

Oxynon

Material no.		Version	2.4 / GB
Specification	102877	Revision date	26.02.2009
VA-Nr		Print Date	19.06.2009
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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name	:	Oxynon
Company	:	DeguDent GmbH Postfach 1364 D-63403 Hanau
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Emergency telephone number	:	+49 (0)180 / 23 24-555
Use of the Substance / Preparation	:	For dental use only.

2. HAZARDS IDENTIFICATION**Classification**

Xn, Harmful
R22: Harmful if swallowed.

Additional safety information for humans and the environment

Irritation and on occasion caustic effects to the skin and mucous membranes (eyes, respiratory channels, in the stomach/intestinal tracts after swallowing) are to be expected from local contact. hydrogen fluoride is released during processing.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Information on ingredients / Hazardous components**

• Potassium difluorodihydroxyborate(1-)	60% - 80%	
CAS-No. 85392-66-1	EC-No.	286-925-2
• Boron	< 5%	
CAS-No. 7440-42-8	EC-No.	231-151-2

See chapter 16 for text of risk phrases

4. FIRST AID MEASURES**General advice**

Remove contaminated or saturated clothing.

Inhalation

Move victims into fresh air.

Upon formation of vapours / fumes are formed:

Possible discomfort:

irritation of mucous lining (nose, throat, eyes)

cough, sneezing, flow of tears

If breathing difficulties occur:

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Keep patient half sitting with upper body raised.
Consult a physician immediately.

Skin contact

Remove product immediately with cellucotton (or similar material).
Wash off with soap and plenty of water.

Eye contact

Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, if necessary, eye rinsing solution.
In case of persistent discomfort:
Consult an ophthalmologist.

Ingestion

Have the mouth rinsed with water.
Have patient drink plenty of water in small sips.
Dissolve effervescent calcium tablet, if available, in water and have patient swallow it in sips (insoluble calcium fluoride forms in the gastrointestinal tract).
Consult a physician immediately.

Notes to physician

If required, therapy of irritative symptoms.
After absorbing large amounts of substance:
After oral intake, release of fluoride ions cannot be precluded.
Administration of calcium gluconate solution (formation of insoluble calcium fluoride in the gastrointestinal tract)
Early endoscopy in order to assess mucosa lesions in the oesophagus and stomach which may appear.
If necessary, suck away leftover substance.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

All extinguishing substances suitable.

Extinguishing media which must not be used for safety reasons

None known

Specific hazards during fire fighting

Danger of decomposition under influence of heat.
In case of combustion or decomposition of the product, the fumes produced lead to irritations or inflammations of the respiratory tract.
In the case of fire, the following hazardous smoke fumes may be produced: hydrogen fluoride.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Water used to extinguish fire should not enter drainage systems, soil, or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Contaminated fire-extinguishing water must be disposed of in accordance with the regulations issued by the appropriate local authorities.
Fire residues should be disposed of in accordance with the regulations.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

In case product dust is released:
Do not breathe dust.

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Avoid formation of dust. Ensure sufficient ventilation.
 Avoid contact with skin, eyes and clothing.

Environmental precautions

Prevent penetration into soil, stretches of water and drainage systems.

Methods for cleaning up

Absorb in water or rinse away with water and collect in suitable containers.

7. HANDLING AND STORAGE**Handling****Safe handling advice**

Ensure suitable suction/aeration at the work place and with operational machinery.
 Do not breathe vapour.
 If necessary: Local ventilation.

Storage**Requirements for storage areas and containers**

Keep tightly sealed in original packing.

Storage stability

Keep at temperatures of between 5 °C and 30 °C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Components with workplace control parameters**

- Potassium difluorodihydroxyborate(1-)**

CAS-No.	85392-66-1	EC-No.	286-925-2
Control parameters	2.5 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	2.5 mg/m ³		Time Weighted Average (TWA):(EU ELV)

- hydrogen fluoride**

CAS-No.	7664-39-3	EC-No.	231-634-8
Control parameters	1.8 ppm		Time Weighted Average (TWA):(EH40 WEL)
	1.5 mg/m ³		
Control parameters	3 ppm		Short Term Exposure Limit (STEL):(EH40 WEL)
	2.5 mg/m ³		
Control parameters	1.8 ppm		Time Weighted Average (TWA):(EU ELV)
	1.5 mg/m ³		
Control parameters	3 ppm		Short Term Exposure Limit (STEL):(EU ELV)
	2.5 mg/m ³		

- related to: fluoride**

CAS-No.	16984-48-8		
Control parameters	2.5 mg/m ³		MAK:(TRGS 900)
Short-time value	4		
type of exposition	as an inhalable fraction		

Engineering measures

hydrogen fluoride is released during processing.
 Ensure suitable suction/aeration at the work place and with operational machinery.

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Personal protective equipment**Respiratory protection**

When working without/without sufficient suction of objects:
Respirator with grey B-type filter

Hand protection

suitable protective gloves: e.g. rubber gloves, nitrile-butadiene rubber (NBR) gloves

Eye protection

Safety glasses with side-shields

Skin and body protection

suitable protective clothing recommended

Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work.

After contact with skin, wash immediately with plenty of water.

Do not inhale fumes, dust, vapour.

Draw off hydrogen fluoride vapours.

Do not swallow product.

Use suitable skin protective agents before handling product. Cleanse and apply cream to skin after work. Preventive skin protection recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	paste
Colour	brown
Odour	odourless

Safety data

pH	ca. 5.5	(10 g / l)	(20 °C)
	Medium:	water	
Melting point/range	ca. 500 °C		
Boiling point/range	110 °C		
Density	ca. 1.40 g/cm ³		
Water solubility	ca. 500 g/l	(20 °C)	
Viscosity, dynamic	thixotropic paste		

10. STABILITY AND REACTIVITY

Conditions to avoid	Traces of hydrogen fluoride vapours are formed if heated above melting point.
Hazardous decomposition products	decomposition products on heating sulphuric acid hydrogen fluoride
Hazardous reactions	No dangerous reactions are known to occur with correct handling and

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storage.
Stable at room temperature.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50 Rat: 763 mg/kg Data derived from product of similar composition:
Skin irritation	Rabbit not irritating Data derived from product of similar composition:
Eye irritation	Rabbit not irritating Data derived from product of similar composition:

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)****Behaviour in environmental compartments****Ecotoxicity effects**

No ecotoxicological studies are available.

Further information on ecology

Further Information	Danger to groundwater and drinking water. Do not allow into stretches of water without pre-treating. The following substances are to be precipitated from rinsing and washing water using lime milk and disposed of: flouride
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13. DISPOSAL CONSIDERATIONS**Product**

Disposal according to local authority regulations.

Uncleaned packaging

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities.

14. TRANSPORT INFORMATION**Transport/further information**

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION**Labelling according to EC Directives**

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hazard-defining component(s)

- Potassium difluorodihydroxyborate(1-)

Symbol(s)	Xn	Harmful
R-phrases(s)	R22	Harmful if swallowed.
S-phrases(s)	S 2 S26 S28 S37/39	Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water. Wear suitable gloves and eye/face protection.

National legislation

employment restriction

Note employment restrictions for pregnant and lactating women.
Note employment restrictions for minors.

16. OTHER INFORMATION**Risk phrase (R phrase) texts****Further information**

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.