

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 22.11.2023

Version number 4 (replaces version 3)

Revision: 21.11.2023

- **1.1 Product identifier**
- **Trade name: smartdent Okklusionsspray**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Auxiliary for dental technology
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hersteller/Lieferant:  
PRISMAN GmbH  
Otto Hahn Ring 6-18  
D-64653 Lorsch - Germany
- Vertrieb durch:  
OMNIDENT DentalHandelsgesellschaft mbH  
Gutenbergring 5  
D-63110 Rodgau  
Tel.: +49 (0) 6106 874-0
- **Further information obtainable from:**  
Produktmanagement  
Fon: +49 (6106) 8 74 - 0
- **1.4 Emergency telephone number:**  
Erreichbar werktags von: 8.00 - 16.30 Uhr  
Tel: +49 (6106) 874 -0  
Fax: +49 (6106) 874 -265  
info@omnident.de

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
Aerosol 1 H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**  
H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.
- **Precautionary statements**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **Additional information:**  
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.  
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

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- Keep out of the reach of children
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 RTECS: TZ 4300000 Reg.nr.: 01-2119485395-27-xxxx	isobutane	 Flam. Gas 1, H220 Press. Gas (Comp.), H280	50-100%
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- **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**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
In cases of frost bites, rinse with plenty of water. Do not remove clothing.  
Rinse with warm water.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Rinse out mouth and then drink plenty of water.
- **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:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray.  
Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Keep away from ignition sources.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** No special measures required.

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- **6.3 Methods and material for containment and cleaning up:**  
Allow to evaporate.  
Ensure adequate ventilation.
- **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** Keep away from heat and direct sunlight.
- **Information about fire - and explosion protection:**  
Do not spray onto a naked flame or any incandescent material.  
Highly volatile, flammable constituents are released during processing.  
Fumes can combine with air to form an explosive mixture.  
Emergency cooling must be available in case of nearby fire.  
Keep ignition sources away - Do not smoke.
- **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:** Not required.
- **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**

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:**  
Not necessary if room is well-ventilated.  
Not required.  
Use suitable respiratory protective device in case of insufficient ventilation.
- **Hand protection**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
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.

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- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
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- **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**  
Rubber gloves
- **For the permanent contact gloves made of the following materials are suitable:** Neoprene gloves
- **Eye/face protection** Not required.

### SECTION 9: Physical and chemical properties

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

##### · General Information

- |                                                            |                                    |
|------------------------------------------------------------|------------------------------------|
| · Physical state                                           | Aerosol                            |
| · Colour:                                                  | Different according to colouring   |
| · Odour:                                                   | Pleasant                           |
| · Odour threshold:                                         | Not determined.                    |
| · Melting point/freezing point:                            | -159.4 °C                          |
| · Boiling point or initial boiling point and boiling range | -44 °C                             |
| · Flammability                                             | Extremely flammable liquefied gas. |
| · Lower and upper explosion limit                          |                                    |
| · Lower:                                                   | 1.8 Vol % (Propan/Butan)           |
| · Upper:                                                   | 8.5 Vol % (Propan/Butan)           |
| · Flash point:                                             | Not applicable, as aerosol.        |
| · Auto-ignition temperature:                               | 460 °C                             |
| · Decomposition temperature:                               | Not determined.                    |
| · pH                                                       | Not applicable                     |
| · Viscosity:                                               |                                    |
| · Kinematic viscosity                                      | Not applicable                     |
| · Dynamic:                                                 | Not applicable                     |
| · Solubility                                               |                                    |
| · water at 20 °C:                                          | 0.049 g/l (Isobutan)               |
| · Partition coefficient n-octanol/water (log value)        | Not determined.                    |
| · Vapour pressure at 20 °C:                                | 3,000 hPa                          |
| · Density and/or relative density                          |                                    |
| · Density at 20 °C:                                        | 0.56 g/cm <sup>3</sup>             |
| · Relative density                                         | Not determined.                    |
| · Vapour density                                           | Not determined.                    |

#### · 9.2 Other information

- |                                                                                 |                              |
|---------------------------------------------------------------------------------|------------------------------|
| · Appearance:                                                                   |                              |
| · Form:                                                                         | Aerosol                      |
| · Important information on protection of health and environment, and on safety. |                              |
| · Ignition temperature:                                                         | Product is not selfigniting. |
| · Explosive properties:                                                         | Not determined.              |
| · Solvent content:                                                              |                              |
| · VOC (EC)                                                                      | 95 %                         |
| · Solids content:                                                               | <1.0 %                       |
| · Change in condition                                                           |                              |
| · Evaporation rate                                                              | Not applicable.              |

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<b>· Information with regard to physical hazard classes</b>	
· Explosives	Void
· Flammable gases	Extremely flammable gas.
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Contains gas under pressure; may explode if heated.
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

### 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** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

##### 75-28-5 isobutane

Inhalative	LC50/4 h	258,000 mg/l (rat)
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- **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.
- **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.

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## · 11.2 Information on other hazards

## · Endocrine disrupting properties

None of the ingredients is listed.

\* **SECTION 12: Ecological information**

## · 12.1 Toxicity

## · Aquatic toxicity:

75-28-5 isobutane

EC50	7.71 mg/l (A)
LC50/96h	27.98 mg/l (fish)

· 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.

## · 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

## · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

## · 12.7 Other adverse effects

· Remark: The product is highly volatile.

## · Additional ecological information:

· General notes: Not hazardous for water.

\* **SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

## · Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

## · Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

\* **SECTION 14: Transport information**

## · 14.1 UN number or ID number

· ADR, IMDG, IATA UN1950

## · 14.2 UN proper shipping name

· ADR	1950 AEROSOLS
· IMDG	AEROSOLS
· IATA	AEROSOLS, flammable

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## · 14.3 Transport hazard class(es)

## · ADR



· Class 2 5F Gases.  
· Label 2.1

## · IMDG, IATA



· Class 2.1 Gases.  
· Label 2.1

## · 14.4 Packing group

· ADR, IMDG, IATA Void

## · 14.5 Environmental hazards:

· Marine pollutant: No

## · 14.6 Special precautions for user

Warning: Gases.

## · Hazard identification number (Kemler code):

-

## · EMS Number:

F-D,S-U

## · 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

## · Transport/Additional information:

## · ADR

## · Excepted quantities (EQ)

Code: E0  
Not permitted as Excepted Quantity

## · IMDG

## · Limited quantities (LQ)

1L

## · Excepted quantities (EQ)

Code: E0  
Not permitted as Excepted Quantity

**SECTION 15: Regulatory information**

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

## · Labelling according to Regulation (EC) No 1272/2008

GHS label elements

The product is classified and labelled according to the GB CLP regulation.

## · Hazard pictograms



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- **Signal word** *Danger*
- **Hazard statements**  
H222 *Extremely flammable aerosol.*  
H229 *Pressurised container: May burst if heated.*
- **Precautionary statements**  
P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*  
P211 *Do not spray on an open flame or other ignition source.*  
P251 *Do not pierce or burn, even after use.*  
P410+P412 *Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.*
- **Directive 2012/18/EU**
- **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.*

- **Relevant phrases**  
H220 *Extremely flammable gas.*  
H280 *Contains gas under pressure; may explode if heated.*
- **Recommended restriction of use** *Product only for professional use*
- **Abbreviations and acronyms:**  
RID: *Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*  
IATA-DGR: *Dangerous Goods Regulations by the "International Air Transport Association" (IATA)*  
ICAO: *International Civil Aviation Organisation*  
ICAO-TI: *Technical Instructions by the "International Civil Aviation Organisation" (ICAO)*  
ADR: *Accord relatif au transport international 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)*  
VOC: *Volatile Organic Compounds (USA, EU)*  
LC50: *Lethal concentration, 50 percent*  
LD50: *Lethal dose, 50 percent*  
PBT: *Persistent, Bioaccumulative and Toxic*  
vPvB: *very Persistent and very Bioaccumulative*  
Flam. Gas 1: *Flammable gases – Category 1*  
Aerosol 1: *Aerosols – Category 1*  
: *Aerosols – Category 3*  
Press. Gas (Comp.): *Gases under pressure – Compressed gas*
- **\* Data compared to the previous version altered.**

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