

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

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### Identification of the substance or preparation

**Luftmassensensor-Reiniger 200 ml**  
**Art.: 4066**

#### Use of the substance/preparation

Cleaner

#### Company/undertaking identification

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, k.schnurbusch@chemical-check.de

#### Emergency telephone

#### Advisory office in case of poisoning:

Tel.:

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

Tel. (+49) 0731-1420-0

### 2. HAZARDS IDENTIFICATION

#### To people

See point 11 and 15.  
 Preparation is classified as hazardous in the sense of directive 1999/45/EC.  
 Product is extremely flammable.  
 When using: development of explosive vapour/air mixture possible.  
 Danger of bursting (explosion) when heated  
 Irritation of the eyes  
 Vapours may cause drowsiness and dizziness.

#### To the environment

See point 12.  
 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### REGULATION (EC) No 648/2004

15 % or over but less than 30 %  
 aliphatic hydrocarbons

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Aerosol

Chemical name			
content %	Symbol Registration number (ECHA)	R-phrases	EINECS, ELINCS
Propan-2-ol			
70 - 90	F/Xi	11-36-67	200-661-7

GB

2 / 7

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision: 09.09.2009 Replaces the version of: 20.11.2008 PDF date: 09.09.2009  
 Luftmassensensor-Reiniger 200 ml Art.: 4066

Naphtha (petroleum), hydrodesulfurized light, dearomatized			
10 - 20	F/Xi/Xn/N	11-38-51-53-65-67	295-434-2

Naphtha (petroleum), hydrotreated light			
1 - 10	F/Xn/Xi/N	11-38-51-53-65-67	265-151-9

Carbon dioxide		Substance for which an EU exposure limit value applies.	
1 - 10	---	---	204-696-9

For complete wording of the R-phrases, refer to point 16.

## 4. FIRST AID MEASURES

### 4.1 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.

Symptoms:

Fatigue  
 Coordination disorders

### 4.2 Eye contact

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

Consult medical specialist.

Symptoms:

Irritation of the eyes  
 Watering eyes

### 4.3 Skin contact

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

Symptoms:

Irritation of the skin.

### 4.4 Ingestion

Typically no exposure pathway.  
 Rinse the mouth thoroughly with water.  
 Give copious water to drink - consult doctor immediately.

Symptoms:

Headaches  
 Nausea

### 4.5 Special resources necessary for first aid

Indications for the physician:

Symptomatic treatment

## 5. FIRE-FIGHTING MEASURES

### 5.1 Suitable extinguishing media

Water jet spray  
 CO2  
 Extinction powder  
 Cool container at risk with water.

### 5.2 Extinguishing media which shall not be used for safety reasons

High volume water jet

### 5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire the following can develop:

Oxides of carbon  
 Toxic pyrolysis products.  
 Danger of explosion by prolonged heating.  
 Explosive vapour/air mixture

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 Revision: 09.09.2009 Replaces the version of: 20.11.2008 PDF date: 09.09.2009  
 Luftmassensensor-Reiniger 200 ml Art.: 4066

Dangerous vapours heavier than air.  
 In case of spreading near the ground, flashback to distance sources of ignition is possible.

#### 5.4 Special protective equipment for fire-fighters

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

#### 5.5 Further information

Dispose of contaminated extinction water according to official regulations.

### 6. ACCIDENTAL RELEASE MEASURES

Refer to point 13. and for personal protection refer to point 8.

#### 6.1 Personal precautions

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 for 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:  
 Collect using absorbant material (e.g. sand, earth) and dispose of according to point 13.

### 7. HANDLING AND STORAGE

#### 7.1 Handling

##### Tips for safe handling:

See point 6.1  
 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.  
 Wash hands before breaks and at end of work.  
 Observe directions on label and instructions for use.  
 Use working methods according to operating instructions.

#### 7.2. Storage

##### Requirements for storage rooms and containers:

Not to be stored in gangways or stair wells.  
 Store product closed and only in original packing.  
 Observe special regulations for aerosols!  
 Do not store with oxidizing agents.

##### Special storage conditions:

See point 10  
 Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").  
 Keep protected from direct sunlight and temperatures over 50°C.  
 Store in a well ventilated place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Exposure limit values

Chemical Name	Propan-2-ol	Content %:70 - 90
WEL-TWA: 400 ppm (999 mg/m3)	WEL-STEL: 500 ppm (1250 mg/m3)	---
BMGV: ---	Other information: ---	

GB

4 / 7

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision: 09.09.2009 Replaces the version of: 20.11.2008 PDF date: 09.09.2009  
 Luftmassensensor-Reiniger 200 ml Art.: 4066

Chemical Name	Naphtha (petroleum), hydrodesulfurized light, dearomatized		Content %:10 - 20
WEL-TWA: 1200 mg/m3 (> C7 normal and branched chain alkanes) (WEL), 1500 mg/m3 (AGW)	WEL-STEL: 2(II) (AGW)	---	
BMGV: ---	Other information: ---		
Chemical Name	Naphtha (petroleum), hydrotreated light		Content %:1 - 10
WEL-TWA: 700 mg/m3 (AGW)	WEL-STEL: 4(II) (AGW)	---	
BMGV: ---	Other information: ---		
Chemical Name	Carbon dioxide		Content %:1 - 10
WEL-TWA: 5000 ppm (9150 mg/m3) (WEL), 5000 ppm (9000 mg/m3) (EC)	WEL-STEL: 15000 ppm (27400 mg/m3) (WEL)	---	
BMGV: ---	Other 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.

## 8.2 Exposure controls

### 8.2.1 Occupational exposure 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.  
 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.  
 Respiratory protection:  
 Normally not necessary.  
 If OES or MEL is exceeded.  
 Filter A2 P2 (EN 14387)  
 At high concentrations:  
 Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)  
 Hand protection:  
 Solvent resistant protective gloves (EN 374).  
 Recommended  
 Protective nitrile gloves (EN 374)  
 Permeation time (penetration time) in minutes:  
 > 480 (Level 6)  
 Protective hand cream recommended.  
 Eye protection:  
 Tight fitting protective goggles with side protection (EN 166).  
 Skin protection:  
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Additional information on hand protection - No tests have been performed.  
 Selection made for preparations according to the best available knowledge and information on the ingredients.  
 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 preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.2 Environmental exposure controls

n.av.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Aerosol

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision: 09.09.2009 Replaces the version of: 20.11.2008 PDF date: 09.09.2009  
 Luftmassensensor-Reiniger 200 ml Art.: 4066

Substance:	Liquid
Colour:	Colourless
Odour:	Characteristic
pH-value undiluted:	Not detected
Boiling point/boiling range (°C):	60
Melting point/melting range (°C):	Not detected
Flash point (°C):	< 0
Ignition temperature:	> 200°C
Oxidising properties:	No
Minimum limit of explosion:	1,1 Vol%
Maximum limit of explosion:	12 Vol%
Product is not explosive.	
Possible build up of explosive/highly flammable vapour/air mixture.	
Vapour pressure:	5400 hPa
Density (g/ml):	0,76
Water solubility:	Not miscible
Viscosity:	n.a.

## 10. STABILITY AND REACTIVITY

### Conditions to avoid

See point 7  
 Stable when handled and stored correctly.  
 Heating, open flame, ignition sources  
 Pressure increase will result in danger of bursting.

### Materials to avoid

See point 7  
 Avoid contact with oxidizing agents.

### Hazardous decomposition products

See point 5.3  
 No decomposition when used as directed.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	n.av.
Inhalation, LC50 rat inhal.(mg/l/4h):	n.av.
Skin contact, LD50 rat dermal (mg/kg):	n.av.
Eye contact:	See point 15.

### Delayed and chronic effects

Sensitization:	n.c.
Carcinogenicity:	n.c.
Mutagenicity:	n.c.
Reproductive toxicity:	n.c.
Narcosis:	Possible

### Further information

Classification according to calculation procedure.  
 The following may occur:  
 Irritation of the respiratory tract  
 Coughing  
 Headaches  
 Dizziness  
 Effects/damages the central nervous system  
 Coordination disorders  
 With long-term contact:  
 Product removes fat.  
 Dermatitis (skin inflammation)  
 Other dangerous properties cannot be ruled out.

## 12. ECOLOGICAL INFORMATION

Water hazard class (Germany):

1

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
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 Luftmassensensor-Reiniger 200 ml Art.: 4066

Self classification:	Yes (VwVwS)
Persistence and degradability:	
Not biodegradable *	
> 99,9% OECD 303A, (95% 21d mod. OECD-Screening-Test) **	
Behaviour in sewage plants:	According to the recipe, contains no AOX.
Aquatic toxicity:	See point 2.
Ecological toxicity:	n.av.
Mobility:	Product is slightly volatile.
Accumulation:	
Concentration in organisms possible. *	
* Naphtha (petroleum), hydrodesulfurized light, dearomatized	
** Propan-2-ol	

## 13. DISPOSAL CONSIDERATIONS

### 13.1. for the material / preparation / residue

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

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

### 13.2 for contaminated packing material

See point 13.1

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

## 14. TRANSPORT INFORMATION

### General statements

UN-Number: 1950

### Road/Rail-transport (ADR/RID)

Class/packing group: 2/- 

UN 1950 AEROSOLS

Classification code: 5F

LQ: 2

Tunnel restriction code: D

### Transport by sea

IMDG-code: 2.1/- (class/packing group)

EmS: F-D, S-U 

Marine Pollutant: n.a.

AEROSOLS

### Transport by air

IATA: 2.1/-/ (class/secondary danger/packing group)

Aerosols, flammable

### Additional information:

Danger code and packing code on request.

## 15. REGULATORY INFORMATION

**Classification according to Dangerous Product Regulations incl. EC Directives  
(67/548/EEC and 1999/45/EC)**

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revision: 09.09.2009 Replaces the version of: 20.11.2008 PDF date: 09.09.2009  
Luftmassensensor-Reiniger 200 ml Art.: 4066

Symbols: F+/Xi

Indications of danger:

Extremely flammable

Irritant

R-phrases:

36 Irritating to eyes.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

67 Vapours may cause drowsiness and dizziness.

S-phrases:

23 Do not breathe vapour/spray.

35 This material and its container must be disposed of in a safe way.

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

51 Use only in well-ventilated areas.

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.

Observe restrictions:

Yes

Observe youth employment law (German regulation).

Observe restrictive guidelines 76/769/EEC, 1999/51/EC, 1999/77/EC

VOC (1999/13/EC):

744 g/l



## 16. OTHER INFORMATION

These details refer to the product as it is delivered.

Storage class VCI (Germany):

2 B

Revised points:

2, 15

The following phrases represent the prescribed R-phrases / H-phrases (GHS) for the ingredients (designated in point 3).

11 Highly flammable.

36 Irritating to eyes.

67 Vapours may cause drowsiness and dizziness.

38 Irritating to skin.

51 Toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

## Legend:

n.a. = not applicable / n.v., k.D.v. = n.av. = not available / n.g. = n.c. = not checked

WEL = Workplace Exposure Limit EH40, TWA = Long-term exposure limit (8-hour TWA (= time weighted average) reference period), STEL = Short-term exposure limit (15-minute reference period) / BMGV = Biological monitoring guidance value EH40

AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water

VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

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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