

SAFETY DATA SHEET (EC 1907/2006)

Veriflux Veriflux P

Version:	1.13 / GB	Material no.	5325340001
Revision date:	21.11.2017	Specification	102878
Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	1 / 10		



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

1.1. Product identifier

Trade name	Veriflux Veriflux P
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.
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1.3. Details of the supplier of the safety data sheet

Company	DeguDent GmbH Postfach 1364 D-63403 Hanau
Telephone	+49 (0)6181/59-5767
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.)
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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	H332
Reproductive toxicity	Category 1B	H360

2.2. Label elements

Labelling as per (EU) 1272/2008

Statutory basis	EU-CLP as per Regulation (EU) No. 1272/2008, Annex VI
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hazard-defining component(s) (GHS)

- boric acid
- disodium-octaborate, tetrahydrate

Hazard pictograms



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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	2 / 10		



Signal word	Danger
Hazard statement	H332 - Harmful if inhaled. H360 - May damage fertility or the unborn child.
Precautionary statement: Prevention	P201 - Obtain special instructions before use. P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement: Reaction	P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. 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.

SECTION 3: Composition/information on ingredients**Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008**

• boric acid <= 60%				
CAS-No.	10043-35-3	EC-No.	233-139-2	
Reproductive toxicity				Category 1B H360FD
• disodium-octaborate, tetrahydrate <= 50%				
CAS-No.	12280-03-4	EC-No.	234-541-0	
Reproductive toxicity				Category 1B H360
• tripotassium-hexafluoroaluminate <= 5%				
CAS-No.	13775-52-5	EC-No.	237-409-0	
Skin irritation				Category 2 H315
Eye irritation				Category 2 H319
Specific Target Organ Toxicity - Single exposure				Category 3 H335

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.

If breathing difficulties occur:

Keep patient half sitting with upper body raised.

Call a physician immediately.

Skin contact

Wash off immediately with plenty of water.

Take off contaminated clothing and shoes immediately.

Obtain medical attention.

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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	3 / 10		



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.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

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

Symptoms

Skin contact may provoke the following symptoms:

Redness

Inhalation may provoke the following symptoms:

cough

Shortness of breath

Asthma

Ingestion may provoke the following symptoms:

Stomach/intestinal disorders

Following eye contact:

Excessive lachrymation

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: All extinguishing substances suitable.

Unsuitable extinguishing media: None known

5.2. Special hazards arising from the substance or mixture

Risk of decomposition when exposed to 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.

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.

Wear self-contained breathing apparatus for firefighting if necessary.

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.

SAFETY DATA SHEET (EC 1907/2006)

Veriflux

Veriflux P

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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	4 / 10		



6.3. Methods and material for containment and cleaning up

Vacuum up immediately. A vacuum cleaner with a high-efficiency filtration system is recommended. To avoid raising dust do not use brooms or compressed air. Collect and place in correctly labelled containers. For disposal see Section 13.

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.
Avoid dust formation.
Do not breathe 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

13 - Non Combustible Solids

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

• tripotassium-hexafluoroaluminate			
CAS-No.	13775-52-5	EC-No.	237-409-0
Control parameters	2.5 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	2 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	2.5 mg/m ³ Indicative		Time Weighted Average (TWA):(EU ELV)
• hydrofluoric acid ... %			
CAS-No.	7664-39-3	EC-No.	231-634-8
Control parameters	3 ppm 2.5 mg/m ³		Short Term Exposure Limit (STEL):(EH40 WEL)
Control parameters	1.8 ppm 1.5 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	3 ppm 2.5 mg/m ³ Indicative		Short Term Exposure Limit (STEL):(EU ELV)
Control parameters	1.8 ppm 1.5 mg/m ³ Indicative		Time Weighted Average (TWA):(EU ELV)
• related to: fluoride			
CAS-No.	16984-48-8		
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)

SAFETY DATA SHEET (EC 1907/2006)

Veriflux Veriflux P

Version:	1.13 / GB	Material no.	5325340001
Revision date:	21.11.2017	Specification	102878
Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	5 / 10		



Indicative

8.2. Exposure controls

Engineering measures

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

Personal protective equipment

Respiratory protection

In case of working with / without sufficient object exhaustion., Respirator with grey B-type filter

Hand protection

suitable protective gloves: e.g. rubber gloves, nitrile-butadiene rubber (NBR) gloves, Suitability for specific workplaces should be clarified with protective glove manufacturers.

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	powder, tablets
Colour	white

Odour	odourless
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Odour threshold:	not applicable
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pH	ca. 8	(10 g/l)	(20 °C)
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Melting point/range	ca. 750 °C
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Boiling point/range	no data available
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Flash point	Method: closed cup does not flash
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Evaporation rate	not applicable
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Flammability (solid, gas)	not flammable
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Lower explosion limit	no data available
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Upper explosion limit	no data available
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Vapour pressure	not applicable
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Density	no data available
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SAFETY DATA SHEET (EC 1907/2006)

Veriflux Veriflux P

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Revision date:	21.11.2017	Specification	102878
Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	6 / 10		



Water solubility	ca. 50 g/l (20 °C)
Partition coefficient: n-octanol/water	no data available
Autoinflammability	Not capable of spontaneous combustion or heating.
Thermal decomposition	no data available
Viscosity, dynamic	no data available
Explosiveness	no data available
Oxidizing properties	no data available

9.2. Other information

Other information No further physicochemical data were determined.

SECTION 10: Stability and reactivity

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 reactions	No hazardous reactions are known if properly handled and stored.

10.4. Conditions to avoid

No limitations

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Decomposition products occurring when heated above melting temperature
hydrogen fluoride-vapours
decomposition products on heating sulphuric acid
Hydrogen fluoride

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity	LD50 Rat: 2500 mg/kg Test substance: boric acid
	LD50 Rat: > 2600 mg/kg Test substance: disodium octaborate
Acute inhalation toxicity	no data available
Acute dermal toxicity	LD50 Rabbit: > 2000 mg/kg Test substance: disodium octaborate
Skin irritation	Human: <= 15 mg / 72 h

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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	7 / 10		



	slightly irritating
Test substance:	boric acid
	Rabbit
	not irritating
Test substance:	disodium octaborate
Eye irritation	Rabbit
	slightly irritating
Test substance:	disodium octaborate
Sensitization	no data available
Repeated dose toxicity	no data available
Mutagenicity assessment	no data available
Carcinogenicity	No data available
Toxicity to reproduction	Is capable of inducing malformations.
reproduction toxicity assessment	May damage fertility. May damage the unborn child.

SECTION 12: Ecological information**12.1. Toxicity**

No ecotoxicological studies are available.

Toxicity to fish	LC50 <i>Catostomus commersoni</i> (white sucker): 125 - 162 mg/l / 96 h
Test substance:	boric acid
Toxicity in aquatic invertebrates	LC50 <i>Daphnia magna</i> (Water flea): 133 mg/l / 48 h
Test substance:	boric acid
chronic toxicity in fish	NOEC <i>Oncorhynchus mykiss</i> (rainbow trout): 2.1 mg/l / 87 d
Test substance:	boric acid
chronic toxicity in daphnia	NOEC <i>Daphnia magna</i> (Water flea): 6 mg/l / 21 d
Test substance:	boric acid

12.2. Persistence and degradability

Biodegradability no data available

12.3. Bioaccumulative potential

Bioaccumulation no data available

12.4. Mobility in soil

Mobility No data available

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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	8 / 10		



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

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

Disposal according to local authority regulations.

Uncleaned packaging

Disposal according to local authority regulations.

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 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 Regulation is required for this product.

SECTION 16: Other information

Relevant H phrases from chapter 3

H315	: Causes skin irritation.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H360	: May damage fertility or the unborn child.
H360FD	: May damage fertility. May damage the unborn child.

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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	9 / 10		



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	European Committee of Organic Surfactants and their Intermediates
ChemG	German Chemicals Act
CMR	carcinogenic-mutagenic-toxic for reproduction
DIN	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	International Organization For Standardization
LOAEL	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
o. 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

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Issue date:	03.09.2001	VA-Nr	01780205
replaces version:	1.12		
Page:	10 / 10		



TA	Technical Instructions
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCI	German chemical industry association
vPvB	very persistent, very bioaccumulative
VOC	volatile organic compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organization