

according to Regulation (EC) No 1907/2006

Occlutec

Revision date: 26.06.2017

Product code: 1935x000

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SECTION 1: Identification of the su	bstance/mixture and of the company/un	dertaking	
1.1. Product identifier			
Occlutec			
Further trade names			
1935-0000 Occlutec green			
1935-1000 Occlutec red			
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against		
Use of the substance/mixture			
Occlusion spray for the recogniti	on of trouble spots.		
Uses advised against			
No information available.			
1.3. Details of the supplier of the safety	data sheet		
Company name:	Renfert GmbH		
Street:	Untere Giesswiesen 2		
Place:	D-78247 Hilzingen		
Telephone:	+49 7731 8208-0	Telefax:	+49 7731 8208-70
e-mail:	info@renfert.com		
Contact person:	Frau Andris	Telephone:	+49 7731 8208-927
e-mail:	silke.andris@renfert.com		
Internet:	www.renfert.com		
1.4. Emergency telephone number:	GB: 0044 151 951 3317 (Health and Safety Executive (HSE) Chemicals) USA:		
	800-222-1222 (National Poison Control number) CA: British Columbia: 800-567-8911 or		
	604-682-5050 Alberta: 1-800-332-1414 or 944-1414 Saskatchewan: 1-866-454-1212		
	Manitoba: 1-855-776-4766 Ontario: 1-800-268-9017 Quebec: 1-800-463-5060 New		
	Brunswick: 911 New Foundland: 1-866-727-1110 Northwest Territories: 1-800-332-1414		
	Nova Scotia: 1-800-565-8161 AU: 13 11	26 ZA: 021 938 6084 (Office	e Hours) or 021
	931 6129 (24 Hours)		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008 Hazard categories: Aerosol: Aerosol 1 Hazard Statements: Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Danger

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Pictograms:
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Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
Precautionary stateme	ents
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.
2.3. Other hazards	

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization Aerosol



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Hazardous components

Chemical name			Quantity
EC No	Index No	REACH No	
Classification according	to Regulation (EC) No. 1272/2008 [CLP]		
isobutane			80 - 100%
200-857-2	601-004-00-0		
Flam. Gas 1; H220		-	
	EC No Classification according isobutane 200-857-2	EC No Index No Classification according to Regulation (EC) No. 1272/2008 [CLP] isobutane 200-857-2 601-004-00-0	EC No Index No REACH No Classification according to Regulation (EC) No. 1272/2008 [CLP] isobutane 200-857-2 601-004-00-0

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

After contact with skin

No special measures are necessary.

In case of skin irritation, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth. When in doubt or if symptoms are observed, get medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Extinguishing powder, Water spray jet, alcohol resistant foam

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Provide adequate ventilation.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Handle and open container with care.



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Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.

Further information on storage conditions

Protect against: Heat, UV-radiation/sunlight

Heating causes rise in pressure with risk of bursting.

7.3. Specific end use(s)

Please refer to our internet website for more information: www.renfert.com

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
13463-67-7	Titanium dioxide, total inhalable	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Safe handling: see section 7

Protective and hygiene measures

Provide adequate ventilation.

Wash hands before breaks and after work.

Keep away from food, drink and animal feedingstuffs.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Suitable material: NR (natural rubber, natural latex), Butyl caoutchouc (butyl rubber), NBR (Nitrile rubber)

Thickness of the glove material: >= 0,4 mm

Breakthrough time: >= 60 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Respiratory protection

Use only in well-ventilated areas.

Usually no personal respirative protection necessary.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour:	Aerosol various, depending on coloration characteristic	
		Test method
pH-Value:	not applicable	
Changes in the physical state		
Melting point:	- 159 °C	
Initial boiling point and boiling range:	- 44 °C	
Flash point:	not applicable	
Explosive properties		
In use, may form flammable/explosive va	pour-air mixture.	
Lower explosion limits:	1,8 vol. %	
Upper explosion limits:	8,5 vol. %	

aterial. Keep away from sources





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Ignition temperature:		460 °C	
Decomposition temperature:		not determined	
Vapour pressure: (at 20 °C)		3000 hPa	
Density (at 20 °C):		0,6 g/cm³	
Water solubility: (at 20 °C)		0,049 g/L	
Partition coefficient:		not determined	
Viscosity / dynamic:		not determined	
Viscosity / kinematic:		not determined	
Evaporation rate:		not determined	
9.2. Other information			
Solid content:	< 5 %		

Solid content:

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. In case of warming: Danger of bursting container.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Further information

The product has not been tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
75-28-5	isobutane	2,8

12.4. Mobility in soil

There are no data available on the mixture itself.





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12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

Further information

The product has not been tested. The statement is derived from the properties of the single components. Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

160504

Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances Classified as hazardous waste.

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

•	
Land transport (ADR/RID)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Marine transport (IMDG)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Marine pollutant:	no
Air transport (ICAO-TI/IATA-DGR)	
<u>14.1. UN number:</u>	UN 1950
14.2. UN proper shipping name:	AEROSOLS, flammable
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	no
14.6. Special precautions for user not applicable	
14.7. Transport in bulk according to Annex II of M	larpol and the IBC Code
not applicable	
SECTION 15: Regulatory information	
- -	s/legislation specific for the substance or mixture
EU regulatory information	
Restrictions on use (REACH, annex XVII):	
Entry 28: isobutane	
2004/42/EC (VOC):	98 %
National regulatory information	
Water contaminating class (D):	1 - slightly water contaminating
SECTION 16: Other information	
Changes	
Abs. 15 * Data changed compared with the	e previous version
Abbreviations and acronyms	of the American Chemical Society)
CAS: Chemical Abstracts Service (division ADR: Accord européen relatif au transport	or the American Chemical Society) international des marchandises Dangereuses par Route (European Agreement
	international des marshandides Bungeredes par Notice (European Agreement



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concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement concernant le transport international ferroviaire de marchandises Dangereuses (Regulations Concerning

the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

VOC: volatile organic compound(s)

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. Restricted to professional users.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)