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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 15.02.2011 / 0004
Replaces revision of / Version: 18.08.2010 / 0003
Valid from: 15.02.2011
PDF print date: 19.02.2011
Pflegespray für Gartengeräte 300 mL Art.: 1615

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

Pflegespray für Gartengeräte 300 mL
Art.: 1615

1.2 Relevant identified uses of the substance or mixture:

Care components

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]:

PC24 - Lubricants, greases, release 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)

PROC10 - Roller application or brushing

PROC11 - Non industrial spraying

PROC13 - Treatment of articles by dipping and pouring

PROC17 - Lubrication at high energy conditions and in partly open process

PROC18 - Greasing at high energy conditions

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

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

Article Categories [AC]:

AC99 - Not required.

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, k.schnurbusch@chemical-check.de

1.4 Emergency telephone

Advisory office in case of poisoning:

Tel.:

Telephone number of the company in case of emergencies:

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

SECTION 2: Hazards identification

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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).

F+,Extremely flammable

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+

Indications of danger:

Extremely flammable

R-phrases:

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.

2.3 Other hazards

The mixture contains no vPvB substance (vPvB = very persistent, very bioaccumulative).

The mixture contains no PBT substance (PBT = persistent, bioaccumulative, toxic).

SECTION 3: Composition/information on ingredients

Aerosol

3.1 Substance

n.a.

3.2 Mixture

Registration number (ECHA)	-
Index	-
EINECS, ELINCS	-
CAS	-
content %	
Symbol	-
R-phrases	-
Classification categories / Indications of danger	---
Hazard class/Hazard category	Hazard statement
---	---

SECTION 4: First aid measures

4.1 Description of first aid measures

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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

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.

Ingestion

Do not induce vomiting.

Immediate admittance to a hospital.

4.2 Most important symptoms and effects, both acute and delayed

At high concentrations:

Irritation of the respiratory tract

Coughing

Other dangerous properties cannot be ruled out.

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

Water jet spray

CO₂

Extinction powder

Foam

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

Hydrocarbons

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

Protective respirator with independent air supply.

Full protection, if necessary

Dispose of contaminated extinction water according to official regulations.

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

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

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

6.3 Methods and material for containment and cleaning up

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

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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.

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

Ensure good ventilation.
 Keep away from sources of ignition - Do not smoke.
 Take measures against electrostatic charging, if appropriate.
 Do not use on hot surfaces.
 Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
 Observe directions on label and instructions for use.
 Use working methods according to operating instructions.
 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

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

GB	Chemical Name	Butane	Content %:	
	WEL-TWA:	600 ppm (1450 mg/m ³)	WEL-STEL:	750 ppm (1810 mg/m ³)

	BMGV:	---	Other information:	---
GB	Chemical Name	Propane	Content %:	
	WEL-TWA:	1000 ppm (ACGIH)	WEL-STEL:	---

	BMGV:	---	Other information:	---
GB	Chemical Name	Isobutane	Content %:	
	WEL-TWA:	1000 ppm (ACGIH)	WEL-STEL:	---

	BMGV:	---	Other information:	---

GB 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 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

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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)
 Protective hand cream recommended.

Skin protection - Other: Oil resistant protective clothing (EN 13034)

Respiratory protection: Normally not necessary.

If OES or MEL is exceeded.
 Gas mask filter AX (EN 14387), code colour brown.
 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:
 If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

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
Physical state:	Substance: Liquid
Colour:	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:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	1,4 Vol-%
Upper explosive limit:	32 Vol-%
Vapour pressure:	4200 hPa
Vapour density (air = 1):	Not determined
Density:	0,732 g/ml
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	n.a.
Explosive properties:	Not determined
Oxidising properties:	No

9.2 Other information

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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

See also Subsection 10.4 to 10.6.
 The product has not been tested.

10.2 Chemical stability

See also Subsection 10.4 to 10.6.
 Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

See also Subsection 10.4 to 10.6.
 No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.
 Heating, open flame, ignition sources
 Pressure increase will result in danger of bursting.

10.5 Incompatible materials

See also section 7.
 Avoid contact with oxidizing agents.

10.6 Hazardous decomposition products

See also Subsection 10.4 to 10.6.
 See also section 5.3
 No decomposition when used as directed.

SECTION 11: Toxicological information

The product was not tested.
 Classification according to calculation procedure.

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Toxicity/effect	Endpoint t	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.

Butane

Toxicity/effect	Endpoint t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:				---		n.d.a.

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Acute toxicity, by dermal route:				---		n.d.a.
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Skin corrosion/irritation:				---		n.d.a.
Serious eye damage/irritation:				---		n.d.a.
Respiratory or skin sensitisation:				---		n.d.a.
Germ cell mutagenicity:				---	OECD 471 (Bacterial Reverse Mutation Test)	Negative
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:				---		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
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.
Germ cell mutagenicity (bacterial):				---	OECD 471 (Bacterial Reverse Mutation Test)	Negative
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:				---		breathing difficulties, unconsciousness, frostbite, headaches, cramps, mucous membrane irritation, dizziness, nausea and vomiting.

Isobutane						
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:	LC50	658	mg/l/4h	Rat		
Skin corrosion/irritation:				---		n.d.a.
Serious eye damage/irritation:				Rabbit		Not irritant

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Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.

Isobutane							
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:							n.d.a.
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.

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

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Residues may present a risk of explosion.

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

LQ (ADR 2011): 1 L

LQ (ADR 2009): 2

Environmental hazards: Not applicable

Tunnel restriction code: D



Transport by sea (IMDG-code)

UN proper shipping name:

AEROSOLS

Transport hazard class(es): 2.1

Packing group: -

EmS: F-D, S-U

Marine Pollutant: n.a.

Environmental hazards: Not applicable



Transport by air (IATA)

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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.

Additional information:

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

Observe youth employment law (German regulation).

Regulation (EC) No 1907/2006, Annex XVII.

VOC 1999/13/EC 40% w/w, 293 g/l

15.2 Chemical safety assessment

No information available at present.

SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: n.a.

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)

VOC = Volatile organic compounds

AOX = Adsorbable organic halogen compounds

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

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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