

Trade name: Korox®

Current version : 1.0.2, issued: 08.05.2012

Replaced version: 1.0.2, issued: 06.03.2012

Region: GB

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

Korox®**Korox® 250 (REF: 46014; 54300)****Korox® 110 (REF: 46044; 54299)****Korox® 50 (REF: 46062; 54298)****Korox® 25 (REF: 46036)**

Substance name	ALUMINIUM OXIDE
REACH registration no.	01-2119529248-35

Identification numbers

CAS no.	1344-28-1
EC no.	215-691-6

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

Manufacturing of dental prosthesis in a dental laboratory

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

BEGO Bremer Goldschlägerei
Wilh. Herbst GmbH & Co. KG
Wilhelm-Herbst-Str. 1
28359 Bremen

Telephone no.	+49/ 421/ 2028 – 0
Fax no.	+49/ 421/ 2028 – 115

Information provided by / telephone

Research & Development Department - Materials, alloys and ceramics; +49/ 421/ 2028 – 130 (Chief Development Officer alloys)

Advice on Safety Data Sheet

msds@bego.com

1.4 Emergency telephone number

For medical advice (in German and English):
+49/ 551/ 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification information**

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).
This product does not meet the classification and labelling criteria given in the Dangerous Preparations Directive 67/548/EC (DSD)

2.2 Label elements

Not relevant

2.3 Other hazards**PBT assessment**

The product is not considered to be a PBT.

vPvB assessment

The product is not considered to be a vPvB.

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SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name ALUMINIUM OXIDE

Identification numbers

CAS no. 1344-28-1

EC no. 215-691-6

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

If the patient is likely to become unconscious, place and transport in stable sideways position. In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. If a high concentration of dust is inhaled, seek medical help immediately.

After skin contact

Wash off immediately with soap and water.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Let plenty of water be drunk in small gulps. Summon a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide; extinguishing powder; Water spray jet; Foam

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

None known

5.3 Advice for firefighters

Product itself does not burn. Adapt extinguisher and fire-fighting measures to fire in the environment. Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid dust formation. Refer to protective measures listed in sections 7 and 8.

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For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up mechanically. Avoid raising dust. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Keep container tightly closed.

General protective and hygiene measures

Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Do not inhale dust. Keep away from foodstuffs and beverages.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Keep only in the original container.

Advice on storage assembly

Do not store together with: explosive substances

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	ALUMINIUM OXIDE	1344-28-1	215-691-6
	List of approved workplace exposure limits (WELs) / EH40		
	Aluminium oxides		
	total inhalable dust		
	TWA	10	mg/m ³
	List of approved workplace exposure limits (WELs) / EH40		
	Aluminium oxides		
	respirable dust		
	TWA	4	mg/m ³
2	Dust		
	List of approved workplace exposure limits (WELs) / EH40		
	total inhalable dust		
	TWA	10	mg/m ³
	List of approved workplace exposure limits (WELs) / EH40		
	respirable dust		
	TWA	4	mg/m ³

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8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respiratory filter (part): Feinstaubmaske (Schutzstufe P2)

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour			
Powder			
white			
Odour			
odourless			
Odour threshold			
No data available			
pH value			
No data available			
Boiling point / boiling range			
No data available			
Melting point / melting range			
Value	appr.	2000	°C

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Decomposition point / decomposition range	
No data available	
Flash point	
No data available	
Auto-ignition temperature	
No data available	
Oxidising properties	
No data available	
Explosive properties	
No data available	
Flammability (solid, gas)	
No data available	
Lower flammability or explosive limits	
No data available	
Upper flammability or explosive limits	
No data available	
Vapour pressure	
No data available	
Vapour density	
No data available	
Evaporation rate	
No data available	
Relative density	
No data available	
Density	
Value	3,7 - 4,5 g/cm ³
Bulk density	
Value	500 - 2500 kg/m ³
Solubility in water	
Remarks	insoluble
Solubility(ies)	
No data available	
Partition coefficient: n-octanol/water	
No data available	
Viscosity	
No data available	

9.2 Other information

Other information
No data available.

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SECTION 10: Stability and reactivity

- 10.1 Reactivity**
No data available.
- 10.2 Chemical stability**
No data available.
- 10.3 Possibility of hazardous reactions**
No data available.
- 10.4 Conditions to avoid**
None, if handled according to order.
- 10.5 Incompatible materials**
None known.
- 10.6 Hazardous decomposition products**
No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity	No data available
Acute dermal toxicity	No data available
Acute inhalational toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Reproduction toxicity	No data available
Carcinogenicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available
Delayed and immediate effects as well as chronic effects from short and long-term exposure	Contact with the skin and eyes may cause mechanical irritation. Inhalation of dusts may irritate the respiratory tract.

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SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity

No data available

Daphnia toxicity

No data available

Algae toxicity

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

Biodegradability

Remarks

The methods for the assessment of the biodegradability cannot be applied for inorganic substances.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

PBT assessment

The product is not considered to be a PBT.

vPvB assessment

The product is not considered to be a vPvB.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

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SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Restriction of occupation

Adhere to the national sanitary and occupational safety regulations when using this product.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks

Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Department issuing safety data sheet

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This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.