

Occlu-Spray

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

- 1.1 Product identifier**
Commercial product name: Occlu-Spray
- 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**
Company / Manufacturer: al dente Dentalprodukte GmbH
Street / mailbox: Borsigstr. 1
Country code. / postal code / city: D - 38644 Goslar
Phone: 0 53 21 / 80031
Fax: 0 53 21 / 50881
E-mail / Website: info@aldente.de / www.aldente.de
Further information obtainable from: al dente Dentalprodukte GmbH
- 1.4 Emergency telephone number:**
al dente Dentalprodukte GmbH: +49 (0) 53 21 / 80031 (Mo-Fr 8:00-16:00)

SECTION 2: Hazards Identification *

- 2.1 Classification of the substance or mixture**
Classification according to Regulation (EC) No 1272/2008
- | | | |
|-----------|--------------|---|
| Aerosol 1 | H222
H229 | Extremely flammable aerosol.
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 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:** Pressurized 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

Occlu-Spray

smoking. Keep out of the reach of children

- 2.3 Other hazards:**
Results of PBT and vPvB assessment
PBT:
vPvB:

Not applicable.
Not applicable.

SECTION 3: Composition / Information on Ingredients *

3.2 Mixture

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%

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. If symptoms persist, consult a doctor.

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: Fire Fighting measures: *

5.1 Extinguishing media

Suitable extinguishing media:

CO₂, 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.

Occlu-Spray

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.
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 in a cool location. 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 item 7.
Individual protection measures, such as personal protective equipment	
General protective and hygienic measures:	Wash hands before breaks and at the end of work. Not necessary if room is well-ventilated.
Respiratory protection:	Not required. Use suitable respiratory protective device in case of insufficient ventilation.

Occlu-Spray

Hand protection:	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 cannot be calculated in advance and has therefore to be checked prior to the application.
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.
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.
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 ³
Relative density:	Not determined.

Occlu-Spray

Vapour density: Not determined.

9.2 Other information:

Appearance:

Form: Aerosol

Important information on protection of health and environment, and on safety.

Auto-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.

Information with regard to physical hazard classes

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 toxicological effects

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)

Occlu-Spray

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.
Additional toxicological information:	
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	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.

11.2 Information on other hazards
Endocrine disrupting properties: None of the ingredients is listed.

SECTION 12: Ecological Information

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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.

Occlu-Spray

SECTION 13: Disposal Considerations

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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

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14.1 UN-Number

ADR, IMDG, IATA: UN1950

14.2 UN proper shipping name

ADR: 1950 AEROSOLS
IMDG: AEROSOLS
IATA: AEROSOLS, flammable

14.3 Transport hazard class:

ADR



Class: 2.5F Gases
Label: 2.1

IMDG, IATA



Class: 2.1 Gases
Label: 2.1

14.4 Packaging group:

ADR, IMDG, IATA: Void

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user:

Hazard identification number (Kemler code): -
EMS Number: F-D,S-U

14.7 Transport in bulk according to Annex II of the MARPOL Agreement and according to the IBC Code:

Not applicable.

Transport/Additional information:

ADR

Excepted quantities (EQ): Code: E0
Not permitted as Excepted Quantity

IMDG

Limited quantities (LQ): 1L

Occlu-Spray

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



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.

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: Further Information *

The information is based on the current state of our knowledge, however, it does not represent a guarantee of product characteristics and does not establish a contractual legal relationship.

Relevant sentences:

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.

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 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

EU – Safety Data Sheet

according to 1907/2006/EC, Article 31

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Page 9 of 9

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Occlu-Spray

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
Aerosol 3:	Aerosols – Category 3
Press. Gas (Comp.):	Gases under pressure – Compressed gas

*** Data changed versus the previous version**