

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 28 Apr 2022

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Version: 4



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## Mabanol Trockenkettenspray

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

#### \* 1.1. Product identifier

Trade name/designation:

Mabanol Trockenkettenspray

Other means of identification:

Mabanol Dry Chain Spray

UFI:

KW2Y-YV37-MKKG-NV93

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

Use of the substance/mixture:

Lubricating agent

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

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Mabanol GmbH & Co. KG

Koreastraße 7

20457 Hamburg

Germany

Telephone: 0049 (0) 40 36809988

E-mail: info@mabanol.com

Website: www.mabanol.com

E-mail (competent person): giznord@giz-nord.de

#### 1.4. Emergency telephone number

Giftinformationszentrale Göttingen , 24h: 0049 (0) 551 1 92 40

### SECTION 2: Hazards identification

#### \* 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aerosols ( <i>Aerosol 1</i> )	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	
Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )	H315: Causes skin irritation.	
STOT-single exposure ( <i>STOT SE 3</i> )	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment ( <i>Aquatic Chronic 2</i> )	H411: Toxic to aquatic life with long lasting effects.	
Aspiration hazard ( <i>Asp. Tox. 1</i> )	H304: May be fatal if swallowed and enters airways.	

#### \* 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS02  
Flame



GHS07  
Exclamation mark



GHS09  
Environment

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## Mabanol Trockenkettenspray

**Signal word:** Danger

**Hazard components for labelling:**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

**Hazard statements for physical hazards**

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

**Hazard statements for health hazards**

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.

**Hazard statements for environmental hazards**

H411	Toxic to aquatic life with long lasting effects.
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**Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

**Precautionary statements Prevention**

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.
P261	Avoid breathing spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves.

**Precautionary statements Response**

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

**Precautionary statements Storage**

P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
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**Precautionary statements Disposal**

P501	Dispose of contents/container to Dispose of waste according to applicable legislation..
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**Additional information:**

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**2.3. Other hazards**

No data available

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## Mabanol Trockenkettenspray

### SECTION 3: Composition/information on ingredients

#### \* 3.2. Mixtures

##### Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 75-28-5 EC No.: 200-857-2 REACH No.: 01-2119485395-27	<b>isobutane</b> Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) <b>Danger</b>	25 - < 50 Vol-%
CAS No.: 64742-49-0 EC No.: 921-024-6 REACH No.: 01-2119475514-35	<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b> Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT SE 3 (H336), Skin Irrit. 2 (H315) <b>Danger</b>	20 - < 25 Vol-%
CAS No.: 64742-49-0 EC No.: 927-510-4 REACH No.: 01-2119475515-33	<b>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</b> Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT SE 3 (H336), Skin Irrit. 2 (H315) <b>Danger</b>	20 - < 25 Vol-%
CAS No.: 74-98-6 EC No.: 200-827-9 REACH No.: 01-2119486944-21	<b>propane</b> Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) <b>Danger</b>	5 - < 10 Vol-%
CAS No.: 106-97-8 EC No.: 203-448-7 REACH No.: 01-2119474691-32	<b>butane</b> Flam. Gas 1 (H220), Press. Gas (Liq.) (H280) <b>Danger</b>	1 - < 3 Vol-%
CAS No.: 17265-14-4 EC No.: 241-300-3 REACH No.: 01-2120762063-61	<b>disodium sebacate</b> Eye Irrit. 2 (H319) <b>Warning</b>	0.1 - < 1 Vol-%

Full text of H- and EUH-phrases: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information:

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

##### Following inhalation:

Remove person to fresh air and keep comfortable for breathing. When in doubt or if symptoms are observed, get medical advice.

##### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. When in doubt or if symptoms are observed, get medical advice.

##### After eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

##### Following ingestion:

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

#### 4.2. Most important symptoms and effects, both acute and delayed

Headache. Nausea. Dizziness. Causes skin irritation.

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

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## Mabanol Trockenkettenspray

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media:**

Water mist. Foam. Carbon dioxide (CO<sub>2</sub>). Extinguishing powder.

**Unsuitable extinguishing media:**

Full water jet.

\* **5.2. Special hazards arising from the substance or mixture**

Burning produces heavy smoke.

**Hazardous combustion products:**

In case of fire: Gases/vapours, toxic.

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. aldehydes. carbon black.

#### 5.3. Advice for firefighters

Do not inhale explosion and combustion gases. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

\* **5.4. Additional information**

Pressurised container: May burst if heated.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

**Personal precautions:**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use personal protection equipment.

##### 6.1.2. For emergency responders

**Personal protection equipment:**

Personal protection equipment: see section 8.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

#### 6.3. Methods and material for containment and cleaning up

**For containment:**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**For cleaning up:**

Clean contaminated articles and floor according to the environmental legislation.

#### 6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

### SECTION 7: Handling and storage

\* **7.1. Precautions for safe handling**

**Protective measures**

**Advices on safe handling:**

Observe instructions for use.

Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. Do not breathe gas/fumes/vapour/spray.

**Fire prevent measures:**

Keep away from sources of ignition - No smoking.

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## Mabanol Trockenkettenspray

### Advices on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothes.

### \* 7.2. Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Hints on storage assembly:

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances. Food and feedingstuffs.

**Storage class (TRGS 510, Germany):** 2B - Aerosol dispensers and lighters

#### Further information on storage conditions:

Protect against: Frost. Protect from direct sunlight. Store in a cool dry place.

### 7.3. Specific end use(s)

No data available

## SECTION 8: Exposure controls/personal protection

### \* 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	isobutane CAS No.: 75-28-5 EC No.: 200-857-2	① 1,000 ppm (2,400 mg/m <sup>3</sup> ) ② 4,000 ppm (9,600 mg/m <sup>3</sup> )
TRGS 900 (DE)	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6	① 700 mg/m <sup>3</sup> ② 1,400 mg/m <sup>3</sup> ⑤ (C6-C8 Aliphaten)
TRGS 900 (DE)	Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4	① 700 mg/m <sup>3</sup> ② 1,400 mg/m <sup>3</sup> ⑤ (C6-C8 Aliphaten)
TRGS 900 (DE)	propane CAS No.: 74-98-6 EC No.: 200-827-9	① 1,000 ppm (1,800 mg/m <sup>3</sup> ) ② 4,000 ppm (7,200 mg/m <sup>3</sup> )
TRGS 900 (DE)	butane CAS No.: 106-97-8 EC No.: 203-448-7	① 1,000 ppm (2,400 mg/m <sup>3</sup> ) ② 4,000 ppm (9,600 mg/m <sup>3</sup> )

#### 8.1.2. Biological limit values

No data available

#### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6	2,035 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6	608 mg/m <sup>3</sup>	① DNEL Consumer ② Long-term - inhalation, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6	733 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6	699 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6	699 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4	2,085 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4	447 mg/m <sup>3</sup>	① DNEL Consumer ② Long-term - inhalation, systemic effects
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4	300 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4	149 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4	149 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

### \* 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/vapour/aerosol.

#### 8.2.2. Personal protection equipment

##### Eye/face protection:

Eye glasses with side protection (EN 166).

##### Skin protection:

Tested protective gloves must be worn (EN ISO 374). Suitable material: NBR (Nitrile rubber).

Breakthrough time: 480 min. Thickness of the glove material: 0,45 mm.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Wear suitable protective clothing.

##### Respiratory protection:

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Respiratory protection necessary at: exceeding exposure limit values.

Suitable respiratory protection apparatus: Combination filtering device. Combination filtering device (DIN EN 141). Filtering device with filter or ventilator filtering device of type: AX.

Observe the wear time limits as specified by the manufacturer.

#### 8.2.3. Environmental exposure controls

No data available

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## Mabanol Trockenkettenspray

### SECTION 9: Physical and chemical properties

#### \* 9.1. Information on basic physical and chemical properties

##### Appearance

**Physical state:** Aerosol

**Colour:** light brown

**Odour:** not determined

##### Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	<i>not determined</i>		
Melting point	<i>not determined</i>		
Freezing point	<i>not determined</i>		
Initial boiling point and boiling range	-42 °C		
Decomposition temperature	<i>not determined</i>		
Flash point	-80 °C		
Evaporation rate	<i>not determined</i>		
Auto-ignition temperature	> 200 °C		
Upper/lower flammability or explosive limits	0.6 - 15 Vol-%		
Vapour pressure	<i>not determined</i>		
Vapour density	<i>not determined</i>		
Density	0.711 g/cm <sup>3</sup>	20 °C	① DIN 51757
Relative density	<i>not determined</i>		
Bulk density	<i>not determined</i>		
Water solubility	practically insoluble		
Partition coefficient: n-octanol/water	<i>not determined</i>		
Dynamic viscosity	<i>not determined</i>		
Kinematic viscosity	< 7 mm <sup>2</sup> /s	40 °C	

#### 9.2. Other information

No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No information available.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

#### 10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

#### 10.5. Incompatible materials

Oxidizing agent. Pyrophoric or self-heating substances.

#### 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). aldehydes. carbon black. Gases/vapours, toxic.

#### Further information

Do not mix with other chemicals.

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## Mabanol Trockenkettenspray

### SECTION 11: Toxicological information

#### \* 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b> CAS No.: 64742-49-0 EC No.: 921-024-6
<b>LD<sub>50</sub> oral:</b> >5,000 mg/kg (Rat)
<b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg (Rabbit)
<b>LC<sub>50</sub> Acute inhalation toxicity (vapour):</b> >23.3 mg/L 4 h (Rat)
<b>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</b> CAS No.: 64742-49-0 EC No.: 927-510-4
<b>LD<sub>50</sub> oral:</b> 5,500 mg/kg (Rat)
<b>LD<sub>50</sub> dermal:</b> 2,770 mg/kg (Rat)
<b>LC<sub>50</sub> Acute inhalation toxicity (vapour):</b> 23.3 mg/L 4 h (Rat)
<b>butane</b> CAS No.: 106-97-8 EC No.: 203-448-7
<b>LC<sub>50</sub> Acute inhalation toxicity (gas):</b> 658 ppmV 4 h (Rat)
<b>disodium sebacate</b> CAS No.: 17265-14-4 EC No.: 241-300-3
<b>LD<sub>50</sub> oral:</b> >5,000 mg/kg
<b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg

#### **Acute oral toxicity:**

Based on available data, the classification criteria are not met.

#### **Acute dermal toxicity:**

Based on available data, the classification criteria are not met.

#### **Acute inhalation toxicity:**

Based on available data, the classification criteria are not met.

#### **Skin corrosion/irritation:**

Causes skin irritation.

#### **Serious eye damage/irritation:**

Based on available data, the classification criteria are not met.  
Serious eye damage/irritation.

#### **Respiratory or skin sensitisation:**

May cause an allergic skin reaction.

#### **Germ cell mutagenicity:**

Based on available data, the classification criteria are not met.  
No indications of human germ cell mutagenicity exist.

#### **Carcinogenicity:**

Based on available data, the classification criteria are not met.  
No indication of human carcinogenicity.

#### **Reproductive toxicity:**

Based on available data, the classification criteria are not met.  
No indications of human reproductive toxicity exist.

#### **STOT-single exposure:**

May cause drowsiness or dizziness.

#### **STOT-repeated exposure:**

Based on available data, the classification criteria are not met.

#### **Aspiration hazard:**

May be fatal if swallowed and enters airways.

#### 11.2. Information on other hazards

##### **Endocrine disrupting properties:**

No information available.



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## Mabanol Trockenkettenspray

### SECTION 12: Ecological information

#### \* 12.1. Toxicity

<b>isobutane CAS No.: 75-28-5 EC No.: 200-857-2</b>
LC <sub>50</sub> : 91.42 mg/L 4 d (fish)
ErC <sub>50</sub> : 19.37 mg/L 4 d (Algae/water plant)
EC <sub>50</sub> : 69.43 mg/L 2 d (crustaceans)
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6</b>
LC <sub>50</sub> : >1 - 10 mg/L 4 d (fish, Pimephales promelas (fathead minnow))
EC <sub>50</sub> : >1 - 10 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))
ErC <sub>50</sub> : 10 - 30 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
NOEC: 2,045 mg/L 28 d (fish, Oncorhynchus mykiss (Rainbow trout))
NOEC: 1 mg/L 21 d (crustaceans)
<b>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics CAS No.: 64742-49-0 EC No.: 927-510-4</b>
LC <sub>50</sub> : >13.4 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) OECD 203
EC <sub>50</sub> : >1 - 10 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))
ErC <sub>50</sub> : 12 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
NOEC: 1.534 mg/L 28 d (fish, Oncorhynchus mykiss (Rainbow trout))
NOEC: 1 mg/L 21 d (crustaceans, Daphnia magna (Big water flea))
<b>propane CAS No.: 74-98-6 EC No.: 200-827-9</b>
LC <sub>50</sub> : 49.9 mg/L 4 d (fish)
ErC <sub>50</sub> : 19.4 mg/L 4 d (Algae/water plant)
EC <sub>50</sub> : 69.4 mg/L 2 d (crustaceans)
<b>butane CAS No.: 106-97-8 EC No.: 203-448-7</b>
LC <sub>50</sub> : 49.9 mg/L 4 d (fish)
ErC <sub>50</sub> : 19.37 mg/L 4 d (Algae/water plant)
EC <sub>50</sub> : 69.43 mg/L 2 d (crustaceans)

#### \* 12.2. Persistence and degradability

<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6</b>
<b>Biodegradation:</b> —
<b>Remark:</b> Readily biodegradable (according to OECD criteria).

#### Additional information:

The product has not been tested.

#### \* 12.3. Bioaccumulative potential

<b>isobutane CAS No.: 75-28-5 EC No.: 200-857-2</b>
Log K <sub>OW</sub> : 1.09
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane CAS No.: 64742-49-0 EC No.: 921-024-6</b>
Log K <sub>OW</sub> : 3.4
<b>propane CAS No.: 74-98-6 EC No.: 200-827-9</b>
Log K <sub>OW</sub> : 1.09
<b>butane CAS No.: 106-97-8 EC No.: 203-448-7</b>
Log K <sub>OW</sub> : 1.09

#### Accumulation / Evaluation:

The product has not been tested.

#### \* 12.4. Mobility in soil

The product has not been tested.

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## Mabanol Trockenkettenspray

### \* 12.5. Results of PBT and vPvB assessment

<b>isobutane</b> CAS No.: 75-28-5 EC No.: 200-857-2
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane</b> CAS No.: 64742-49-0 EC No.: 921-024-6
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>Hydrocarbons, C7, n-alkanes, iso-alkanes, cyclics</b> CAS No.: 64742-49-0 EC No.: 927-510-4
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>propane</b> CAS No.: 74-98-6 EC No.: 200-827-9
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>butane</b> CAS No.: 106-97-8 EC No.: 203-448-7
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>disodium sebacate</b> CAS No.: 17265-14-4 EC No.: 241-300-3
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### \* 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

#### 13.1.1. Product/Packaging disposal

#### Waste codes/waste designations according to EWC/AVV

##### Waste code product

16 05 04 *	Gases in pressure containers (including halons) containing hazardous substances
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\*: Evidence for disposal must be provided.

##### Waste code packaging

15 01 04	metallic packaging
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### Waste treatment options





#### Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

#### Appropriate disposal / Package:

Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1. UN number or ID number</b>			
UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
<b>14.3. Transport hazard class(es)</b>			
 2.1	 2.1	 2.1	 2.1
<b>14.4. Packing group</b>			
		-	

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.5. Environmental hazards</b>			
		MARINE POLLUTANT	
<b>14.6. Special precautions for user</b>			
<b>Special provisions:</b> 190, 327, 344, 625 <b>Limited quantity (LQ):</b> 1 L <b>Excepted Quantities (EQ):</b> E0 <b>Classification code:</b> 5F <b>Tunnel restriction code:</b> (D) <b>Remark:</b> Warning: Flammable gases.	<b>Special provisions:</b> 190, 327, 344, 625 <b>Limited quantity (LQ):</b> 1 L <b>Excepted Quantities (EQ):</b> E0 <b>Classification code:</b> 5F <b>Remark:</b> Warning: Flammable gases.	<b>Special provisions:</b> 63, 190, 277, 327, 344, 381, 959 <b>Limited quantity (LQ):</b> 1000 mL <b>Excepted Quantities (EQ):</b> E0 <b>EmS-No.:</b> F-D, , S-U <b>Remark:</b> Warning: Flammable gases.	<b>Special provisions:</b> A145, A167, A802 <b>Limited quantity (LQ):</b> Airfreight transport prohibited by IATA. <b>Excepted Quantities (EQ):</b> E0 <b>Remark:</b> Airfreight transport prohibited by IATA. Warning: Flammable gases.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable.

#### Additional information:

ENVIRONMENTALLY HAZARDOUS: Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane.

## SECTION 15: Regulatory information

### \* 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU legislation

##### Restrictions on use:

Use restriction according to REACH annex XVII, no.: 3. 28. 40. 75.

##### Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:

- P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

- E2 Hazardous to the Aquatic Environment in Category Chronic 2

Aerosol directive (75/324/EEC).

2004/42/EG (VOC): No information available.

Observe in addition any national regulations!

#### 15.1.2. National regulations

##### [DE] National regulations

##### Restrictions of occupation

To follow: §22 JArbSchG.

##### Störfallverordnung

##### for substances contained in the product:

Hazard categories:

- P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

- E2 Hazardous to the Aquatic Environment in Category Chronic 2

Named dangerous substances:

- Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas

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### Technische Anleitung Luft (TA-Luft)

#### Klasse 1:

5.2.5: organic substances, to be indicated as total carbon at  $m \geq 0.50$  kg/h: conc.  $50 \text{ mg/m}^3$

#### Anteil 1:

40.68 %

### Water hazard class

#### WGK:

2 - deutlich wassergefährdend

#### Remark:

Self-classification (mixture; calculation rule).

### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### \* 16.1. Indication of changes

1.1.	Product identifier
2.1.	Classification of the substance or mixture
2.2.	Label elements
3.2.	Mixtures
5.2.	Special hazards arising from the substance or mixture
5.4.	Additional information
7.1.	Precautions for safe handling
7.2.	Conditions for safe storage, including any incompatibilities
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.4.	Mobility in soil
12.5.	Results of PBT and vPvB assessment
12.6.	Endocrine disrupting properties
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.4.	Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
16.5.	Relevant R-, H- and EUH-phrases (Number and full text)

### 16.2. Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: Accord européen sur le transport des marchandises dangereuses par Route (International Carriage of Dangerous Goods by Road)

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

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LC<sub>50</sub>: Lethal concentration, 50 percent

LD<sub>50</sub>: Lethal dose, 50 percent

NIOSH: National Institute of Occupational Safety and Health

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OEL: Occupational Exposure limit (Arbeitsplatzgrenzwert)

OSHA: Occupational Safety and Health Administration

PEL: permissible exposure limit (Zulässiger Expositionsgrenzwert)

PBT: persistent bioaccumulative toxic

PNEC: predicted no effect concentration

REL: Recommended exposure limit (Empfohlene Expositionsgrenze)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit (Kurzzeitgrenzwert) (15 min)

SVHC: substance of very high concern

TLV: Threshold Limit Values (Schwellwert Grenzwerte)

TRGS Technische Regeln für Gefahrstoffe

TSCA: Toxic Substances Control Act

TWA: Time Weighted Average (Zeitlich gewichteter Mittelwert) (8 h)

VOC: Volatile Organic Compounds

vPvB: very persistent and very bioaccumulative

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

### 16.3. Key literature references and sources for data

No data available

### \* 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Aerosols ( <i>Aerosol 1</i> )	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	
Skin corrosion/irritation ( <i>Skin Irrit. 2</i> )	H315: Causes skin irritation.	
STOT-single exposure ( <i>STOT SE 3</i> )	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment ( <i>Aquatic Chronic 2</i> )	H411: Toxic to aquatic life with long lasting effects.	
Aspiration hazard ( <i>Asp. Tox. 1</i> )	H304: May be fatal if swallowed and enters airways.	

### \* 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

### 16.6. Training advice

No data available

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## Mabanol Trockenkettenspray

### 16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

\* Data changed compared with the previous version