

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Lead(II) oxide

Creation date 18th October 2021
Revision date Version 1.0

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

- 1.1. Product identifier**
Substance / mixture Lead(II) oxide
Chemical name substance
CAS number lead monoxide
EC (EINECS) number 1317-36-8
215-267-0

1.2. Relevant identified uses of the substance or mixture and uses advised against
Substance's intended use

Laboratory chemicals, Manufacture of substances

Substance uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name

Protolab Stanisław Staniuk



Address

Owocowa 4-8, Słupsk, 76-200

Poland

Phone

+48 794 341 322

E-mail

protolab@protolab.pl

Competent person responsible for the safety data sheet

Name

Protolab Stanisław Staniuk

E-mail

protolab@protolab.pl

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

Acute Tox. 4, H302+H332

Carc. 2, H351

Repr. 1A, H360D

Lact., H362

STOT RE 1, H372 (blood, kidneys)

Aquatic Acute 1, H400 (multiplying factor = 10)

Aquatic Chronic 1, H410 (multiplying factor = 1)

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse effects on human health and the environment

Suspected of causing cancer. May cause harm to breast-fed children. May damage the unborn child. Causes damage to the blood, the kidneys through prolonged or repeated exposure. Harmful if swallowed or if inhaled. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram



Signal word

Danger

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

Hazard statements

- H351 Suspected of causing cancer.
H360D May damage the unborn child.
H362 May cause harm to breast-fed children.
H372 Causes damage to the blood, the kidneys through prolonged or repeated exposure if swallowed or if inhaled.
H410 Very toxic to aquatic life with long lasting effects.
H302+H332 Harmful if swallowed or if inhaled.

Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P263 Avoid contact during pregnancy and while nursing.
P273 Avoid release to the environment.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTRE/doctor if you feel unwell.

2.3. Other hazards

Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

The substance specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 1317-36-8 EC: 215-267-0	substance main component lead monoxide	<100	Acute Tox. 4, H302+H332 Repr. 1A, H360Df STOT RE 2, H373 (central nervous system) Aquatic Chronic 1, H410 (M=1) Specific concentration limit: Repr. 2, H361: C ≥ 2,5 % STOT RE 2, H373 (central nervous system): C ≥ 0,5 %	1, 2

Notes

- Substance of very high concern - SVHC.
- The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

If swallowed

Provide medical treatment. For persons with no symptoms, call the Toxicological Information Centre to decide about the need of medical treatment; provide information about the substances or composition of the product from the original packaging or the Safety Data Sheet of the product.

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

If inhaled

Cough, headache.

If on skin

Not expected.

If in eyes

Not expected.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale dust. Prevent contact with skin and eyes.

6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not inhale dust. Prevent contact with skin and eyes. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Avoid contact during pregnancy and while nursing. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep container tightly closed.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Protolab
Tworzymy unikalne rozwiązania

Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

Storage class

6,1D - Non-combustible toxic substances or substances with chronic effect

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

It is not needed.

Skin protection

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

Respiratory protection

Use a mask with anti-dust filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation.

Thermal hazard

Data not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	solid
Colour	light yellow
Odour	without fragrance
Melting point/freezing point	886 °C
Boiling point or initial boiling point and boiling range	>600 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	8-9 (10% solution at 20 °C)
Kinematic viscosity	data not available
Solubility in water	partially soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	9,53 g/cm ³ at 20 °C
Relative density	9,96
Relative vapour density	data not available
Particle characteristics	data not available
Form	

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The substance is non-flammable.

10.2. Chemical stability

The product is stable under normal conditions.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

10.3. Possibility of hazardous reactions

Risk of explosion with:

Aluminum

Powdered metals

performic acid

perchloric acid

glycerol

Violent reactions possible with:

carbides

Sulfur oxides

hydrogen peroxide

halogens

alkenes

Risk of ignition or formation of inflammable gases or vapours with:

Boron

Alkali metals

hydrides

silanes

vegetable/animal oils

Fluorine

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the substance.

Acute toxicity

Harmful if swallowed or if inhaled.

Lead(II) oxide

Route of exposure	Parameter	Method	Value	Time of exposure	Species	Sex
Dermal	LD ₅₀	OECD 402	>2000 mg/kg		Rat (Rattus norvegicus)	F/M

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

Reproductive toxicity

May cause harm to breast-fed children. May damage the unborn child.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Causes damage to the blood, the kidneys through prolonged or repeated exposure.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

RTECS: OG1750000

Lead salts have been reported to cross the placenta and to induce embryo- and fetomortality. They also have teratogenic effect in some animal species. No teratogenic effects have been reported with exposure to organometallic lead compounds. Adverse effects of lead on human reproduction, embryonic and fetal development, and postnatal (e.g., mental) development have been reported. Excessive exposure can affect blood, nervous, and digestive systems. The synthesis of hemoglobin is inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result. Additional symptoms of overexposure include: joint and muscle pain, weakness of the extensor muscles (frequently the hand and wrist), headache, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death., Anorexia., Vomiting, Convulsions, Nausea, Headache, Weakness, anemia
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Very toxic to aquatic life with long lasting effects.

Lead(II) oxide

Parameter	Value	Time of exposure	Species	Environment
LC ₅₀	0.1 mg/l	96 hour	Fishes (Oncorhynchus mykiss)	
EC ₅₀	0.13 mg/l	48 hour	Invertebrates (Daphnia magna)	
EC ₁₀	0.0294 mg/l	96 hour	Algae (Skelettonema costatum)	

12.2. Persistence and degradability

Result: - According to the results of tests of biodegradability this product is not readily biodegradable.

12.3. Bioaccumulative potential

Data not available.

12.4. Mobility in soil

Data not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

12.7. Other adverse effects

Data not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 2291

14.2. UN proper shipping name

LEAD COMPOUND, SOLUBLE, N.O.S.

14.3. Transport hazard class(es)

6.1 Toxic substances

14.4. Packing group

III - substances presenting low danger

14.5. Environmental hazards

ADR/RID: yes

IMDG: yes

IATA: no

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.

UN number

Classification code

Safety signs

60

2291

T5

6.1+hazardous for the environment



Air transport - ICAO/IATA

Packaging instructions passenger

670

Cargo packaging instructions

677

Marine transport - IMDG

EmS (emergency plan)

F-A, S-A

MFAG

110

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

lead monoxide

Restriction	Conditions of restriction
63	<p>1. Shall not be placed on the market or used in any individual part of jewellery articles if the concentration of lead (expressed as metal) in such a part is equal to or greater than 0,05 % by weight.</p> <p>2. For the purposes of paragraph 1:</p> <p>(i) "jewellery articles" shall include jewellery and imitation jewellery articles and hair accessories, including:</p> <p>(a) bracelets, necklaces and rings;</p> <p>(b) piercing jewellery;</p> <p>(c) wrist watches and wrist-wear;</p> <p>(d) brooches and cufflinks;</p> <p>(ii) "any individual part" shall include the materials from which the jewellery is made, as well as the individual components of the jewellery articles.</p> <p>3. Paragraph 1 shall also apply to individual parts when placed on the market or used for jewellery-making.</p> <p>4. By way of derogation, paragraph 1 shall not apply to:</p> <p>(a) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Council Directive 69/493/EEC (*);</p> <p>(b) internal components of watch timepieces inaccessible to consumers;</p> <p>(c) non-synthetic or reconstructed precious and semiprecious stones (CN code 7103, as established by Regulation (EEC) No 2658/87), unless they have been treated with lead or its compounds or mixtures containing these substances;</p> <p>(d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of minerals melted at a temperature of at least 500 °C.</p> <p>5. By way of derogation, paragraph 1 shall not apply to jewellery articles placed on the market for the first time before 9 October 2013 and jewellery articles produced before 10 December 1961.</p> <p>6. By 9 October 2017, the Commission shall re-evaluate paragraphs 1 to 5 of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 1 and, if appropriate, modify this entry accordingly.</p> <p>7. Shall not be placed on the market or used in articles supplied to the general public, if the concentration of lead (expressed as metal) in those articles or accessible parts thereof is equal to or greater than 0,05 % by weight, and those articles or accessible parts thereof may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children.</p> <p>That limit shall not apply where it can be demonstrated that the rate of lead release from such an article or any such accessible part of an article, whether coated or uncoated, does not exceed 0,05 µg/cm² per hour (equivalent to 0,05 µg/g/h), and, for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the article.</p> <p>For the purposes of this paragraph, it is considered that an article or accessible part of an article may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size.</p>

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

lead monoxide

Restriction	Conditions of restriction
	<p>8. By way of derogation, paragraph 7 shall not apply to:</p> <ul style="list-style-type: none"> (a) jewellery articles covered by paragraph 1; (b) crystal glass as defined in Annex I (categories 1, 2, 3 and 4) to Directive 69/493/EEC; (c) non-synthetic or reconstructed precious and semi-precious stones (CN code 7103 as established by Regulation (EEC) No 2658/87) unless they have been treated with lead or its compounds or mixtures containing these substances; (d) enamels, defined as vitrifiable mixtures resulting from the fusion, vitrification or sintering of mineral melted at a temperature of at least 500 °C; (e) keys and locks, including padlocks; (f) musical instruments; (g) articles and parts of articles comprising brass alloys, if the concentration of lead (expressed as metal) in the brass alloy does not exceed 0,5 % by weight; (h) the tips of writing instruments; (i) religious articles; (j) portable zinc-carbon batteries and button cell batteries; (k) articles within the scope of: <ul style="list-style-type: none"> (i) Directive 94/62/EC; (ii) Regulation (EC) No 1935/2004; (iii) Directive 2009/48/EC of the European Parliament and of the Council (*); (iv) Directive 2011/65/EU of the European Parliament and of the Council (**) <p>9. By 1 July 2019, the Commission shall re-evaluate paragraphs 7 and 8(e), (f), (i) and (j) of this entry in the light of new scientific information, including the availability of alternatives and the migration of lead from the articles referred to in paragraph 7, including the requirement on coating integrity, and, if appropriate, modify this entry accordingly.</p> <p>10. By way of derogation paragraph 7 shall not apply to articles placed on the market for the first time before 1 June 2016.</p> <p>11. Doing either of the following acts after 15 February 2023 in or within 100 metres of wetlands is prohibited:</p> <ul style="list-style-type: none"> (a) discharging gunshot containing a concentration of lead (expressed as metal) equal to or greater than 1 % by weight; (b) carrying any such gunshot where this occurs while out wetland shooting or as part of going wetland shooting. <p>For the purposes of the first subparagraph:</p> <ul style="list-style-type: none"> (a) "within 100 metres of wetlands" means within 100 metres outward from any outer boundary point of a wetland; (b) "wetland shooting" means shooting in or within 100 metres of wetlands; (c) if a person is found carrying gunshot in or within 100 metres of wetlands while out shooting or as part of going shooting, the shooting concerned shall be presumed to be wetland shooting unless that person can demonstrate that it was some other type of shooting. <p>The restriction laid down in the first subparagraph shall not apply in a Member State if that Member State notifies the Commission in accordance with paragraph 12 that it intends to make use of the option granted by that paragraph.</p> <p>12. If at least 20 % in total of the territory, excluding the territorial waters, of a Member State are wetlands, that Member State may, in place of the restriction laid down in the first subparagraph of paragraph 11, prohibit the following acts throughout the whole of its territory from 15 February 2024:</p> <ul style="list-style-type: none"> (a) the placing on the market of gunshot containing a concentration of lead (expressed as metal) equal to or greater than 1 % by weight; (b) the discharging of any such gunshot; (c) carrying any such gunshot while out shooting or as part of going shooting. <p>Any Member State intending to make use of the option granted by the first subparagraph shall notify the Commission of this intention by 15 August 2021. The Member State shall communicate the text of the national measures adopted by it to the Commission without delay and in any event by 15 August 2023. The Commission shall make publicly available without delay any such notices of</p>

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Lead(II) oxide

Creation date 18th October 2021

Revision date

Version

1.0

lead monoxide

Restriction	Conditions of restriction
	<p>intention and texts of national measures received by it.</p> <p>13. For the purposes of paragraphs 11 and 12:</p> <p>(a) "wetlands" means areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6 metres;</p> <p>(b) "gunshot" means pellets used or intended for use in a single charge or cartridge in a shotgun;</p> <p>(c) "shotgun" means a smooth-bore gun, excluding airguns;</p> <p>(d) "shooting" means any shooting with a shotgun;</p> <p>(e) "carrying" means any carrying on the person or carrying or transporting by any other means;</p> <p>(f) in determining whether a person found with gunshot is carrying gunshot "as part of going shooting":</p> <p>(i) regard shall be had to all the circumstances of the case;</p> <p>(ii) the person found with the gunshot need not necessarily be the same person as the person shooting.</p> <p>14. Member States may maintain national provisions for protection of the environment or human health in force on 15 February 2021 and restricting lead in gunshot more severely than provided for in paragraph 11.</p> <p>The Member State shall communicate the text of those national provisions to the Commission without delay. The Commission shall make publicly available without delay any such texts of national provisions received by it.</p>

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H361	Suspected of damaging fertility or the unborn child.
H362	May cause harm to breast-fed children.
H372	Causes damage to the blood, the kidneys through prolonged or repeated exposure.
H373	May cause damage to the central nervous system through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H302+H332	Harmful if swallowed or if inhaled.

Guidelines for safe handling used in the safety data sheet

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P263	Avoid contact during pregnancy and while nursing.
P273	Avoid release to the environment.
P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/attention.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Lead(II) oxide

Creation date	18th October 2021	Version	1.0
Revision date			

CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Carc.	Carcinogenicity
Lact.	Lactation
Repr.	Reproductive toxicity
STOT RE	Specific target organ toxicity - repeated exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

More information

Classification procedure - calculation method.

Statement

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended



Protolab
Tworzymy unikalne rozwiązania

Lead(II) oxide

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The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.