposure routes

Deco-Paint Directive

Ireland (en) Page 13 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

VOC content	0 %
VOC content	0 g/l

Industrial Emissions Directive (IED)

VOC content	0 %
VOC content	0 ^g / _l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Water Framework Directive (WFD)

List of pollutants (WFD)

Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Mercury(II) oxide	mercury compounds		b)	HAZ
Mercury(II) oxide	mercury compounds	7439-97-6	c)	
Mercury(II) oxide	Substances and preparations, or the breakdown products of such, which have been proved to pos- sess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine- related functions in or via the aquatic environment		a)	
Mercury(II) oxide	Metals and their compounds		a)	

Legend

a) b)

Indicative list of the main pollutants List of priority substances in the field of water policy Environmental Quality Standards for Priority Substances and certain other pollutants Identified as priority hazardous substance c) HAZ

Regulation on the marketing and use of explosives precursors

not listed

Regulation on drug precursors

not listed

Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

chemicals subject to the international prior informed consent (PIC) procedure (the 'PIC procedure').

Ireland (en) Page 14 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Name of substance	Name acc. to inventory	CAS No	Wt%	Category / subcat- egory	Use limita- tion
Mercury(II) oxide	mercury compounds		100	p(1) p(2)	b b
Mercury(II) oxide	mercury compounds	21908- 53-2	100	р	
Mercury(II) oxide	mercury compounds		100	р	

Legend

b Use limitation: ban (for the sub-category or sub-categories concerned) according to Union legislation

Category: p - pesticides

Sub-category: p(1) - pesticide in the group of plant protection products Sub-category: p(2) - other pesticide including biocides p(1) p(2)

Regulation on persistent organic pollutants (POP)

not listed

Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

Legend

AIIC CSCL-ENCS

DSL ECSI IECSC INSQ

Australian Inventory of Industrial Chemicals
List of Existing and New Chemical Substances (CSCL-ENCS)
Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China
National Inventory of Chemical Substances
Korea Existing Chemicals Inventory
National Chemical Inventory
New Zealand Inventory of Chemicals
Philippine Inventory of Chemicals and Chemical Substances (PICCS)
Taiwan Chemical Substance Inventory

Taiwan Chemical Substance Inventory **Toxic Substance Control Act**

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

Ireland (en) Page 15 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: T5	yes
14.8		Danger label(s): 6.1, "Fish and tree"	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Environmental hazards: Yes Hazardous to water	yes
14.8		Special provisions (SP): 802(ADN)	yes
14.8		Excepted quantities (EQ): E4	yes
14.8		Limited quantities (LQ): 500 g	yes
14.8		Transport category (TC): 2	yes
14.8		Hazard identification No: 60	yes
15.1	VOC content: 0 % , 0 ^g / _l	VOC content: 0 %	yes
15.1		VOC content: 0 ^g / _l	yes
15.1		Regulation concerning the export and import of hazardous chemicals (PIC): change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2022/431/EU	Directive (EU) 2022/431 of the European Parliament and of the Council of 9 March 2022 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate

Ireland (en) Page 16 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Abbr.	Descriptions of used abbreviations
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
S.I. No. 619 of 2001	Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001
STEL	Short-term exposure limit
SVHC	Substance of Very High Concern
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Ireland (en) Page 17 / 18

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



Mercury(II) oxide ≥99 %, p.a., red

article number: 4470

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Disclaimer

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

Ireland (en) Page 18 / 18