#### SAFETY DATA SHEET (EC 1907/2006) Anoxan Version: 1.9 / GB Material no. Dentsply 20.09.2017 Revision date: Specification 102876 03.09.2001 Issue date: Sirona VA-Nr 01906661 replaces version: 1.8 Page: 1/9

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

#### 1.1. **Product identifier**

Trade name Anoxan **REACH Registration No.:** if available listed in Chapter. 3

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

Relevant applications identified For dental use only.

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

Company

DeguDent GmbH Postfach 1364 D-63403 Hanau

Telephone	+49 (0)6181/59-5576
Telefax	+49 (0)6181/59-5879
Email address	SDB.Degudent-DE@dentsplysirona.com

#### 1.4. **Emergency telephone number**

**Emergency information** 

+49 (0)6181/59-50 (This telephone number is available during office hours only.)

#### **SECTION 2: Hazards identification**

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

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity	Category 4	H302
Reproductive toxicity	Category 2	H361d
Label elements		

#### Labelling as per (EU) 1272/2008

#### hazard-defining component(s) (GHS)

 Potassium difluorodihydroxyborate(1-) Hazard pictograms

2.2.

Signal word	Warning
Hazard statement	H302 - Harmful if swallowed. H361d - Suspected of damaging the unborn child.
Precautionary statement: Prevention	P202 - Do not handle until all safety precautions have been read and understood. P264 - Wash hands thoroughly with soap and water after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement: Reaction	P308 + P313 - IF exposed or concerned: Get medical advice/ attention.
Precautionary statement: Disposal	P501 - Dispose of contents/container in accordance with local regulation.

#### 2.3. Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

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#### **SECTION 3: Composition/information on ingredients**

# Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

Potassium difluorodihydroxyborate(1-)			< 80%		
CAS-No. Acute toxic Reproduct	85392-66-1 city (oral) ive toxicity (oral)	EC-No.	286-925-2	Category 4 Category 2	H302 H361d

Texts of H phrases, see in Chapter 16

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

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

#### Skin contact

Remove product immediately with cellucotton (or similar material). Wash off with soap and plenty of water. Consult a physician in case of eye irritation.

#### Eye contact

With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Remove contact lenses. In case of persistent discomfort: Consult an ophthalmologist.

#### Ingestion

Induce vomiting immediately and call a physician. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

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

#### Symptoms

Ingestion may provoke the following symptoms: Stomach/intestinal disorders

# **4.3.** Indication of any immediate medical attention and special treatment needed No information available.

#### **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

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Suitable extinguishing media:

All extinguishing substances suitable.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: High volume water jet

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

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.

#### 5.3. Advice for firefighters

Water for fire fighting must not be introduced in the sewer system, subsoil, or surface waters. Assure that there are sufficient fire water retaining facilities Contaminated fire fighting water must be disposed of in conformity with the regulations of the local authorities.

Fire residues should be disposed of in accordance with the regulations. In the event of fire, wear self-contained breathing apparatus.

## **SECTION 6: Accidental release measures**

 6.1. Personal precautions, protective equipment and emergency procedures In case product dust is released: Do not breathe dust. Avoid formation of dust. Ensure sufficient ventilation. Avoid contact with skin, eyes and clothing.

#### **6.2.** Environmental precautions Introduction into soil, natural water bodies or sewerage must be prevented.

#### **6.3.** Methods and material for containment and cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

#### 6.4. Reference to other sections Wear personal protective equipment; see section 8. Disposal considerations; see section 13.

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Ensure suitable suction/aeration at the work place and with operational machinery. If necessary: Local ventilation. Do not breathe vapours/dust. Avoid contact with skin, eyes and clothing.

# 7.2. Conditions for safe storage, including any incompatibilities

#### Storage

Keep tightly closed in a dry, cool and well-ventilated place. Store in original container. Protect from direct sunlight.

#### German storage class

12 - Non Combustible Liquids

#### Storage stability

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

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

We are unaware of any specific end uses which go beyond the data reported in Section 1.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

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<ul> <li>Potassium difluorodihydroxyborate(1-)</li> </ul>							
CAS-No. Control parameters	85392-66-1 2.5 mg/m3 Indicative	EC-No.	286-925-2 Time Weighted Average (TWA):(EU ELV)				

#### 8.2. Exposure controls

#### **Engineering measures**

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

#### Personal protective equipment

#### **Respiratory protection**

In case of working with / without sufficient object exhaustion:, If workplace exposure limit is exceeded apply respirator with ABEK-P3 combination filter.

#### Hand protection

Wear protective gloves made of the following materials:.Glove materialNitrile rubber/Nitrile latex (NBR)Material thickness0.4 mmBreak through time> 240 min

#### **Eye/face 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 practice., 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 smoke, dust, vapor., Draw off hydrogen fluoride vapours., Do not swallow product., Apply adequate skin protection agents before handling the product. Assure skin cleaning and skin care after work. Preventive skin protection is recommended.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance Form Colour Odour	paste white to yel odourless	lowish	
Odour threshold:	not applicat	ble	
рН	ca. 5.4	(10 g/l)	(20 °C)
Melting point/range	not known		
Boiling point/range	not known		
Flash point	Method: not applicat	closed cup ble	
Evaporation rate	No data ava	ailable	
Flammability (solid, gas)	not flammal	ble	
Lower explosion limit	not applicat	ble	

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	Upper explosion limit		not applicable					
	Vapour pressure		not applicable					
	Density		ca. 1.5 - 1.6 g/cm3					
	Water solubility		ca. 500 g_l (20 °C)					
Partition coefficient: n-			no data available					
	octanol/water Autoinflammability		Not capable of spontaneous combustion or heating.					
	Thermal decompositio	n	No data available					
	Viscosity, dynamic		no data available					
	Explosiveness		not applicable					
	Oxidizing properties		not oxidizing					
9.2.	Other information	ı						
	Other information		No further phys	icochemical data	were determined.			

**10.1. Reactivity** no data available

#### **10.2.** Chemical stability The product is chemically stable.

# **10.3.** Possibility of hazardous reactions Stability Stable at room temperature. Possibility of hazardous No hazardous reactions are known if properly handled and stored. reactions No hazardous reactions are known if properly handled and stored.

- **10.4.** Conditions to avoid Traces of hydrogen fluoride vapours are formed if heated above melting point.
- **10.5.** Incompatible materials Avoid contact with acids., Reaction with sulphuric acid.
- **10.6. Hazardous decomposition products** decomposition products on heating sulphuric acid Hydrogen fluoride

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute oral toxicity	LD50 Rat(fem Method: Test substance:	ale): 608 mg/kg OECD Guide-line 401 Potassium difluorodihydroxyborate(1-)
Acute inhalation toxicity	Method: Test substance: Assessment: The data are d	e and female): > 2.04 mg/l / 4 h / dust/mist OECD Test Guideline 403 Potassium difluorodihydroxyborate(1-) The substance or mixture has no acute inhalation toxicity derived from the evaluations or test results achieved with tts (conclusion by analogy).

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Acute dermal toxicity		Assessment: This informatio	ale and female): The substance of n is derived from e nclusion based on	r mixture has no evaluation of or a		
Skin irritation		not irritating				
Eye irritation		not irritating				
Sensitization		no data availab	le			
Repeated dose toxici	ty	no data availab	le			
Assessment of STOT exposure	single	no data availab	le			
Assessment of STOT exposure	repeat	no data availab	le			
Risk of aspiration tox	icity	no data availab	le			
Mutagenicity assessn	ment	no data availab	le			
Carcinogenicity		No data availat	ble			
Toxicity to reproduction	on	Studies in labo disturbations.	ratory animals hav	e given indicatic	ons of dev	elopmental

# **SECTION 12: Ecological information**

# **12.1. Toxicity** No ecotoxicological studies are available.

No ecotoxicological studies are available.				
Toxicity to fish	LC50 Danio re Test substance: Method:	rio (zebra fish): 750 mg/l / 96 h Potassium difluorodihydroxyborate(1-) OECD TG 203		
	NOEC Danio r Test substance: Method:	erio (zebra fish): 560 mg/l / 96 h Potassium difluorodihydroxyborate(1-) OECD Test Guideline 203		
Toxicity in aquatic invertebrates	EC50 Pseudor Test substance:	monas putida: 240 mg/l / 17 h Potassium difluorodihydroxyborate(1-)		
	NOEC Pseudomonas putida: 180 mg/l / 17 h Test substance: Potassium difluorodihydroxyborate(1-)			
Toxicity to algae	EC50 Lemna r Test substance:	ninor (duckweed): 60 mg/l / 96 h Boron		

## 12.2. Persistence and degradability Biodegradability

no data available

# **12.3. Bioaccumulative potential** Bioaccumulation n

no data available

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#### 12.4. Mobility in soil

Mobility

No data available

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

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

#### 12.6. Other adverse effects

#### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

#### 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.

#### **SECTION 14: Transport information**

#### Not dangerous according to transport regulations.

14.1.	UN number:	
14.2.	UN proper shipping name:	
14.3.	Transport hazard class(es):	
14.4.	Packing group:	
14.5.	Environmental hazards:	
14.6	Special precautions for user:	No

#### **SECTION 15: Regulatory information**

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

#### National legislation

employment restriction Note em

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

#### 15.2. Chemical safety assessment

Chemical safety assessment No Chemical Safety Report as per Articles 2(8), 2(9) or 14 of the REACH Regulatione is required for this product.

#### **SECTION 16: Other information**

#### **Relevant H phrases from chapter 3**

H302	:	Harmful if swallowed.
H361d	:	Suspected of damaging the unborn child.

#### **Further information**

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

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Legend	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by
	Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by
	Inland Waterways
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BetrSichV	German Ordinance on Industrial Safety and Health
C.C.	closed cup
CAS	Chemical Abstract Services
CESIO ChemG	European Committee of Organic Surfactants and their Intermediates German Chemicals Act
CMR	
DIN	carcinogenic-mutagenic-toxic for reproduction German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	half maximal effective concentration
GefStoffV	German Ordinance on Hazardous Substances
GGVSEB	German ordinance for road, rail and inland waterway transportation of dangerous
	goods
GGVSee	German ordinance for sea transportation of dangerous goods
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
ISO LOAEL	International Organization For Standardization Lowest observed adverse effect level
LOEL	Lowest observed effect level
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
0. C.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
REACH	REACH registration
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA TPR	Technical Instructions Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCI	German chemical industry association
vPvB	very persistent, very bioaccumulative

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VOC VwVwS WGK WHO	volatile organic co German Administr Waters into Water Water Hazard Clas World Health Orga	ative Regulation on the Hazard Classes ss	Classification of S	Substances Hazardous to