

**LEAD DIOXIDE****1001**  
October 2001CAS No: 1309-60-0  
RTECS No: OGO700000  
UN No: 1872  
EC No: 082-001-00-6Lead peroxide  
Lead(IV) oxide  
PbO<sub>2</sub>  
Molecular mass: 239.2

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire.	NO contact with flammable substances. NO contact with reducing agents.	In case of fire in the surroundings: water spray.
<b>EXPLOSION</b>	Risk of fire and explosion on contact with combustible substances and reducing agents.		

EXPOSURE		AVOID EXPOSURE OF (PREGNANT) WOMEN!	
<b>Inhalation</b>		Local exhaust or breathing protection.	Fresh air, rest.
<b>Skin</b>		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
<b>Eyes</b>		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. Personal protection: P3 filter respirator for toxic particles.	T Symbol N Symbol R: 61-20/22-33-62-50/53 S: 53-45-60-61 Note: A, E UN Hazard Class: 5.1 UN Pack Group: III Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-51S1872	Separated from food and feedstuffs and incompatible materials. See Chemical Dangers.

### IMPORTANT DATA

**Physical State; Appearance**

BROWN CRYSTALS OR POWDER.

**Chemical dangers**

The substance decomposes on heating at 290°C, producing oxygen and toxic fumes. Reacts violently with combustible substances, organic compounds, sulphur, hydrogen peroxide, and phosphorus, causing fire hazard.

**Occupational exposure limits**

TLV: (as Pb) 0.05 mg/m<sup>3</sup> as TWA; A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued; (ACGIH 2004).

MAK: (as Pb) (Inhalable fraction); Carcinogen category: 3B; Germ cell mutagen group: 3A; (DFG 2004).

**Routes of exposure**

The substance can be absorbed into the body by inhalation and by ingestion.

**Inhalation risk**

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed, especially if powdered.

**Effects of long-term or repeated exposure**

The substance may have effects on the blood, bone marrow, central nervous system, peripheral nervous system and kidneys, resulting in anaemia, encephalopathy (e.g., convulsions), peripheral nerve disease, abdominal cramps and kidney impairment. Causes toxicity to human reproduction or development.

### PHYSICAL PROPERTIES

Melting point (decomposes): 290°C  
Density: 9.38 g/cm<sup>3</sup>

Solubility in water: none

### ENVIRONMENTAL DATA

Bioaccumulation of this chemical may occur in plants and in mammals. It is strongly advised that this substance does not enter the environment.

### NOTES

Depending on the degree of exposure, periodic medical examination is suggested.  
Do NOT take working clothes home.  
Card has been partly updated in April 2005. See section Occupational Exposure Limits.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible