

Trade name: Minoxyd **Product no.:** 52530

Current version: 1.0.2, issued: 08.05.2012 Replaced version: 1.0.2, issued: 09.03.2012 Region: GB

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

1.1 Product identifier

Trade name

Minoxyd

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 - 0Fax 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 in accordance with Directive 67/548/EEC or 1999/45/EC

Xn; R22

2.2 Label elements

Labelling according to Directive 1999/45/EC

Hazard symbols



Harmful

Hazardous component(s) to be indicated on label, contains:

potassium difluorodihydroxyborate(1-)

R phrases

22 Harmful if swallowed.

S phrases

7 Keep container tightly closed.

46 If swallowed, seek medical advice immediately and show this container or label.

This material and its container must be disposed of as hazardous waste.

Wear suitable gloves.

In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

23 Do not breathe vapour.



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2.3 Other hazards

PBT assessment No data available. vPvB assessment No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Mixture (preparation)

Hazardous ingredients

No	Substance name		Additional information					
	CAS / EC / Index /	Classification 67/548/EEC	Conc	entratio	n			%-b.w.
	REACH no							
1	potassium difluoro	dihydroxyborate(1-)						
	85392-66-1	Xn; R22	>	70,00	-	<	90,00	%-b.w.
	286-925-2							
	-							
	-							

Full Text for all R-phrases: pls. see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Ensure supply of fresh air. Remove affected person from the immediate area.

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. Do not induce vomiting.

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

In the event of fire, the following can be released: Hydrogen fluoride (HF); Hydrogen



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5.3 Advice for firefighters

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 contact with skin, eyes and clothing. Refer to protective measures listed in sections 7 and 8.

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. 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

Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

General protective and hygiene measures

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

Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

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. Protect from heat and direct sunlight.

Recommended storage temperature

Value 5 - 30 °C

Requirements for storage rooms and vessels

Keep only in the original container.

Inappropriate material aluminium; zinc; lead

Advice on storage assembly

Do not store together with: strong oxidizing agents; 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	potassium difluorodihydroxyborate(1-)	85392-66-1		286-925-2
	2000/39/EWG			
	Fluorides, inorganic			
	TWA	2,5	mg/m³	_



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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, aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). 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

Information on basic physical and chemical properties						
Form/Colour						
Pasty/solid						
brown	brown					
Odour						
odourless						
Odour threshold						
No data available						
pH value						
Value		5,5				
Reference temperature		20	°C			
Concentration		10	g/l			
Boiling point / boiling range						
Value		110	°C			
Melting point / melting range						
Value		500	°C			
Decomposition point / decomposition range						
No data available						
Flash point						
Not applicable						



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Auto-ignition t	emperature
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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 1,6 g/ml

Solubility in water

Value 500 g/l

Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity	
Value	150 - 250 mPa*s
Reference temperature	20 °C
Type	dynamic

9.2 Other information

Other information
No data available.

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

Protect from sun. Beware of drying.

10.5 Incompatible materials

Acids; sulfuric acid



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10.6 Hazardous decomposition products

In case of fire the following can be released: Hydrogen fluoride; Hydrogen

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity					
LD50	744 mg/kg				
Species	rat				

Acute dermal toxicity

No data available

Acute inhalational toxicity

No data available

Skin corrosion/irritation

Species rabbit
Evaluation non-irritant

Serious eye damage/irritation

Species rabbit rabit non-irritant

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

Harmful if swallowed.

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity			
LC50		750	mg/l
Duration of exposure		96	h
Species	Brachydanio rerio		
Reference substance	CAS 85392-66-1		



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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	No data available.			
vPvB assessment	No data available.			

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.

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



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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.