Safety data sheet

according to UK REACH Regulation

Art. no.: ME22935

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

1.1 Product identifier

Care Oil Spray (300 ml)

UFI: P985-U0K3-R00Q-YE7H

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

Use of the substance/mixture

Lubricant

1.3 Details of the supplier of the safety data sheet

Company name:	MELAG Medizintechnik GmbH & Co. KG
Street:	Geneststraße 6 - 10
Place:	10829 Berlin Germany
Telephone:	+49 (0)30 75 79 11-0
Telefax:	+49 (0)30 75 79 11-99
E-mail:	hotline@melag.de
Internet:	www.melag.com
Availability:	Monday to Friday – 8 a.m. to 4 p.m. (CET)

1.4 Emergency telephone number: 111 NHS (National Health Service)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GB CLP Regulation

Aerosol 1; H222-H229
Full text of hazard statements: see SECTION 16.

2.2 Label elements

GB CLP Regulation

Signal word: Danger

Pictograms:

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.

2.3 Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.1 Mixtures

Hazardous components

CAS No.	Chemical name			Quantity
	EG No.	Index No.	REACH No.	
	Classification (GB CLP Regulation)			
75-28-5	Isobutane			50 - < 100 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1, Liquefied gas; H220 H280			
74-98-6	Propane			5 - < 10 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Liquefied gas; H220 H280			
106-97-8	Butane			1 - < 3 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			

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

Specific Conc. Limits, M-factors and ATE

CAS No.	EC No.	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
106-97-8	203-448-7	Butane	1 - < 3 %
	inhalation: LC50 = 658 ppm (gases)		

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

4.2 Most important symptoms and effects, both acute and delayed

Headache, nausea, dizziness, fatigue, skin irritation

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information

Danger of bursting container.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General advice

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Wear personal protection equipment.

For non-emergency personnel

First aider: Pay attention to self-protection!

For emergency responders

Fight fire with normal precautions from a reasonable distance.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3 Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

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

Observe instructions for use.
Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
When using do not eat, drink, smoke, sniff.
Wear personal protection equipment (refer to section 8).
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Further information on handling

Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Observe legal regulations and provisions.

Hints on joint storage

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

Further information on storage conditions

Protect from frost. Protect from direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

7.3 Specific end use(s)

Lubricant

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limits (EH40)

CAS No.	Substance	ppm	mg/m³	fibres/m³	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

Additional advice on limit values

a No restriction
b End of exposure or end of shift
c At long-term exposure:
d Before next shift

Blood (B)
Urine (U)

8.2 Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.
EN 166

Hand protection

Protect skin by using skin protective cream. 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.
Suitable material: NBR (Nitrile rubber)
Breakthrough time: 480 min
Thickness of the glove material 0.45 mm
EN ISO 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
When exceeding the relevant workplace exposure limits, note the following:
Suitable respiratory protective equipment: Combination filter device (DIN EN 141).
Filtering device with filter or ventilator filtering device of type: AX
Observe the wear time limits as specified by the manufacturer.
Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	
Odour:	characteristic

		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	-40 °C	
Flammability		
Solid/liquid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	1,5 Vol.-%	
Upper explosion limits:	10,8 Vol.-%	
Flash point:	-80 °C	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):		DIN 19268

Viscosity / kinematic: (at 40 °C)	21,3 mm²/s	
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Solubility in other solvents:	not determined	
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	0,836 g/cm³	DIN 51757
R elative vapour density:	not determined	

9.2 Other information

Information with regard to physical hazard classes

Explosive properties

Heating may cause an explosion.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

Further information

Data apply to technical substance: Relative density, Colour, Odour, Viscosity, pH.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

10.4 Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Take precautionary measures against static discharges.

10.5 Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

10.6 Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

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

CAS No.	Chemical name				
	Exposure route	Dose	Species	Source	Method
106-97-8	Butane				
	inhalation (4 h) gas	LC50 658 ppm	Rat	GESTIS	

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.
No indication of human carcinogenicity.
No indications of human germ cell mutagenicity exist.
No indications of human reproductive toxicity exist.

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.

Specific effects in experiment on an animal

No information available.

SECTION 12: Ecological information

12.1 Toxizity

The product is not: Ecotoxic.

CAS No.	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
75-28-5	Isobutane					
	Acute fish toxicity	LC50 91,42 mg/l	96 h	Fish, no other information	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50 19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	ErC50 69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.

74-98-6	Propane					
	Acute fish toxicity	LC50 49,9 mg/l	96 h	Fish, no other information	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50 19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	EC50 69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.
106-97-8	Butane					
	Acute fish toxicity	LC50 49,9 mg/l	96 h	Fish, no other information	United States Environmental Protection A	The Ecosar class program has been develo
	Acute algae toxicity	ErC50 19,37 mg/l	96 h	Algae	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.
	Acute crustacea toxicity	EC50 69,43 mg/l	48 h	Daphnia sp.	USEPA OPPT Risk Assessment Division (200	Calculation using ECOSAR Program v1.00.

12.2 Persistence and degradability

The product has not been tested.

12.3 Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No.	Chemical name	Log Pow
75-28-5	Isobutane	1,09
74-98-6	Propane	1,09
106-97-8	Butane	1,09

12.4 Mobility in soil

The product has not been tested.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH. The product has not been tested.

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

Avoid release to the environment.

SECTION 13: Disposal consideration

13.1 Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160504 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

List of Wastes Code - used product

160504 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

List of Wastes Code - contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

SECTION 14: Transport information

Land transport (ADR/RID)

14.1	**UN number or ID number:**	UN 1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
14.4	**Packaging group:**	-
	Hazard label:	2.1
	Classification code:	5F
	Special provisions:	190 327 344 625
	Limited quantity:	1 L
	Excepted quantity:	E0
	Transport category:	2
	Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1	**UN number or ID number:**	UN 1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
14.4	**Packaging group:**	-
	Hazard label:	2.1
	Classification code:	5F
	Special provisions:	190 327 344 625
	Limited quantity:	1 L
	Excepted quantity:	E0

Marine transport (IMDG)

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	**Packaging group:**	-
	Hazard label:	2.1
	Marine pollutant:	no
	Special provisions:	63, 190, 277, 327, 344, 381, 959
	Limited quantity:	1000 mL
	Excepted quantity:	E0
	EmS:	F-D, S-U

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	**Packaging group:**	-
	Hazard label:	2.1
	Special provisions:	A145 A167 A802
	Limited quantity Passenger:	30 kg G
	Passenger LQ:	Y203
	Excepted quantity:	E0
	IATA-packaging instructions - Passenger:	203
	IATA-max. quantity - Passenger:	75 kg
	IATA-packaging instructions - Cargo:	203
	IATA-max. quantity - Cargo:	150 kg

14.5 Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6 Special precautions for user

No information available.

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

EU regulatory information

Restrictions on use (REACH, annex XVII):	Entry 3, Entry 28, Entry 40
2010/75/EU (VOC):	No information available.
2004/42/EG (VOC):	No information available.
Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Aerosol Directive (75/324/)

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):	1 - slightly hazardous to water

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized 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)
DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
ATE: Acute Toxicity Estimate
STEL (EC) Short Term Exposure Limit
LC50: Lethal Concentration
EC50: half maximal Effective Concentration
ErC50: means EC50 in terms of reduction of growth rate

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode 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.

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