



# LEAD DIOXIDE, EXTRA PURE

**SECTION 1: PRODUCT IDENTIFICATION** 

Product Name: LEAD DIOXIDE, EXTRA PURE

Product Code: 1946 CAS#: 1309-60-0 Chemical Formula: O<sub>2</sub>Pb

Molecular Formula: 239.19 g/mol

Formula Weight: NA

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS** 

Substances Synonyms: Lead Peroxide, Lead (su)peroxide

Formula: O<sub>2</sub>Pb

Molecular Weight: 239.19 g/mol

CAS-No.: 1309-60-0

**SECTION 3: HAZARDS IDENTIFICATION** 

# Classification of the substance or mixture

Oxidizing solids, (Category 3) H272: May intensify fire; oxidizer.

Acute toxicity, (Category 4) H302: Harmful if swallowed. Acute toxicity, (Category 4) H332: Harmful if inhaled.

Reproductive toxicity, (Category 1A) H360Df: May damage the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - repeated exposure, (Category 2), Blood, Central nervous system, Immune system, Kidney

H373: May cause damage to organs through prolonged or repeated exposure.

Short-term (acute) aquatic hazard, (Category 1) H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, (Category 1) H410: Very toxic to aquatic life with long lasting effects.

### Other hazards:

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

**Ecological information:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Toxicological information:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# **SECTION 4: FIRST AID MEASURES**

# **Description of first aid measures**

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact: Flush eyes with water as a precaution.

**Skin Contact:** Wash off with soap and plenty of water. Consult a physician.

Serious Skin Contact: Not available

**Serious Inhalation:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician **If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Serious Ingestion: Not available

Most important symptoms and effects, both acute and delay no data available

Indication of any immediate medical attention and special treatment needed no data available







# **SECTION 5: FIRE AND EXPLOSION DATA**

#### **Extinguishing media**

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture no data available

**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid dust formation. Avoid breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

# **SECTION 7: HANDLING AND STORAGE**

Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage, including any incompatibilities** Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s) A part from the uses no other specific uses are stipulated.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

# **Exposure controls**

Personal protective equipment

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

**Eye/face protection** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection** Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state and appearance Form** : Dark brown colored powder.

Odour : Not available : Not available **Taste Molecular Weight** : Not available : Not available Colour рΗ : Not available **Boiling Point** : Not available : Not available **Melting Point Critical Temperature** : Not available **Specific Density** : Not Available **Vapor Pressure** : Not Available **Vapor Density** : Not available





#### **MATERIAL SAFETY DATA SHEET**

Volatility: Not AvailableOdor Threshold: Not AvailableWater/Oil Dist. Coeff.: Not AvailableIonicity (in Water): Not AvailableDispersion Properties: Not AvailableSolubility: Not available

#### **SECTION 10: STABILITY AND REACTIVITY DATA**

# Reactivity no data available

Chemical stability Stable under recommended storage conditions.

**Possibility of hazardous reactions** Exothermic reaction with: Aluminum, carbides, glycerol, Metals, Reducing agents, nonmetals, semimetals and Sulfides, oxidisable substances.

Risk of explosion with: Boron, Alkali, metals organic, nitro compounds, performic acid, hydrochloric acid, hydrogen peroxide, combustible substances, Amines and hydrides

Risk of ignition or formation of inflammable gases or vapours with: Strong acids, hydrogen sulphide, sulfur sulfuric acid and sulphur dioxide

Conditions to avoid no information available

Incompatible materials no data available

Hazardous decomposition products no data available

Other decomposition products no data available

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

# Information on toxicological effects

# Acute toxicity:

Acute toxicity estimate Oral - 500,1 mg/kg

Oral: No data available

Acute toxicity estimate Inhalation - 4 h - 1,6 mg/l - dust/mist

Dermal: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available Respiratory or skin sensitization: No data available

**Germ cell mutagenicity:** Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

Remarks: (National Toxicology Program)

Carcinogenicity: No data available

Reproductive toxicity: May damage the unborn child. Positive evidence from human epidemiological studies. Suspected of

damaging fertility.

Specific target organ toxicity: No data available

Specific target organ toxicity - repeated exposure: May cause damage to organs through prolonged or repeated

exposure. - Blood, Central nervous system, Immune system, Kidney

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Aspiration hazard: No data available

# **SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity** no data available **Persistence and degradability** 





#### **MATERIAL SAFETY DATA SHEET**

Biodegradability

Result: Not readily biodegradable.

Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Bio-accumulative potential no data available

Mobility in soil no data available

**Results of PBT and vPvB assessment PBT/vPvB assessment** This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects no data available

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental controlregulations.

# **SECTION 14: TRANSPORT INFORMATION**

**UN number:** 

ADR/RID: 1872 IMDG: 1872 IATA: 1872

UN proper shipping name ADR/RID: LEAD DIOXIDE IMDG: LEAD DIOXIDE IATA: lead dioxide

Transport hazard class(es):

ADR/RID: 5.1 (6.1) IMDG: 5.1 (6.1) IATA: 5.1 (6.1)

Packaging group:

ADR/RID: ||| IMDG: ||| IATA: |||

**Environmental hazards:** 

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

**Special precautions for user** Tunnel restriction code : (E)

Further information: No data available

# **SECTION 15: OTHER REGULATORY INFORMATION**

Regulatory information: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture: This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

#### **SECTION 16: OTHER INFORMATION**

References: Full text of H AND R-Statements

H272 May intensify fire; oxidizer.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H360Df May damage the unborn child. Suspected of damaging fertility.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.





# **MATERIAL SAFETY DATA SHEET**

H400 Very toxic to aquatic life.

Other Special Considerations: Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.