

Page 1 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

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 50 mL

Art.: 3394

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

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LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany Phone: (+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)





Page 2 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

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.

EUH066-Repeated exposure may cause skin dryness or cracking.

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

3.1 Substance

n.a. **3 2 Mixture**

OLE MIXEU O	
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 %	40-60
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 %	20-40
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Carbon dioxide	Substance for which an EU exposure limit value applies.
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	204-696-9
CAS	124-38-9
content %	1-5
Classification according to Regulation (EC) 1272/2008 (CLP)	

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 3.1/3.2 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).'

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



Page 3 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016

PDF print date: 09.08.2016

LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

4.1 Description of first aid measures

Inhalation

Remove person from danger area.

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

If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye 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. Consult doctor immediately.

Danger of aspiration

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

Effect on the central nervous system

With long-term contact:

Drying of the skin.

Dermatitis (skin inflammation)

Ingestion:

Nausea

Vomiting

Danger of aspiration

Oedema of the lungs

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

Adapt to the nature and extent of fire. Water jet spray/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

Toxic vapours

Danger of bursting (explosion) when heated

Explosive vapour/air mixture

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



Page 4 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

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 inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

Prevent from entering drainage system.

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.

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.

Keep away from sources of ignition - Do not smoke.

Do not use on hot surfaces.

Avoid contact with eyes or skin.

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.

Do not store with oxidizing agents.

Observe special regulations for aerosols!

Observe special storage conditions.

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.

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



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Page 5 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

Chemical Name	Hvdrocarbons, C	10-C13, n-alkanes, isoalkanes, cyclics, «	< 2% aromatics		Content %:40-60
WEL-TWA: 800 mg/m3		WEL-STEL:			
Monitoring procedures:	-	Draeger - Hydrocarbons 2/a (81 03 581)		
	-	Draeger - Hydrocarbons 0,1%/c (81 03	571)		
	-	Compur - KITA-187 S (551 174)	,		
BMGV:		Ot	ther information: (W	/EL acc. to	RCP-method,
		El	H40)		
Chemical Name	Carbon dioxide				Content %:1-5
WEL-TWA: 5000 ppm (9150 mg/n	n3) (WEL), 5000	WEL-STEL: 15000 ppm (27400 m	g/m3) (WEL)		
ppm (9000 mg/m3) (EU)					
Monitoring procedures:	-	Compur - KITA-126 B (549 475)			
	-	Compur - KITA-126 SA (549 467)			
	-	Compur - KITA-126 SB (548 816)			
	-	Compur - KITA-126 SF (549 491)			
	-	Compur - KITA-126 SG (550 210)			
	=	Compur - KITA-126 SH (549 509)			
	-	Compur - KITA-126 UH (549 517)			
	-	Draeger - Carbon Dioxide 100/a (81 01			
	-	Draeger - Carbon Dioxide 0,1%/a (CH 2			
	-	Draeger - Carbon Dioxide 0,5%/a (CH 3			
	-	Draeger - Carbon Dioxide 1%/a (CH 25			
	-	Draeger - Carbon Dioxide 5%/A (CH 20			
	-	OSHA ID-172 (Carbon dioxide in workp	lace atmospheres) -	1990	
	-	NIOSH 6603 (Carbon dioxide) - 1994			
BMGV:		O1	ther information:		
Chemical Name	Oil mist, mineral				Content %:
WEL-TWA: 5 mg/m3 (ACGIH)		WEL-STEL: 10 mg/m3 (ACGIH)			
Monitoring procedures:	-	Draeger - Oil 10/a-P (67 28 371)			
	-	Draeger - Oil Mist 1/a (67 33 031)			
BMGV:		Ot	ther information:		
Chemical Name	Baseoil - unspec				Content %:
WEL-TWA: 300 mg/m3 (AGW)		WEL-STEL: 2(II) (AGW)			
Monitoring procedures:	-	Draeger - Hydrocarbons 2/a (81 03 581			
	-	Draeger - Hydrocarbons 0,1%/c (81 03	571)		
BMGV:	-	Compur - KITA-187 S (551 174)	ther information:		

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | 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.

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 - dermal	Long term, systemic effects	DNEL	220	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	160	mg/m3	



Page 6 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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.

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:

With danger of contact with eyes.

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

Skin protection - Hand protection:

Chemical resistant protective gloves (EN 374).

If applicable

Protective Neoprene® / polychloroprene gloves (EN 374).

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

0,5

Permeation time (penetration time) in minutes:

480

The breakthrough times determined in accordance with EN 374 Part 3 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:

Normally not necessary.

If OES or MEL is exceeded.

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

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

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, Ac

Colour: Odour: Aerosol, Active substance: Liquid

Brown, Clear Characteristic



Page 7 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

Odour threshold:

pH-value:

Melting point/freezing point:

Not determined

Not determined

Not determined

Initial boiling point and boiling range:

n.a.

Flash point:

n.a.

Evaporation rate:

Flammability (solid, gas):

Lower explosive limit:

Upper explosive limit:

Vapour pressure:

Vapour density (air = 1):

Not determined

Not determined

Not determined

Not determined

Not determined

Density: 0,881 g/ml (20°C, Active substance)

Bulk density:

Solubility(ies):

Not determined
Water solubility:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Not determined
Not determined
Not determined
Not determined

Viscosity: 17 mm2/s (40°C, Active substance)

Explosive properties: Not determined

Oxidising properties: No

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Not determined

Not determined

Surface tension:

Not determined

Not determined

Not determined

Not determined

Not determined

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 50 mL									
Art.: 3394									
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 sensitisation:						n.d.a.			
Germ cell mutagenicity:						n.d.a.			
Carcinogenicity:						n.d.a.			
Reproductive toxicity:						n.d.a.			



Page 8 of 15
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 09.08.2016 / 0015
Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL Art.: 3394

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 sensitisation:					OECD 406 (Skin	Not sensitizising
					Sensitisation)	•
Respiratory or skin sensitisation:					Í	Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative,
-					Reverse Mutation Test)	Analogous
					,	conclusion
Germ cell mutagenicity:						Negative
Carcinogenicity:					OECD 453 (Combined	Negative,
					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
					Studies)	
Carcinogenicity:						Negative
Reproductive toxicity:					OECD 414 (Prenatal	Negative,
					Developmental Toxicity	Analogous
					Study)	conclusion
Reproductive toxicity:					OECD 421	Negative,
					(Reproduction/Developm	Analogous
					ental Toxicity Screening	conclusion
					Test)	
Reproductive toxicity:						Negative
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
Symptoms:						unconsciousness
						, headaches,
						dizziness

White mineral oil (Natural oil)							
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	>5000	mg/l/4h	Rat	OECD 403 (Acute		
					Inhalation Toxicity)		
Acute toxicity, by inhalation:	LC50	>5000	mg/l/4h	Rat	OECD 403 (Acute	Aerosol	
					Inhalation Toxicity)		



Page 9 of 15
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL Art.: 3394

Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitizising
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:	NOAEL	>1200	mg/kg	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative
Reproductive toxicity:					OECD 415 (One- Generation Reproduction Toxicity Study)	Negative
Reproductive toxicity:	NOAEL	>=1000	mg/kg bw/d	Rat	OECD 421 (Reproduction/Developm ental Toxicity Screening Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	>1200	mg/kg	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	
Aspiration hazard:					,	Yes, Classification according to Regulation (EC) 1272/2008 (CLP)
Symptoms:						nausea and vomiting.
Specific target organ toxicity - single exposure (STOT-SE), dermal:	NOAEL	>1000	mg/kg	Rabbit	OECD 410 (Repeated Dose Dermal Toxicity - 90-Day)	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	>2000	mg/kg	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

Carbon dioxide						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Symptoms:						unconsciousness
						, blisters by skin-
						contact,
						vomiting,
						frostbite,
						annoyance,
						palpitations,
						itching,
						headaches,
						cramps, ear
						noises, dizziness

Baseoil - unspecified							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes	
Skin corrosion/irritation:						Not irritant	
Serious eye damage/irritation:						Not irritant	
Respiratory or skin sensitisation:						Not sensitizising	

SECTION 12: Ecological information



Page 10 of 15
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL Art.: 3394

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

LM 40 Multi-Funktions-Spray 50 mL								
Art.: 3394								
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes	
12.1. Toxicity to fish:							n.d.a.	
12.1. Toxicity to daphnia:							n.d.a.	
12.1. Toxicity to algae:							n.d.a.	
12.2. Persistence and							Isolate as much	
degradability:							as possible with	
							an oil separator.	
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
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus	OECD 203 (Fish,	
					mykiss	Acute Toxicity	
						Test)	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.1. Toxicity to algae:	ErL50	72h	>1000	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	80	%		OECD 301 F	
degradability:						(Ready	
						Biodegradability -	
						Manometric	
10.0 B:			5.5.7.0			Respirometry Test)	
12.3. Bioaccumulative	Log Pow		5,5-7,2				
potential:	l am Man		>3				
12.4. Mobility in soil: 12.5. Results of PBT	Log Koc		>3	-			No PBT
and vPvB assessment							substance, No
and vevb assessment							vPvB substance
Other information:				+			No PBT
otilei iilioittiatioti.							substance. No
							vPvB substance
Water solubility:		+	~10	mg/l			Slight

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Leuciscus idus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	96h	>1000	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	



Page 11 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

12.1. Toxicity to daphnia:	NOEC/NOEL	48h	>100	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to daphnia:	EL50	48h	>100	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	>100	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.1. Toxicity to algae:	EL50	48h	>1000	mg/l	Pseudokirchneriell	OECD 201 (Alga,	
					a subcapitata	Growth Inhibition	
						Test)	
12.2. Persistence and		28d	31,3	%		OECD 301 F	
degradability:						(Ready	
						Biodegradability -	
						Manometric	
						Respirometry Test)	
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
Toxicity to bacteria:	LC50		>1000	mg/l	activated sludge		
Toxicity to bacteria:	NOELR		>100	mg/l	Pseudomonas		
					subspicata		

Carbon dioxide							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	35	mg/l	Salmo gairdneri		
12.6. Other adverse							Greenhouse
effects:							effect
Other information:	Log Kow		0,83				

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 99 wastes not otherwise specified

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

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:

Return to manufacturer with residual pressure.

Do not perforate, cut up or weld uncleaned container.

15 01 04 metallic packaging

SECTION 14: Transport information

General statements

14.1. UN number:

1950



Page 12 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

UN 1950 AEROSOLS

14.3. Transport hazard class(es):2.114.4. Packing group:-Classification code:5FLQ (ADR 2015):1 L

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:

mS: 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:

14.5. Environmental hazards: Not applicable

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

For classification and labelling see Section 2.

Observe restrictions:

Observe youth employment law (German regulation).

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): ~ 55,5 %

REGULATION (EC) No 648/2004

30 % and more aliphatic hydrocarbons less than 5 % aromatic hydrocarbons

perfumes

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, 11, 12

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.









Page 13 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

Employee training in handling dangerous goods 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 (EC) No. 1272/2008 (CLP)	Evaluation method used
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:

AC **Article Categories**

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

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

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Article number Art., Art. no.

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

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)

BCF

Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation) BGV

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

body weight bw

CAS Chemical Abstracts Service

Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids CFC

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

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

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes) DVS

dw

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

e.g. EC **European Community** ECHA European Chemicals Agency EEA European Economic Area **EEC** European Economic Community



Page 14 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

Valid from: 09.08.2016 PDF print date: 09.08.2016 LM 40 Multi-Funktions-Spray 50 mL

Art.: 3394

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)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera EU European Union

EWC European Waste Catalogue

Fax. Fax number gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWP Halocarbon Global Warming Potential IARC International Agency for Research on Cancer IATA International Air Transport Association

IBC Intermediate Bulk Container

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill LCLo lowest published lethal concentration

LD Lethal Dose of a chemical LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration

LOEL Lowest Observed Effect Level

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable n.av. not available n.c. not checked n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration NOEL No Observed Effect Level ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration
POCP Photochemical ozone creation potential

ppm parts per million PROC Process category PTFE Polytetrafluorethylene

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)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use



Page 15 of 15

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

Revision date / version: 09.08.2016 / 0015

Replacing version dated / version: 13.05.2016 / 0014

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Art.: 3394

SVHC Substances of Very High Concern

Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon
TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances) **UN RTDG** United Nations Recommendations on the Transport of Dangerous Goods Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria)) VbF

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wet weight wwt

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: Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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