

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

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

- **1.1 Product identifier**
- **Trade name:** TopDent Red Action
- **Article number:** according to Catalog
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU20 Health services
- **Environmental release category** ERC2 Formulation into mixture
- **Application of the substance / the mixture** Dental material
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Kentzler-Kaschner Dental GmbH
Mühlgraben 36
D-73479 Ellwangen
Tel: +49/7961/90730
Fax: +49/7961/52031
E-Mail: info@kkd-topdent.de
- **Further information obtainable from:**
During normal business hours
Monday-Thursday 08:30 - 12:30 and 13:00 - 16:30 CET
Friday 08:30 - 12:30 and 13:00 - 15:00 CET
- **1.4 Emergency telephone number:** Vergiftungs-Informations-Zentrale Freiburg, Tel. +49 761 19240

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard-determining components of labelling:**
Phosphorsäure
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: TopDent Red Action

(Contd. of page 1)

- P260 Do not breathe dusts or mists.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Dental material

- **Dangerous components:**

	Phosphorsäure ☞ Skin Corr. 1B, H314	25-35%
CAS: 5949-29-1 EINECS: 201-069-1	1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate ☞ Eye Dam. 1, H318	3-6%
EC number: 931-964-9	Laurylamin, ethoxyliert ☞ Eye Dam. 1, H318; ☞ Aquatic Acute 1, H400; ☠ Acute Tox. 4, H302	0.2-0.4%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
 Take affected persons out of danger area and lay down.
 Do not leave affected persons unattended.
 Take affected persons out into the fresh air.
- **After inhalation:** Take affected persons into fresh air and keep quiet.
- **After skin contact:** If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Inform doctor. Do not give milk or fatty oils.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
 CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** Carbon dioxide (CO₂)
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: TopDent Red Action

(Contd. of page 2)

- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

Phosphorsäure

WEL	Short-term value: 2 mg/m ³
	Long-term value: 1 mg/m ³

- **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:**
DGUV 112-190 Breathing apparatus
Filter type A2
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: **TopDent Red Action**

(Contd. of page 3)

- **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

Fluorocarbon rubber (Viton)

Butyl rubber, BR

Recommended material thickness:

Butylkautschuk: 0,50 mm +/- 0,10 mm

Fluorkautschuk: 0,75 mm +/- 0,10 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

Basis: DGUV 212-007

Permeation (Fluorkautschuk) + Level 6 (> 480 min)

Permeation (Butylkautschuk): + Level 6 (> 480 min)

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **For the permanent contact gloves made of the following materials are suitable:**

Fluorocarbon rubber (Viton)

Butyl rubber, BR

- **Not suitable are gloves made of the following materials:**

Rubber gloves

Natural rubber, NR

- **Eye protection:** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Fluid

Colour: Red

· **Odour:** Perfume-like

· **Odour threshold:** Not determined.

· **pH-value at 20 °C:** < 1

- **Change in condition**

Melting point/freezing point: > 0 °C

Initial boiling point and boiling range: 100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: TopDent Red Action

(Contd. of page 4)

· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1.25 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Open fire, hot surfaces, high temperatures
- **10.5 Incompatible materials:** oxidants, acids, bases
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

Phosphorsäure

Oral	LD50	1530 mg/kg (Ratte)
		2740 mg/kg (Kaninchen)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:**
97489-15-1 Sulfonsäure, C14-17, sec-alkan, Natriumsalz
Oral, NOAEL (28 d): 4000 mg/kg/d (Ratte)

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: TopDent Red Action

(Contd. of page 5)

- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
7664-38-2 Phosphorsäure
LC50 Fischtoxizität: 3-3,5 mg/l/96 h (Fisch)
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **European waste catalogue**

06 01 99	wastes not otherwise specified
----------	--------------------------------

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA | UN3264 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR | 1805 PHOSPHORIC ACID, SOLUTION mixture |

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: TopDent Red Action

(Contd. of page 6)

<ul style="list-style-type: none"> · IMDG · IATA 	<p><i>CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.</i> <i>(Phosphoric acid-solution)</i></p> <p><i>CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.</i> <i>(Phosphoric acid - solution)</i></p>
--	---

- **14.3 Transport hazard class(es)**
- **ADR, IMDG, IATA**



- **Class** 8 Corrosive substances.
- **Label** 8

- **14.4 Packing group**
- **ADR, IMDG, IATA** III

- **14.5 Environmental hazards:** Not applicable.

- **14.6 Special precautions for user** Warning: Corrosive substances.
- **EMS Number:** F-A,S-B
- **Segregation groups** Acids
- **Stowage Category** A
- **Stowage Code** SW2 Clear of living quarters.

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

- **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
- **Transport category** 3
- **Tunnel restriction code** (E)

- **IMDG**
- **Limited quantities (LQ)** 5 L
- **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":** UN 1805 PHOSPHORIC ACID, SOLUTION MIXTURE, 8, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 22.02.2017

Version number 1

Revision: 22.02.2017

Trade name: TopDent Red Action

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

(Contd. of page 7)

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

*H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.*

· Department issuing SDS:

*LOGAR Günther Hasel e.K.
Baden-Airpark, Airport Boulevard B 210
D-77836 Rheinmünster
Tel: +49(0)7229-1868-163
Fax: +49(0)7229-1868-165*

· Contact: *info@logar.de***· Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*

GB