

**ZINC OXIDE - ART.11430/31/32/33**



**SAFETY DATA SHEET**

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product identifier**

Product name : ZINC OXIDE

Product code : ART.11430/31/32/33.

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

Reactive powder for the preparation of ZOE cement.

For dental professional use only.

**1.3. Details of the supplier of the safety data sheet**

Registered company name : PRODUITS DENTAIRES SA.

Address : Rue des Bosquets 18 .1800 .Vevey .Switzerland.

Telephone : +41 21 921 26 31. Fax : .

info@pd-dental.com

https://pd-dental.com

**1.4. Emergency telephone number : +41 21 921 26 31.**

Association/Organisation : .

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).

Hazardous to the aquatic environment - Chronic hazard, Category 1 (Aquatic Chronic 1, H410).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

**2.2. Label elements**

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :



GHS09

Signal Word :

WARNING

Product identifiers :

030-013-00-7                      ZINC OXIDE

Hazard statements :

H400

Very toxic to aquatic life.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P273

Avoid release to the environment.

P280

Wear protective gloves according to the hygienic rules in force in dental surgeries.

Precautionary statements - Response :

P391

Collect spillage.

Precautionary statements - Disposal :

P501

Dispose of contents/container according to the hygienic rules in force in dental surgeries and according to the legislation in force.

**ZINC OXIDE - ART.11430/31/32/33****2.3. Other hazards**

In use, may form flammable/explosive dust-air mixture.

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
INDEX: 030-013-00-7	GHS09	[1]	50 $\leq$ x % < 100
CAS: 1314-13-2	Wng		
EC: 215-222-5	Aquatic Acute 1, H400		
ZINC OXIDE	M Acute = 1		
	Aquatic Chronic 1, H410		
	M Chronic = 1		

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. Description of first aid measures****In the event of exposure by inhalation :**

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

**In the event of splashes or contact with skin :**

Wash the skin thoroughly with soap and fresh water.

Be careful with product which can remain between the skin and the clothes, the watch, the jewels.

In the event of an allergic reaction, seek medical attention.

**In the event of swallowing :**

Do not induce vomiting.

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

Breathing system irritation.

Severe eyes irritation.

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

No data available.

**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media****Suitable methods of extinction**

In the event of a fire, use :

- carbon dioxide (CO<sub>2</sub>)

The product is not combustible itself. Adapt the measures of extinction in the middle surrounding.

**ZINC OXIDE - ART.11430/31/32/33**

**Unsuitable methods of extinction**

In the event of a fire, do not use :  
- water jet

**5.2. Special hazards arising from the substance or mixture**

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- metallic oxide smokes

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus.

Avoid generating dusts.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Avoid generating dusts.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

Avoid generating dusts.

**6.2. Environmental precautions**

Prevent any material from entering drains or waterways.

**6.3. Methods and material for containment and cleaning up**

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

**6.4. Reference to other sections**

No data available.

**SECTION 7 : HANDLING AND STORAGE**

Respect storage precautions mentioned on the label.

**7.1. Precautions for safe handling**

Always wash hands after handling.

The persons who have medical histories of cutaneous reactions must use this product with all the required precautions.

Avoid any contact with skin and eyes.

**Fire prevention :**

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Packages which have been opened must be reclosed carefully and stored in an upright position.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep the container tightly closed

**Storage**

Respect storage precautions mentioned on the label.

**Packaging**

Always conserve in the original packaging.

**7.3. Specific end use(s)**

Consult instructions for use enclosed.

**ZINC OXIDE - ART.11430/31/32/33****SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limits :**

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1314-13-2	2 (R) mg/m3	10 (R) mg/m3			

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
1314-13-2	-	5	-	-	-	-

**8.2. Exposure controls****Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :

**- Eye / face protection**

Avoid contact with eyes.

**- Hand protection**

Wear gloves according to the hygienic rules in force in dental surgeries.

**- Body protection**

After contact with the product, all parts of the body that have been soiled must be washed.

**- Respiratory protection**

Avoid inhaling dust.

**SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties****General information :**

Physical state : Powder or dust.  
Colour: white

**Important health, safety and environmental information**

pH : Not relevant.  
Boiling point/boiling range : Not relevant.  
Flash point interval : Not relevant.  
Vapour pressure (50°C) : Not relevant.  
Density : 5.61  
Water solubility : Insoluble.  
Melting point/melting range : 1975 °C.  
Self-ignition temperature : Not relevant.  
Decomposition point/decomposition range : Not relevant.

**9.2. Other information**

Enthalpy of melting : 1975°C

**SECTION 10 : STABILITY AND REACTIVITY****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

Do not use if the expiry date is exceeded.

**ZINC OXIDE - ART.11430/31/32/33**

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :

- formation of dusts
- exposure to light

**10.5. Incompatible materials**

Keep away from :

- acids
- alkalis

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)
- metallic oxide smokes

**SECTION 11 : TOXICOLOGICAL INFORMATION**

**11.1. Information on toxicological effects**

No data available.

**11.1.1. Substances**

No toxicological data available for the substances.

**11.1.2. Mixture**

**Acute toxicity :**

Oral route :  
No observed effect.  
Species : Rat  
LD50 > 5000 mg/kg  
Species : Rat  
LC50 > 5700 mg/m<sup>3</sup>

**SECTION 12 : ECOLOGICAL INFORMATION**

Very toxic to aquatic life with long lasting effects.

Very toxic to aquatic organisms.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.2. Mixtures**

Fish toxicity :  
Highly toxic.  
LC50 < 1.1 mg/l  
Species : *Oncorhynchus mykiss*  
Duration of exposure : 96 h

Crustacean toxicity :  
Highly toxic.  
EC50 = 0.83 mg/l  
Species : *Ceriodaphnia dubia*  
Duration of exposure : 48 h  
NOEC = 0.4 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h

Algae toxicity :  
Highly toxic.  
ECr50 = 0.17 mg/l  
Species : *Selenastrum capricornutum*

**ZINC OXIDE - ART.11430/31/32/33**

Duration of exposure : 72 h

**12.2. Persistence and degradability**

**12.2.2. Mixtures**

Biodegradation :

No data on decomposition is available, the mixture is not considered to decompose rapidly.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Other adverse effects**

No data available.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**SECTION 14 : TRANSPORT INFORMATION**

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2015 - IMDG 2014 - ICAO/IATA 2015).

**SECTION 15 : REGULATORY INFORMATION**

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

**- Classification and labelling information included in section 2:**

The following regulations have been used:

**- Container information:**

No data available.

**- Particular provisions :**

No data available.

**15.2. Chemical safety assessment**

No data available.

**ZINC OXIDE - ART.11430/31/32/33**

**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Abbreviations :**

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

GHS09 : Environment