

Occlu-Spray

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

1.1. Product identifier

Product form:	Mixture
Trade names:	Occlu-Spray
UFI:	F50H-3S3F-H01K-PWRD

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:	Auxiliary for dental technology
Uses advised against:	Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier:	SILADENT Dr. Böhme & Schöps GmbH
Street / mailbox:	Im Klei 26
Country code / postal code / city:	DE - 38644 Goslar
Phone:	+49 (0) 53 21 / 37 79 – 0
Fax:	+49 (0) 53 21 / 38 96 32
Email / Internet:	info@siladent.de - www.siladent.de
Further information obtainable from:	SILADENT Dr. Böhme & Schöps GmbH

1.4. Emergency telephone number

SILADENT Dr. Böhme & Schöps GmbH:	+49 (0) 53 21 / 37 79 - 0 (Mon–Fri 8:00–16:00)
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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]:		
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 [CLP]:
The product is classified and labelled according to the CLP regulation.

Hazard pictograms (CLP):



GHS02

Signal word (CLP):

Danger

UFI:

F50H-3S3F-H01K-PWRD

Hazard statements (CLP):

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Precautionary statements (CLP):

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.

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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. Keep out of the reach of children.

2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable.
vPvB: Not applicable.

Endocrine disrupting properties:

Environmental information: There is no information available on endocrine disrupting properties for the environment.
Toxicological information: There is no information available on endocrine disrupting properties for human health.

Other hazards:

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances:

Not applicable (mixture, not a substance)

3.2. Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

Identifiers	Name	Content	Classification (CLP)
(CAS No.) 75-28-5 (EC No.) 200-857-2 (REACH No.) 01-2119485395-27-xxxx	Isobutane	50 - 100 %	Flam. Gas 1, H220 Press. Gas (Comp.), H280

For the wording of the listed hazard statements refer to section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

No information available.

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.
If symptoms persist, consult a doctor.

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 media:

CO₂, powder or water spray. Fight larger fires with water spray.
Use fire extinguishing methods suitable to surrounding conditions.

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Unsuitable extinguishing media: No information available.

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.

6.3. Methods and material for containment and cleaning up:

Allow to evaporate.

Ensure adequate ventilation.

Pick up mechanically.

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:

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

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.

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Further information about storage conditions:

Store receptacle in a well ventilated area.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
Store in upright position.
Keep container tightly closed.

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

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:

Material of gloves:

Not required.

Penetration time of glove material:

No information available.

For the permanent contact in work areas without heightened risk of injury (e.g. laboratory) gloves made of the following material are suitable:

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:

Rubber gloves

Neoprene gloves



Eye/face protection:

Safety glasses

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

Aerosol

Colour:

Different according to colouring

Odour:

Pleasant

Melting point/freezing point:

-159,4 °C

Boiling point or initial boiling point and boiling range:

-44 °C

Flammability:

Extremely flammable liquefied gas.

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Lower and upper explosion limit:	Lower: 1,8 Vol % (propane/butane) Upper: 8,5 Vol % (propane/butane)
Flash point:	Not applicable, as aerosol.
Auto-ignition temperature:	460 °C
Decomposition temperature:	Not determined.
PH:	Not applicable
Kinematic viscosity:	Not applicable
Solubility:	Water at 20 °C: 0,049 g/l (isobutane)
Partition coefficient n-octanol/water (log value):	Not determined.
Vapour pressure:	3000 hPa (20 °C)
Density and/or relative density:	Density: 0,56 g/cm ³ (20 °C) Relative density: Not determined.
Relative vapour density:	Not determined.
Particle characteristics:	No information available.

9.2. Other information

Odour threshold:	Not determined.
Dynamic viscosity:	Not applicable
Appearance:	
Form:	Aerosol
Important information on protection of health and environment, and on safety:	
Auto-ignition temperature:	Product is not self-igniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Solvent content:	
VOC (EU):	98 %
Solids content:	< 2 %
Molecular weight:	58,12 g/mol
Refractive index:	Not applicable
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

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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.

Acute toxicity (Components)

75-28-5 Isobutane

Endpoint	Value	Species	Method
LC50/4 h inhalation	258000 mg/l	Rat	-

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.

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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

12.1. Toxicity

Aquatic toxicity (Components)

Substance (CAS No)	Endpoint	Value	Duration	Species	Method
Isobutane (75-28-5)	EC50	7,71 mg/l	-	Algae	-
Isobutane (75-28-5)	LC50	27,98 mg/l	96 h	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.

European waste catalogue: 16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00 gases in pressure containers and discarded chemicals
16 05 04* gases in pressure containers (including halons)
containing hazardous substances

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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SECTION 14: Transport information

	Land transport ADR/RID	Sea transport IMDG/IMO	Air transport ICAO/IATA
14.1. UN number or ID number	UN1950	UN1950	UN1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)	2	2	2.1
Label	2.1 	2.1 	2.1 
14.4. Packing group	-	-	-
Remarks	Classification code: 5F Excepted quantities (EQ): E0 – not permitted as excepted quantity	EmS: F-D, S-U Excepted quantities (EQ): E0 – not permitted as excepted quantity	-
Limited Quantity	1 L	1 L	-
Transport category	2	-	-
14.5. Environmental hazards	No	No	No
Marine pollutant	-	No	-
Tunnel restriction code	(D)	-	-

UN "Model Regulation": UN 1950 AEROSOLS, 2.1

14.6. Special precautions for user:

Warning: Gases.

14.7. Maritime transport in bulk according to IMO instruments:

Not applicable.

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.

See section 2.2.

Directive 2012/18/EU

Named dangerous substances – Annex I: None of the ingredients is listed.

Seveso category: 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

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Regulation (EC) No 1907/2006, Annex XVII

Conditions of restriction: 3

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

Annex I – RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II – REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

Other regulations, limitations and prohibitive regulations

Customs tariff number: 3212 90 00

15.2. Chemical safety assessment:

A chemical safety assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications – usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer. The information in this safety data sheet applies only to the product named in section 1 and does not necessarily apply when it is used together with other products. It is recommended that this safety data sheet be passed on to the actual user of the product. The information given is not to be used as a product specification.

Changes compared to the previous version:

Section	Note
2	Hazards identification
4	First aid measures
6	Accidental release measures
7	Handling and storage
8	Exposure controls/personal protection

Contact

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info@siladent.de - www.siladent.de

Full text of H- and EUH-phrases:

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

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Abbreviations and acronyms:

ADR:	Agreement concerning the International Carriage of Dangerous Goods by Road
Aerosol 1:	Aerosols – Category 1
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of Notified Chemical Substances
Flam. Gas 1:	Flammable gases – Category 1
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals
IATA:	International Air Transport Association
IATA-DGR:	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
IMDG:	International Maritime Dangerous Goods Code
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
PBT:	Persistent, bioaccumulative and toxic
Press. Gas (Comp.):	Gases under pressure – Compressed gas
RID:	Regulations concerning the International Carriage of Dangerous Goods by Rail
VOC:	Volatile Organic Compounds (USA, EU)
vPvB:	Very persistent and very bioaccumulative