according to Regulation (EC) No 1907/2006

Occlutec Spray

Revision date: 25.01.2023

Product code: 1935xx00

Page 1 of 7

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

1.1. Product identifier

Occlutec Spray

Further trade names

1935 2000 Occlutec Spray grün 1935 3000 Occlutec Spray rot

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

Use of the substance/mixture

Occlusion spray for the recognition 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	
e-mail:	silke.andris@renfert.com	
Internet:	www.renfert.com	
1.4. Emergency telephone number:	IRL: 01 809 2566 (Healthcare Professionals) GB: 0044 1	51 951 3317 (Health and
	Safety Executive (HSE) Chemicals)	-

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008 Aerosol 1; H222-H229 STOT SE 3; H336 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

pentane

Signal word: Pictograms:



Hazard statements

Hazard statements	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
Precautionary stater	ments
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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
<u>3. Other hazards</u>	
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

<u>2.3.</u>

Chemical characterization Aerosol

according to Regulation (EC) No 1907/2006

Occlutec Spray

Revision date: 25.01.2023

Product code: 1935xx00

Page 2 of 7

Renfert GmbH

Hazardous components

CAS No	Chemical name	Chemical name			
	EC No	Index No	REACH No		
	Classification (Regulation (EC) No 1272/2008)				
109-66-0	pentane	pentane			
	203-692-4	601-006-00-1	01-2119459286-30		
	Flam. Liq. 1, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H224 H336 H304 H411 EUH066				

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

After contact with skin

Rinse skin with water. 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

May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

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

Full 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.

Do not inhale explosion and combustion gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

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

Other information

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



according to Regulation (EC) No 1907/2006

Occlutec Spray

Revision date: 25.01.2023

Product code: 1935xx00

Page 3 of 7

Advice on safe handling

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

Handle and open container with care.

Advice on protection against fire and explosion

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 naked flames or any incandescent material. Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Advice on general occupational hygiene

Provide adequate ventilation.

Wash hands before breaks and after work.

Keep away from food, drink and animal feedingstuffs.

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.

Recommended storage temperature: 5°C - 35°C

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

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
74-98-6	Aliphatic hydrocarbon gases, Alkanes (C1-C3), Propane	-	-		Asphyxiant	
75-28-5	Butane, all isomers - Isobutane	1000	-		STEL (15 min)	
106-97-8	Butane, all isomers - n-butane	1000	-		STEL (15 min)	
109-66-0	n-Pentane	1000	3000		TWA (8 h)	

8.2. Exposure controls







Appropriate engineering controls

Safe handling: see section 7

Individual protection measures, such as personal protective equipment

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.

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:	Aerosol
Colour:	various, depending on coloration
Odour:	characteristic

Renfert GmbH



Safety Data Sheet

according to Regulation (EC) No 1907/2006

O	cclutec Spray	
Revision date: 25.01.2023 Proc	duct code: 1935xx00	Page 4 of 7
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling	- 44 °C	
range:		
Flammability:	No data available	
Lower explosion limits:	1,5 vol. %	
Upper explosion limits:	10,9 vol. %	
Flash point:	not applicable	
Auto-ignition temperature:	not determined	
Decomposition temperature: pH-Value:	not determined not applicable	
Viscosity / kinematic:	No data available	
Water solubility:	Immiscible	
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	2700 hPa	
(at 20 °C)		
Density (at 20 °C):	1,28 g/cm ³	
9.2. Other information		
Explosive properties		
In use, may form flammable/explosive vapour-air mixture.		
Other safety characteristics		
Solid content:	< 5 %	
Further Information		
SECTION 10: Stability and reactivity		
10.1. Reactivity		
No hazardous reaction when handled and stored according	g to provisions.	
10.2. Chemical stability		
The product is chemically stable under recommended cond	ditions of storage, use and temperature.	
10.3. Possibility of hazardous reactions In case of insufficient ventilation and/or through use, explore	aive/highly flammable mixtures may develop	
	sive/highly harmable mixtures may develop.	
<u>10.4. Conditions to avoid</u> Keep away from heat, hot surfaces, sparks, open flames a	nd other ignition courses. No emoking	
Pressurised container: May burst if heated.		
10.5. Incompatible materials		
Oxidising agent, strong		
10.6. Hazardous decomposition products		
No known hazardous decomposition products.		
SECTION 11: Toxicological information		
11.1. Information on hazard classes as defined in Regulation (EC	C) No 1272/2008	
Acute toxicity		
Based on available data, the classification criteria are not r	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity		
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r		
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane)	net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane) STOT-repeated exposure	net. net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane)	net. net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane) STOT-repeated exposure Based on available data, the classification criteria are not r	net. net. net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane) STOT-repeated exposure Based on available data, the classification criteria are not r Aspiration hazard	net. net. net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane) STOT-repeated exposure Based on available data, the classification criteria are not r Aspiration hazard Based on available data, the classification criteria are not r 11.2. Information on other hazards	net. net. net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane) STOT-repeated exposure Based on available data, the classification criteria are not r Aspiration hazard Based on available data, the classification criteria are not r	net. net. net.	
Based on available data, the classification criteria are not r Irritation and corrosivity Based on available data, the classification criteria are not r Sensitising effects Based on available data, the classification criteria are not r Carcinogenic/mutagenic/toxic effects for reproduction Based on available data, the classification criteria are not r STOT-single exposure May cause drowsiness or dizziness. (pentane) STOT-repeated exposure Based on available data, the classification criteria are not r Aspiration hazard Based on available data, the classification criteria are not r 11.2. Information on other hazards Endocrine disrupting properties	net. net. net.	

SECTION 12: Ecological information



according to Regulation (EC) No 1907/2006

Occlutec Spray

Revision date: 25.01.2023

Product code: 1935xx00

Page 5 of 7

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity Dose			[h] [d]	Species	Source	Method
109-66-0	pentane				-		
	Acute crustacea toxicity	EC50	2,7 mg/l		Daphnia magna (Big water flea)	IUCLID	

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
109-66-0	pentane	3,39

12.4. Mobility in soil

There are no data available on the mixture itself.

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. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. 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

Disposal recommendations

Dispose of waste according to applicable legislation.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of Wastes Code - 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; hazardous waste

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

160504

14.1. UN number or ID number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1
	*

Renfert Gr		ł
Renfert	Safety Data Sheet	
	according to Regulation (EC) No 1907/2006	
	Occlutec Spray	
Revision date: 25.01.2023	Product code: 1935xx00	Page 6 of
Marine transport (IMDG)		
<u>14.1. UN number or ID number:</u>	UN 1950	
14.2. UN proper shipping name:	AEROSOLS	
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:		
Hazard label:	2.1	
Air transport (ICAO-TI/IATA-DGR)	•	
14.1. UN number or ID number:	UN 1950	
14.2. UN proper shipping name:	AEROSOLS, flammable	
14.3. Transport hazard class(es):	2.1	
14.4. Packing group:	-	
Hazard label:	2.1	
ENVIRONMENTALLY HAZARDOUS: <u>14.6. Special precautions for user</u> Further information: see section 6, 7, <u>14.7. Maritime transport in bulk according to</u>		
not applicable		
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regul	ations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII):		
Entry 3, Entry 40		
2004/42/EC (VOC):	not applicable	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work	
	protection guideline' (94/33/EC).	
Water hazard class (D):	2 - obviously hazardous to water	
Additional information		
deplete the ozone layer: not applicable REGULATION (EU) 2019/1021 OF The	F THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on substances that e HE EUROPEAN PARLIAMENT AND OF THE COUNCIL on persistent organic	
pollutants : not applicable REGULATION (EU) No 649/2012 OF import of hazardous chemicals: not ap	THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and	
SECTION 16: Other information	27/1000/0	
Abbreviations and acronyms		
PBT: persistent and bioaccumulative a vPvB: very persistent, very bioaccumu		
ATE: Acute Toxicity Estimate LD50: lethal dose, 50% LC50: lethal concentration, 50%	· ······	
ADR: Accord européen relatif au trans	sport international des marchandises Dangereuses par Route (European Agreement	
concerning the International Carriage RID: Règlement concernant le transpor the International Transport of Dangero	ort international ferroviaire de marchandises Dangereuses (Regulations Concerning	

IMDG: International Maritime Code for Dangerous Goods

according to Regulation (EC) No 1907/2006

Occlutec Spray

Revision date: 25.01.2023

Product code: 1935xx00

Page 7 of 7

ICAO: International Civil Aviation Organization

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

VOC: volatile organic compound(s)

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
STOT SE 3; H336	Bridging principle "Aerosols"
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

~		
	H222	Extremely flammable aerosol.
	H224	Extremely flammable liquid and vapour.
	H229	Pressurised container: May burst if heated.
	H304	May be fatal if swallowed and enters airways.
	H336	May cause drowsiness or dizziness.
	H411	Toxic to aquatic life with long lasting effects.
	H412	Harmful to aquatic life with long lasting effects.
	EUH066	Repeated exposure may cause skin dryness or cracking.

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.)