

Trade name: Minoxyd (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

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

Trade name

Minoxyd (REF 52530)**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

Email msds@bego.com

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 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Acute Tox. 4; H302

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

Xn; R22

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS07

Signal word

Warning

Hazardous component(s) to be indicated on label:

potassium difluorodihydroxyborate(1-)

Hazard statements

H302 Harmful if swallowed.

Precautionary statements

P233 Keep container tightly closed.

P260 Do not breathe vapour.

P280 Wear protective gloves/protective clothing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Trade name: Minoxyd (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

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**Hazardous ingredients**

No	Substance name	Classification	Classification (EC)	Additional information	
	CAS / EC / Index / REACH no	67/548/EEC	1272/2008 (CLP)	Concentration	%
1	potassium difluorodihydroxyborate(1-)				
	85392-66-1 286-925-2 - -	Xn; R22	Acute Tox. 4; H302	> 70.00 - < 90.00	%-b.w.

Full Text for all R-phrases , H-phrases and EUH-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. Call 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

High power 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

Trade name: Minoxyd (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

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 as 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/m ³

Trade name: Minoxid (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

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

Form/Colour			
Pasty/solid			
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			

Trade name: Minoxyd (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

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	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

Trade name: Minoxyd (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

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 (result of the ATE calculation for the mixture)	
No	Product Name
1	Minoxyd (REF 52530)
ATE (Mixture)	691.79
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.
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	
Harmful if swallowed.	

Trade name: Minoxid (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available
Toxicity to fish (chronic)
No data available
Toxicity to Daphnia (acute)
No data available
Toxicity to Daphnia (chronic)
No data available
Toxicity to algae (acute)
No data available
Toxicity to algae (chronic)
No data available
Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability	
No	Product Name
1	Minoxid (REF 52530)
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.

Trade name: Minoxid (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

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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.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

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

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

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. 1999/45/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/EU

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.

Trade name: Minoxid (REF 52530)

Current version : 2.0.2, issued: 16.12.2014

Replaced version: 2.0.1, issued: 25.09.2014

Region: GB

Full text of the R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R22

Harmful if swallowed.

Department issuing safety data sheet

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.