

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.02.2017


Version number 1


Revision: 23.02.2017

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

- **1.1 Product identifier**
  - **Trade name:** *TopDent Contactspray light green / red*
  - **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:**  
*während üblicher Geschäftszeiten  
Montag-Donnerstag 8.30-12.30 Uhr und 13.00-16.30 Uhr  
Freitag 8.30-12.30 Uhr und 13.00-15.00 Uhr*
- **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**
  -  **GHS02 flame**  
*Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.*

-  **GHS07**  
*STOT SE 3 H336 May cause drowsiness or dizziness.*
- Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.*

- **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**



- **Signal word** *Danger*
- **Hazard statements**  
*H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.*

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- **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.*
- P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
- P251 *Do not pierce or burn, even after use.*
- P211 *Do not spray on an open flame or other ignition source.*
- P405 *Store locked up.*
- P410+P412 *Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.*
- 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:**

CAS: 106-97-8 EINECS: 203-448-7	butane Flam. Gas 1, H220; Press. Gas C, H280	50-<100%
CAS: 74-98-6 EINECS: 200-827-9	propane Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 75-28-5 EINECS: 200-857-2	isobutane Flam. Gas 1, H220; Press. Gas C, H280	1-10%
CAS: 109-66-0 EINECS: 203-692-4	pentane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411 STOT SE 3, H336	1-<10%

- **Additional information:**

REACH Reg.-Nr. (n-Butan)01-2119474691-32-xxxx  
 REACH Reg.-Nr. (Propan)01-2119486944-21-xxxx  
 REACH Reg.-Nr. (Isobutan)01-2119485395-27-xxxx  
 REACH Reg. Nr. (Pentan) 01-2119459286-30-xxxx  
 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.

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#### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, 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 (CO<sub>2</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **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:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb liquid components with liquid-binding material.
- **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.  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** None.
- **Storage class:** VCI: 2 B
- **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:**

##### 106-97-8 butane

WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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##### 109-66-0 pentane

WEL	Long-term value: 1800 mg/m <sup>3</sup> , 600 ppm
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- **Additional information:** The lists valid during the making were used as basis.

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- **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  
 Respiratory protection EN 143  
 Use suitable respiratory protective device only when aerosol or mist is formed.
- **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 (> 240 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
- **Eye protection:** Safety glasses

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Aerosol
<b>Colour:</b>	Light green / red
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	-44 °C
- **Flash point:** Not applicable, as aerosol.
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 365 °C
- **Decomposition temperature:** Not determined.

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· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Not determined.
· <b>Explosion limits:</b>	
Lower:	1.5 Vol %
Upper:	10.9 Vol %
· <b>Vapour pressure at 20 °C:</b>	2700 hPa
· <b>Density at 20 °C:</b>	1.28 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not determined.
Kinematic:	Not determined.
· <b>9.2 Other information</b>	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.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, 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**  
May cause drowsiness or dizziness.
- **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**
- **Aquatic toxicity:** No further relevant information available.

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- **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 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **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**

16 05 04*	gases in pressure containers (including halons) containing hazardous substances
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |   |                     |
|---|---------------------|
| · <b>14.1 UN-Number</b>   | UN1950              |
| · <b>ADR, IMDG, IATA</b>  |                     |
| · <b>14.2 UN proper shipping name</b>   | 1950 AEROSOLS       |
| · <b>ADR</b>  | AEROSOLS            |
| · <b>IMDG</b>   | Aerosols, flammable |
| · <b>IATA</b>   |                     |
| · <b>14.3 Transport hazard class(es)</b>  |                     |
| · <b>ADR</b>  |                     |
|  |                     |
| · <b>Class</b>  | 2.1                 |
| -----   |                     |
| · <b>IMDG, IATA</b>   |                     |
|  |                     |
| · <b>Class</b>  | 2.1                 |
| · <b>Label</b>  | 2.1                 |
| · <b>14.4 Packing group</b>   | --                  |
| · <b>14.5 Environmental hazards:</b>  | Not applicable.     |
| · <b>14.6 Special precautions for user</b>  | Not applicable.     |

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<ul style="list-style-type: none"> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Stowage Code</b></li>   <li>· <b>Segregation Code</b></li> </ul>	<p>2.1</p> <p>F-D,S-U</p> <p>SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.</p> <p>SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p>
<ul style="list-style-type: none"> <li>· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li>   <li>· <b>Transport category</b></li> <li>· <b>Tunnel restriction code</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>1L</p> <p>Code: E0</p> <p>Not permitted as Excepted Quantity</p> <p>2</p> <p>(D)</p> <p>1 L</p> <p>Code: E0</p> <p>Not permitted as Excepted Quantity</p> <p>UN 1950 AEROSOLS, 2.1</p>

### 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.
- **Seveso category**  
FLAMMABLE AEROSOLS  
P3a FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

Creation Date 21.09.2016

EG-SD-Nr. 266

- **Relevant phrases**  
H220 Extremely flammable gas.  
H225 Highly flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.

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*H336 May cause drowsiness or dizziness.*  
*H411 Toxic to aquatic life with long lasting effects.*

• **Department issuing SDS:**

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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](mailto: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)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Gas 1: Flammable gases – Category 1  
Aerosol 1: Aerosols – Category 1  
Press. Gas C: Gases under pressure – Compressed gas  
Flam. Liq. 2: Flammable liquids – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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