

Page 1 of 17  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revised on / Version: 22.05.2013 / 0016  
Replaces revision of / Version: 13.06.2012 / 0015  
Valid from: 22.05.2013  
PDF print date: 10.06.2013  
Motorraum-Reiniger 400ML Art.: 3326

## 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

**Motorraum-Reiniger 400ML**  
**Art.: 3326**

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

##### Relevant identified uses of the substance or mixture:

Cleaner

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC35 - Washing and cleaning products (including solvent based products)

Process category [PROC]:

PROC 7 - Industrial spraying

PROC 8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC 9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC11 - Non industrial spraying

PROC19 - Hand-mixing with intimate contact and only PPE available

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 2 - Formulation of preparations

ERC 4 - Industrial use of processing aids in processes and products, not becoming part of articles

ERC 5 - Industrial use resulting in inclusion into or onto a matrix

ERC 8a - Wide dispersive indoor use of processing aids in open systems

ERC 8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC 8d - Wide dispersive outdoor use of processing aids in open systems

ERC 8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

##### Uses advised against:

No information available at present.

#### 1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Straße 4, D-89081 Ulm-Lehr

Telephone: (+49) 0731-1420-0, Fax: (+49) 0731-1420-88

E-mail address of the competent person: [info@chemical-check.de](mailto:info@chemical-check.de), [k.schnurbusch@chemical-check.de](mailto:k.schnurbusch@chemical-check.de)

#### 1.4 Emergency telephone

##### Emergency information services / official advisory body:

##### Telephone number of the company in case of emergencies:

Tel.: (+49) 0731-1420-0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Not determined

##### 2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

GB

Page 2 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

F+, Extremely flammable  
 N, Dangerous for the environment, R51-53  
 Xn, Harmful, R65  
 R66  
 R67

## 2.2 Label elements

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

Not determined

### 2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments)



Symbols: F+/N

Indications of danger:

Extremely flammable

Dangerous for the environment

R-phrases:

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

S-phrases:

23 Do not breathe vapour/spray.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additions:

Pressurized container:

protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition - No smoking.

Keep out of the reach of children.

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

## 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.

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

## REGULATION (EC) No 648/2004

30 % and more  
 aliphatic hydrocarbons  
 5 % or over but less than 15 %  
 aromatic hydrocarbons  
 less than 5 %  
 non-ionic surfactants

## SECTION 3: Composition/information on ingredients

Aerosol

### 3.1 Substance

n.a.

### 3.2 Mixture

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	
Registration number (REACH)	01-2119458049-33-XXXX
Index	---
EINECS, ELINCS, NLP	919-446-0 (REACH-IT List-No.)

(GB)

Page 3 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

<b>CAS</b>	CAS ---
<b>content %</b>	30-50
<b>Classification according to Directive 67/548/EEC</b>	Flammable, R10 Dangerous for the environment, N, R51 Dangerous for the environment, R53 Harmful, Xn, R65 R66 R67
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411

<b>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</b>	
<b>Registration number (REACH)</b>	01-2119473977-17-XXXX
<b>Index</b>	---
<b>EINECS, ELINCS, NLP</b>	919-164-8 (REACH-IT List-No.)
<b>CAS</b>	(64742-82-1)
<b>content %</b>	10-30
<b>Classification according to Directive 67/548/EEC</b>	Dangerous for the environment, R52 Dangerous for the environment, R53 Harmful, Xn, R65 R66
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Asp. Tox. 1, H304 Aquatic Chronic 3, H412

<b>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics</b>	
<b>Registration number (REACH)</b>	01-2119456620-43-XXXX
<b>Index</b>	---
<b>EINECS, ELINCS, NLP</b>	926-141-6 (REACH-IT List-No.)
<b>CAS</b>	CAS ---
<b>content %</b>	1-20
<b>Classification according to Directive 67/548/EEC</b>	Harmful, Xn, R65 R66
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Asp. Tox. 1, H304

<b>Fatty alcohol polyglycol ethers</b>	
<b>Registration number (REACH)</b>	--
<b>Index</b>	---
<b>EINECS, ELINCS, NLP</b>	-
<b>CAS</b>	CAS 127036-24-2
<b>content %</b>	1-<5
<b>Classification according to Directive 67/548/EEC</b>	Irritant, Xi, R41
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Eye Dam. 1, H318

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

## SECTION 4: First aid measures

### 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.  
 Respiratory arrest - Artificial respiration apparatus necessary.

#### 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.

#### Eye contact

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

Page 4 of 17  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revised on / Version: 22.05.2013 / 0016  
Replaces revision of / Version: 13.06.2012 / 0015  
Valid from: 22.05.2013  
PDF print date: 10.06.2013  
Motorraum-Reiniger 400ML Art.: 3326

Consult medical specialist.

### **Ingestion**

Immediate admittance to a hospital.

### **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.

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

Coughing

Headaches

Effects/damages the central nervous system

With long-term contact:

Dermatitis (skin inflammation)

Product removes fat.

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

### **4.3 Indication of any immediate medical attention and special treatment needed**

n.c.

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

CO<sub>2</sub>

Extinguishing powder

Cool container at risk with water.

#### **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 pyrolysis products.

Danger of explosion by prolonged heating.

Explosive vapour/air mixture

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

### **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

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.

### **6.2 Environmental precautions**

Prevent from entering drainage system.

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

### **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) 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.

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

## 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.  
 Do not use the product in enclosed spaces.  
 Keep away from sources of ignition - Do not smoke.  
 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!  
 Keep protected from direct sunlight and temperatures over 50°C.  
 Store in a well ventilated place.  
 Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").

### 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):  
 450 mg/m<sup>3</sup>

(GB)	<b>Chemical Name</b>	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Content %:30-50
	WEL-TWA: 300 mg/m <sup>3</sup> (AGW)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
(GB)	<b>Chemical Name</b>	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Content %:10-30
	WEL-TWA: 1000 mg/m <sup>3</sup>	WEL-STEL: ---	---
	BMGV: ---	Other information: (WEL acc. to RCP-method, EH40)	
(GB)	<b>Chemical Name</b>	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	Content %:1-20
	WEL-TWA: 1200 mg/m <sup>3</sup> (>=C7 normal and branched chain alkanes)	WEL-STEL: 2(II) (AGW)	---
	BMGV: ---	Other information: ---	
(GB)	<b>Chemical Name</b>	Butane	Content %:
	WEL-TWA: 600 ppm (1450 mg/m <sup>3</sup> )	WEL-STEL: 750 ppm (1810 mg/m <sup>3</sup> )	---
	BMGV: ---	Other information: ---	
(GB)	<b>Chemical Name</b>	Propane	Content %:
	WEL-TWA: 1000 ppm (ACGIH)	WEL-STEL: ---	---
	BMGV: ---	Other information: ---	
(GB)	<b>Chemical Name</b>	Isobutane	Content %:
	WEL-TWA: 1000 ppm (ACGIH)	WEL-STEL: ---	---
	BMGV: ---	Other information: ---	

Page 6 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

"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.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	330	mg/m <sup>3</sup>	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	44	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	71	mg/m <sup>3</sup>	
Consumer	Human - dermal	Long term, systemic effects	DNEL	26	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	26	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term	DNEL	570	mg/m <sup>3</sup>	
Consumer	Human - inhalation	Short term	DNEL	570	mg/m <sup>3</sup>	

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

Skin protection - Hand protection:  
 Protective nitrile gloves (EN 374)  
 Permeation time (penetration time) in minutes:  
 > 240  
 Protective hand cream recommended.

Skin protection - Other:  
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)  
 According to operation.  
 Boots (EN ISO 20347)  
 PVC

Respiratory protection:  
 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.

Page 7 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

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, Substance: Liquid
Colour:	Light yellow
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	-60 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	1,4 Vol-%
Upper explosive limit:	Not determined
Vapour pressure:	3300 hPa
Vapour density (air = 1):	Vapours heavier than air.
Density:	0,7 g/ml
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	510 °C (Ignition temperature )
Decomposition temperature:	Not determined
Viscosity:	n.a.
Explosive properties:	Product is not explosive. Possible build up of explosive/highly flammable vapour/air mixture.
Oxidising properties:	No

### 9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	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

See also section 7.

Pressure increase will result in danger of bursting.

Heating, open flame, ignition sources

### 10.5 Incompatible materials

See also section 7.

Avoid contact with oxidizing agents.

### 10.6 Hazardous decomposition products

See also section 5.2

GB

Page 8 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

No decomposition when used as directed.

## SECTION 11: Toxicological information

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

### Motorraum-Reiniger 400ML

Art.: 3326

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.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

### Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

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	3400	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by dermal route:	LD50	3400	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	13100	mg/m <sup>3</sup> /4 h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:						Not irritant, Repeated exposure may cause skin dryness or cracking., Analogous conclusion
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitising
Germ cell mutagenicity:						Negative
Carcinogenicity:						Negative Benzene content: <0,1%
Reproductive toxicity:						Negative, Analogous conclusion
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness.
Aspiration hazard:						Yes
Respiratory tract irritation:						Slightly irritant
Symptoms:						dizziness, unconsciousness, vomiting, annoyance, skin afflictions, heart/circulatory disorders, headaches, cramps, drowsiness, dizziness

### Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Page 9 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

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	>2920	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>13,1	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Analogous conclusion
Skin corrosion/irritation:						Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant (Analogous conclusion)
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitising, Analogous conclusion
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Carcinogenicity:					OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative, Analogous conclusion
Reproductive toxicity:					OECD 416 (Two-generation Reproduction Toxicity Study)	Negative, Analogous conclusion
Specific target organ toxicity - single exposure (STOT-SE):						No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):					OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	No indications of such an effect., Analogous conclusion
Aspiration hazard:						Yes
Respiratory tract irritation:						Not irritant
Symptoms:						dizziness, unconsciousness, vomiting, annoyance, skin afflictions, heart/circulatory disorders, headaches, cramps, drowsiness, dizziness

**Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics**

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	> 5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Acute toxicity, by inhalation:	LC50	>5000	mg/m3	Rat	OECD 403 (Acute Inhalation Toxicity)	Analogous conclusion (8 h)
Acute toxicity, by inhalation:	LC50	>20	mg/l/4h	Rat		
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Analogous conclusion, Drying of the skin., Dermatitis (skin inflammation)
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Analogous conclusion, Slightly irritant
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitising (Analogous conclusion)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion, Negative
Germ cell mutagenicity (in vivo):						Negative

Page 10 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

Carcinogenicity:					OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Analogous conclusion, Negative
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion, Negative
Specific target organ toxicity - single exposure (STOT-SE):						Analogous conclusion, No indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):					OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Analogous conclusion, Not to be expected
Aspiration hazard:						Harmful: may cause lung damage if swallowed.
Respiratory tract irritation:						Analogous conclusion, No indications of such an effect.
Symptoms:						drying of the skin., headaches, fatigue, dizziness, nausea

#### Fatty alcohol polyglycol ethers

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Skin corrosion/irritation:				Rabbit		Not irritant
Serious eye damage/irritation:				Rabbit		Risk of serious damage to eyes.
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitising (Analogous conclusion)
Germ cell mutagenicity:					(Ames-Test)	Negative, Analogous conclusion

#### Butane

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						ataxia, breathing difficulties, dizziness, unconsciousness, frostbite, disturbed heart rhythm, headaches, cramps, intoxication, dizziness, nausea and vomiting.

#### Propane

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Germ cell mutagenicity (bacterial):					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						breathing difficulties, unconsciousness, frostbite, headaches, cramps, mucous membrane irritation, dizziness, nausea and vomiting.

#### Isobutane

Page 11 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Serious eye damage/irritation:				Rabbit		Not irritant
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						unconsciousness, frostbite, headaches, cramps, dizziness, nausea and vomiting.

## SECTION 12: Ecological information

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

Motorraum-Reiniger 400ML Art.: 3326							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents., Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment:							n.d.a.
Other adverse effects:							n.d.a.
Other information:							According to the recipe, contains no AOX.

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL50	96h	10	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EL50	48h	10	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to daphnia:	LOEC/LOEL	21d	0,203	mg/l	Daphnia magna		
Toxicity to algae:	IC50	72h	4,6-10	mg/l	Pseudokirchneriella subcapitata		
Persistence and degradability:		28d	74,7	%			Readily biodegradable
Bioaccumulative potential:	Log Pow		3,7-6,7				

GB

Page 12 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

Results of PBT and vPvB assessment:						No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50		>100	mg/l		
Other information:	AOX		0	%		Does not contain any organically bound halogens which can contribute to the AOX value in waste water.
Water solubility:			~20	mg/l		20°C

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	10-100	mg/l	Oncorhynchus mykiss		Analogous conclusion
Toxicity to daphnia:	EL50	48h	10-22	mg/l	Daphnia magna		Analogous conclusion
Toxicity to daphnia:	NOEC/NOEL	21d	0,097	mg/l	Daphnia magna		Analogous conclusion
Toxicity to daphnia:	LOEC/LOEL	21d	0,203	mg/l	Daphnia magna		Analogous conclusion
Toxicity to algae:	EL50	72h	10-100	mg/l	Pseudokirchneriella subcapitata		Analogous conclusion
Toxicity to algae:	NOELR	72h	3	mg/l	Pseudokirchneriella subcapitata		Analogous conclusion
Persistence and degradability:		28d	74,7	%			
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL0	96h	1000	mg/l	Oncorhynchus mykiss		
Toxicity to daphnia:	ELO	48h	1000	mg/l	Daphnia magna		
Toxicity to algae:	ELO	72h	1000	mg/l	Pseudokirchneriella subcapitata		
Persistence and degradability:		28d	69	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Bioaccumulative potential:	Log Pow		6-8				
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance

Fatty alcohol polyglycol ethers							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	1-10	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to algae:	EC50	72h	1,6	mg/l	Selenastrum capricornutum		
Persistence and degradability:		28d	>90	%		OECD 301 A (Ready Biodegradability - DOC Die-Away Test)	

GB

Page 13 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

Toxicity to bacteria:	EC50		50-500	mg/l		OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:	COD		1950	mg/g			
Other information:	DOC		510	mg/g			
Water solubility:							Insoluble

Butane							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Bioaccumulative potential:	Log Pow		2,98				A notable biological accumulation potential is not to be expected (LogPow 1-3).
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance

Propane							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Bioaccumulative potential:	Log Pow		2,28				A notable biological accumulation potential is not to be expected (LogPow 1-3).
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. (2001/118/EC, 2001/119/EC, 2001/573/EC)  
 16 05 04 gases in pressure containers (including halons) containing dangerous substances  
 14 06 03 other solvents and solvent mixes

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:

Do not perforate, cut up or weld uncleaned container.  
 15 01 04 metallic packaging  
 15 01 10 packaging containing residues of or contaminated by dangerous substances

## SECTION 14: Transport information

### General statements

UN number: 1950

#### Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 1950 AEROSOLS

Transport hazard class(es): 2.1

Packing group: -

Classification code: 5F



GB

Page 14 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

LQ (ADR 2013): 1 L  
 LQ (ADR 2009): 2  
 Environmentally hazardous: environmentally hazardous  
 Tunnel restriction code: D

**Transport by sea (IMDG-code)**

UN proper shipping name: AEROSOLS (NAPHTHA (PETROLEUM))  
 Transport hazard class(es): 2.1  
 Packing group: -  
 EmS: F-D, S-U  
 Marine Pollutant: Yes  
 Environmental hazards: environmentally hazardous



**Transport by air (IATA)**

UN proper shipping name: Aerosols, flammable  
 Transport hazard class(es): 2.1  
 Packing group: -  
 Environmental hazards: Not applicable



**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.

**Transport in bulk according to Annex II of MARPOL 73/78 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.

**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: Yes  
 Comply with trade association/occupational health regulations.  
 Observe youth employment law (German regulation).  
 Observe incident regulations.  
 VOC 1999/13/EC 97,2% w/w

**15.2 Chemical safety assessment**

A chemical safety assessment is not provided for mixtures.

**SECTION 16: Other information**

These details refer to the product as it is delivered.  
 Revised sections: 3, 8, 11, 12  
 The following phrases represent the posted R phrases / H phrases, Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).  
 10 Flammable.  
 41 Risk of serious damage to eyes.  
 51 Toxic to aquatic organisms.  
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 52 Harmful to aquatic organisms.  
 53 May cause long-term adverse effects in the aquatic environment.  
 65 Harmful: may cause lung damage if swallowed.  
 66 Repeated exposure may cause skin dryness or cracking.  
 67 Vapours may cause drowsiness and dizziness.  
 H226 Flammable liquid and vapour.  
 H304 May be fatal if swallowed and enters airways.  
 H318 Causes serious eye damage.  
 H336 May cause drowsiness or dizziness.  
 H411 Toxic to aquatic life with long lasting effects.  
 H412 Harmful to aquatic life with long lasting effects.

Flam. Liq. — Flammable liquid

Page 15 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

Asp. Tox. — Aspiration hazard  
 STOT SE — Specific target organ toxicity - single exposure - narcotic effects  
 Aquatic Chronic — Hazardous to the aquatic environment - chronic  
 Eye Dam. — Serious eye damage

### 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  
 Art., Art. no. Article number  
 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 Bioconcentration factor  
 BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)  
 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  
 bw body weight  
 CAS Chemical Abstracts Service  
 CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids  
 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  
 DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)  
 dw dry weight  
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
 EC European Community  
 ECHA European Chemicals Agency  
 EEA European Economic Area  
 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)  
 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

Page 16 of 17  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revised on / Version: 22.05.2013 / 0016  
 Replaces revision of / Version: 13.06.2012 / 0015  
 Valid from: 22.05.2013  
 PDF print date: 10.06.2013  
 Motorraum-Reiniger 400ML Art.: 3326

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  
 REACH Registration, 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  
 SVHC Substances of Very High Concern  
 Tel. 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  
 VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))  
 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  
 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:

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

Revised on / Version: 22.05.2013 / 0016

Replaces revision of / Version: 13.06.2012 / 0015

Valid from: 22.05.2013

PDF print date: 10.06.2013

Motorraum-Reiniger 400ML Art.: 3326

---

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

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.