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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

Revision date / version: 06.03.2020 / 0002

Replacing version dated / version: 21.11.2019 / 0001

Valid from: 06.03.2020 PDF print date: 09.03.2020

LM 40 Multi-Funktions-Spray 400 mL

Art.: 3391

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

LM 40 Multi-Funktions-Spray 400 mL

Art.: 3391

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

Lubricant

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH Jerg-Wieland-Str. 4 89081 Ulm-Lehr Tel.: (+49) 0731-1420-0

Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class Hazard category Hazard statement

Asp. Tox. 1 H304-May be fatal if swallowed and enters airways.

Aerosol 1 H222-Extremely flammable aerosol.

Aerosol 1 H229-Pressurised container: May burst if heated.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



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Danger

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

P102-Keep out of reach of children.

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.

Without adequate ventilation, formation of explosive mixtures may be possible.

White mineral oil (Natural oil)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

Aerosol

3.1 Substance

n.a. **3.2 Mixture**

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP	918-481-9 (REACH-IT List-No.)
CAS	(64742-48-9)
content %	50-70
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

White mineral oil (Natural oil)	
Registration number (REACH)	01-2119487078-27-XXXX
Index	
EINECS, ELINCS, NLP	232-455-8
CAS	8042-47-5
content %	30-50
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here. Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."



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Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eve contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

The following may occur:

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

With long-term contact:

drying of the skin.

Dermatitis (skin inflammation)

Ingestion:

Nausea

Vomiting

Danger of aspiration.

Chemical pneumonitis (condition similar to pneumonia)

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray / alcohol resistant foam / CO2 / dry extinguisher.

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of sulphur

Oxides of nitrogen

Toxic gases

Danger of bursting (explosion) when heated

Explosive vapour/air or gas/air mixtures.

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.



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5.3 Advice for firefighters

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

Protective respirator with independent air supply.

According to size of fire Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air. Avoid contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Keep away from sources of ignition - Do not smoke.

Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Observe special regulations for aerosols!

Observe special storage conditions.

Do not store with flammable or self-igniting materials.

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well-ventilated place.

Store cool.

7.3 Specific end use(s)

No information available at present.



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

Chemical Name	Hydrocarbons, C	10-C13, n-alkanes, isoalkanes, cycl	ics, <2% aromatics		Content %:50-70
WEL-TWA: 800 mg/m3		WEL-STEL:			
Monitoring procedures:	-	Draeger - Hydrocarbons 2/a (81 03			
	-	Draeger - Hydrocarbons 0,1%/c (8	1 03 571)		
	-	Compur - KITA-187 S (551 174)			
BMGV:			Other information: (DEL acc. t	to RCP-method,
			paragraphs 84-87, EH	140)	
Chemical Name	Propane				Content %:
WEL-TWA: 1000 ppm (ACGIH)		WEL-STEL:			
Monitoring procedures:	=	Compur - KITA-125 SA (549 954)			
BMGV:			Other information:	-	
Chemical Name	Oil mist, mineral				Content %:
WEL-TWA: 5 mg/m3 (Mineral oil, e	excluding metal	WEL-STEL:			
working fluids, ACGIH)					
Monitoring procedures:	-	Draeger - Oil Mist 1/a (67 33 031)			
BMGV:			Other information:	-	

White mineral oil (Natural o	oil)					
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - dermal	Long term, systemic effects	DNEL	92	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	35	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	40	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	160	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	220	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	220	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	160	mg/m3	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

- (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit Short-term exposure limit (15-minute reference period).
- (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
- ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.
- (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls

8.2.1 Appropriate engineering controls



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Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. BS EN 14042.

BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

Recommended

Protective nitrile gloves (EN 374).

Minimum layer thickness in mm:

0,7

Permeation time (penetration time) in minutes:

480

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

If OES or MEL is exceeded.

Filter A2 P2 (EN 14387), code colour brown, white

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Aerosol. Acti

Odour:

Colour:

Odour threshold:

pH-value:

Aerosol. Active substance: liquid.

Yellow

Characteristic

Not determined

Not determined



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Melting point/freezing point:

Initial boiling point and boiling range:

Flash point: Evaporation rate: Flammability (solid, gas): Lower explosive limit: Upper explosive limit: Vapour pressure:

Vapour density (air = 1): Density: Bulk density:

Solubility(ies): Water solubility:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Auto-ignition temperature: Decomposition temperature:

Viscosity:

Explosive properties:

Oxidising properties:

9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension:

Not determined

Not determined

n.a. n.a. 0,7 Vol-% 10,9 Vol-% 4500 hPa (20°C) Not determined 0,77 g/cm3 (20°C)

n.a.

Not determined

Mixable

Not determined

470 °C (Ignition temperature)

Nο

Not determined

Not determined

Product is not explosive. When using: development of explosive

vapour/air mixture possible.

Not determined Not determined

Not determined Not determined

61,2 % (Organic solvents) Solvents content:

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

LM 40 Multi-Funktions-Spray 400 mL Art.: 3391 Toxicity / effect **Endpoint** Value Unit Organism Test method Notes Acute toxicity, by oral route: n.d.a. Acute toxicity, by dermal route: n.d.a. Acute toxicity, by inhalation: n.d.a. Skin corrosion/irritation: n.d.a. Serious eye damage/irritation: n.d.a. Respiratory or skin n.d.a. sensitisation: Germ cell mutagenicity: n.d.a.



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Carcinogenicity:			n.d.a.
Reproductive toxicity:			n.d.a.
Specific target organ toxicity -			n.d.a.
single exposure (STOT-SE):			
Specific target organ toxicity -			n.d.a.
repeated exposure (STOT-RE):			
Aspiration hazard:			n.d.a.
Symptoms:			n.d.a.

Hydrocarbons, C10-C13, n-alka						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	
					Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5000	mg/m3/8h	Rat	OECD 403 (Acute	
					Inhalation Toxicity)	
Skin corrosion/irritation:						Repeated
						exposure may
						cause skin
						dryness or
						cracking.
Serious eye damage/irritation:					OECD 405 (Acute Eye	Not irritant
					Irritation/Corrosion)	
Respiratory or skin					OECD 406 (Skin	Not sensitizising
sensitisation:					Sensitisation)	
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative,
· · · · · · · · · · · · · · · · · · ·					Reverse Mutation Test)	Analogous
						conclusion
Carcinogenicity:					OECD 453 (Combined	Negative,
					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
					Studies)	
Reproductive toxicity:					OECD 414 (Prenatal	Negative,
					Developmental Toxicity	Analogous
					Study)	conclusion
Reproductive toxicity:					OECD 421	Negative,
					(Reproduction/Developm	Analogous
					ental Toxicity Screening	conclusion
					Test)	
Specific target organ toxicity -						No indications of
single exposure (STOT-SE):						such an effect.
Specific target organ toxicity -					OECD 408 (Repeated	No indications of
repeated exposure (STOT-RE):					Dose 90-Day Oral	such an effect.,
					Toxicity Study in	Analogous
					Rodents)	conclusion
Aspiration hazard:						Yes

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	
					Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5	mg/l/4h	Rat	OECD 403 (Acute	
					Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant
					Dermal	
					Irritation/Corrosion)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye	Not irritant
					Irritation/Corrosion)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact)
sensitisation:					Sensitisation)	



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Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
			-	typhimurium	Reverse Mutation Test)	
Carcinogenicity:	NOAEL	>1200	mg/kg	Rat	OECD 453 (Combined	Negative
					Chronic	
					Toxicity/Carcinogenicity	
					Studies)	
Reproductive toxicity:					OECD 415 (One-	Negative
					Generation	
					Reproduction Toxicity	
					Study)	
Reproductive toxicity:	NOAEL	>=1000	mg/kg	Rat	OECD 421	Negative
			bw/d		(Reproduction/Developm	_
					ental Toxicity Screening	
					Test)	
Specific target organ toxicity -	NOAEL	>1200	mg/kg	Rat	OECD 453 (Combined	
repeated exposure (STOT-RE):					Chronic	
,					Toxicity/Carcinogenicity	
					Studies)	
Specific target organ toxicity -	NOAEL	>1200	mg/kg		OECD 452 (Chronic	
repeated exposure (STOT-RE):					Toxicity Studies)	
Aspiration hazard:					,	Asp. Tox. 1
Symptoms:						nausea and
•						vomiting.
Specific target organ toxicity -	NOAEL	>2000	mg/kg	Rat	OECD 411 (Subchronic	
repeated exposure (STOT-RE),					Dermal Toxicity - 90-day	
dermal:					Study)	
Specific target organ toxicity -	NOAEL	1000	mg/kg	Rabbit	OECD 410 (Repeated	
repeated exposure (STOT-RE),					Dose Dermal Toxicity -	
dermal:					90-Day)	

Propane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative
					Reverse Mutation Test)	
Reproductive toxicity	NOAEC	21,641	mg/l		OECD 422 (Combined	
(Developmental toxicity):					Repeated Dose Tox.	
					Study with the	
					Reproduction/Developm.	
					Tox. Screening Test)	
Aspiration hazard:						No
Symptoms:						breathing
						difficulties,
						unconsciousne
						, frostbite,
						headaches,
						cramps, mucou
						membrane
						irritation,
						dizziness,
						nausea and
						vomiting.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes					



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12.1. Toxicity to daphnia:				n.d.a.
12.1. Toxicity to algae:				n.d.a.
12.2. Persistence and				n.d.a.
degradability:				
12.3. Bioaccumulative				n.d.a.
potential:				
12.4. Mobility in soil:				n.d.a.
12.5. Results of PBT				n.d.a.
and vPvB assessment				
12.6. Other adverse				n.d.a.
effects:				

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.6. Other adverse effects:							Product floats on the water surface.
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	0,1	mg/l	Oncorhynchus mykiss	,	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,18	mg/l	Daphnia magna		
12.1. Toxicity to algae:	ErL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	80	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
12.3. Bioaccumulative potential:	Log Pow		5,5-7,2				
12.4. Mobility in soil:	Log Koc		>3				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Water solubility:			~10	mg/l			Slight

White mineral oil (Natural oil)							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and degradability:	·	28d	>60	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Biodegradable
12.6. Other adverse effects:							Product floats on the water surface.
12.1. Toxicity to daphnia:	EL50	21d	>1000	mg/l	Daphnia magna		
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Leuciscus idus	OECD 203 (Fish, Acute Toxicity Test)	



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12.1. Toxicity to fish:	NOEC/NOEL	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EL50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EL50	48h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	31,3	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable
Toxicity to bacteria: Toxicity to bacteria:	LC50 NOELR		>1000 >100	mg/l mg/l	activated sludge Pseudomonas subspicata		

Propane							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:	Log Pow		2,28				A notable biological accumulation potential is not to be expected (LogPow 1-3).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU) 07 06 04 other organic solvents, washing liquids and mother liquors

16 05 04 gases in pressure containers (including halons) containing hazardous substances Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Take full aerosol cans to problem waste collection.

Take emptied aerosol cans to valuable material collection.

For contaminated packing material

Pay attention to local and national official regulations.

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Recycling

15 01 04 metallic packaging

SECTION 14: Transport information



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General statements

14.1. UN number: 1950

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

UN 1950 AEROSOLS

14.3. Transport hazard class(es): 2.1 14.4. Packing group: Classification code: 5F IO: 1 I

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

AEROSOLS

14.3. Transport hazard class(es): 2.1

14.4. Packing group: EmS:

F-D, S-U Marine Pollutant:

n.a

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

Aerosols, flammable

14.3. Transport hazard class(es): 2.1

14.4. Packing group:

Not applicable 14.5. Environmental hazards:

14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.

All persons involved in transporting must observe safety regulations.

Precautions must be taken to prevent damage.

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

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

Comply with special provisions.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered

according to storage, handling etc	;.):		
Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of	Qualifying quantity (tonnes) of
		dangerous substances as	dangerous substances as
		referred to in Article 3(10) for the	referred to in Article 3(10) for the
		application of - Lower-tier	application of - Upper-tier
		requirements	requirements
P3a	11 1	150 (netto)	500 (netto)

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 2 - This product contains the substances listed below:









(B)

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Entry Nr	Dangerous substances	Notes to Annex I	Qualifying quantity (tonnes) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) for the application of - Upper-tier requirements
18	Liquefied flammable gases, Category 1 or 2 (including LPG) and natural gas	19	50	200

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC):

61,21 %

Observe incident regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

2, 3, 8, 11, 12, 15, 16

Employee training in handling dangerous goods is required.

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation	Evaluation method used		
(EC) No. 1272/2008 (CLP)			
Asp. Tox. 1, H304	Classification according to calculation procedure.		
Aerosol 1, H222	Classification according to calculation procedure.		
Aerosol 1, H229	Classification based on the form or physical state.		

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H304 May be fatal if swallowed and enters airways.

Asp. Tox. — Aspiration hazard

Aerosol — Aerosols

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)



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CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community
ECHA European Chemicals Agency
EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

etc. et cetera EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

IARC International Agency for Research on Cancer IATA International Air Transport Association IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicablen.av. not availablen.c. not checkedn.d.a. no data available

OECD Organisation for Economic Co-operation and Development

org. organic

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million PVC Polyvinylchloride

REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List

Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by

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