

**Safety Data Sheet**

according to UK REACH Regulation

**JMC Kettenspray Topsynth**

Revision date: 12.09.2024

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

JMC Kettenspray Topsynth

UFI: RP9V-0JGT-DN0P-WQ4G

**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****Manufacturer**

Company name: Johannes J. Matthies GmbH &amp; Co. KG

Street: Hammerbrookstr. 97

Place: D-20097 Hamburg

Telephone: + 49 (0) 40 2 37 21-0

Telefax: + 49 (0) 40 2 37 21-363

E-mail: info@matthies.de

Internet: www.matthies.de

Responsible Department: Abteilung Produktsicherheit

**Supplier**

Company name: Larsson UK Ltd.

Street: 7 Alpha Court, Phoenix Parkway

Place: GB-NN17 5DP Corby

Telephone: + 44 1536 265633

E-mail: info@larsson.uk.com

Internet: www.larsson.uk.com

**1.4. Emergency telephone number:**

+ 44 1536 265633

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Aerosol 1; H222-H229

Skin Irrit. 2; H315

STOT SE 3; H336

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**

Hydrocarbons, C7-C9, isoalkanes

**Signal word:** Danger**Pictograms:**

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**Hazard statements**

|      |  |
|------|--|
| H222 | Extremely flammable aerosol.                       |
| H229 | Pressurised container: May burst if heated.        |
| H315 | Causes skin irritation.                            |
| H336 | May cause drowsiness or dizziness.                 |
| H412 | Harmful to aquatic life with long lasting effects. |

**Precautionary statements**

|           |  |
|-----------|--|
| P101      | If medical advice is needed, have product container or label at hand.                          |
| P102      | Keep out of reach of children.   |
| P210      | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211      | Do not spray on an open flame or other ignition source.  |
| P251      | Do not pierce or burn, even after use.   |
| P261      | Avoid breathing dust/fume/gas/mist/vapours/spray.  |
| P271      | Use only outdoors or in a well-ventilated area.  |
| P273      | Avoid release to the environment.  |
| P280      | Wear protective gloves.  |
| P302+P352 | IF ON SKIN: Wash with plenty of water.   |
| P332+P313 | If skin irritation occurs: Get medical advice/attention.                                       |
| P304+P312 | IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.                       |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.                   |
| P501      | Dispose of contents/container to an appropriate recycling or disposal facility.                |

**Special labelling of certain mixtures**

|        |  |
|--------|--|
| EUH208 | Contains Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts. May produce an allergic reaction. |
|--------|--|

**2.3. Other hazards**

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

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

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**Hazardous components**

| CAS No     | Chemical name  |              |                  | Quantity    |
|------------|--|--------------|------------------|-------------|
|            | EC No  | Index No     | REACH No         |             |
|            | GHS Classification   |              |                  |             |
| 106-97-8   | butane   |              |                  | 25 - < 50 % |
|            | 203-448-7  | 601-004-00-0 | 01-2119474691-32 |             |
|            | Flam. Gas 1, Compressed gas; H220 H280   |              |                  |             |
| 75-28-5    | isobutane  |              |                  | 25 - < 50 % |
|            | 200-857-2  | 601-004-00-0 | 01-2119485395-27 |             |
|            | Flam. Gas 1, Compressed gas; H220 H280   |              |                  |             |
| 64741-66-8 | Hydrocarbons, C7-C9, isoalkanes  |              |                  | 20 - < 25 % |
|            | 921-728-3  |              | 01-2119471305-42 |             |
|            | Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411 |              |                  |             |
| 74-98-6    | propane  |              |                  | 3 - < 5 %   |
|            | 200-827-9  | 601-003-00-5 | 01-2119486944-21 |             |
|            | Flam. Gas 1, Liquefied gas; H220 H280  |              |                  |             |
| 17265-14-4 | Disodium sebacate  |              |                  | 1 - < 3 %   |
|            | 241-300-3  |              |                  |             |
|            | Eye Irrit. 2; H319   |              |                  |             |
| 68037-01-4 | 1-decene, homopolymer, hydrogenated  |              |                  | 1 - < 3 %   |
|            | 500-183-1  |              | 01-2119486452-34 |             |
|            | Asp. Tox. 1; H304  |              |                  |             |
| 97675-24-6 | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts                         |              |                  | 0,1 - < 1 % |
|            | 307-593-8  |              | 01-2119985174-30 |             |
|            | Skin Sens. 1B; H317  |              |                  |             |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No     | EC No     | Chemical name  | Quantity    |
|------------|-----------|--|-------------|
|            |           | Specific Conc. Limits, M-factors and ATE   |             |
| 106-97-8   | 203-448-7 | butane   | 25 - < 50 % |
|            |           | inhalation: LC50 = 658 ppm (gases)   |             |
| 64741-66-8 | 921-728-3 | Hydrocarbons, C7-C9, isoalkanes  | 20 - < 25 % |
|            |           | inhalation: LC50 = > 21 mg/l (vapours); inhalation: LC50 = > 9,4 mg/l (dusts or mists); dermal: LD50 = > 2200 - 2500 mg/kg; oral: LD50 = > 7100 - 7800 mg/kg |             |
| 17265-14-4 | 241-300-3 | Disodium sebacate  | 1 - < 3 %   |
|            |           | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg   |             |
| 68037-01-4 | 500-183-1 | 1-decene, homopolymer, hydrogenated  | 1 - < 3 %   |
|            |           | inhalation: LC50 = > 5,2 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg   |             |
| 97675-24-6 | 307-593-8 | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts   | 0,1 - < 1 % |
|            |           | inhalation: LC50 = > 5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg Skin Sens. 1B; H317: >= 10 - 100                        |             |

**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.

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**After inhalation**

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

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

**After contact with eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When in doubt or if symptoms are observed, get medical advice.

**After 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**

Causes skin irritation. May cause drowsiness or dizziness.  
Headache, Nausea, Dizziness.

**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.

**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**

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

**5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Danger of bursting container.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

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.

**For non-emergency personnel**

First aider: Pay attention to self-protection!

**For emergency responders**

Fight fire with normal precautions from a reasonable distance.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Do not allow uncontrolled discharge of product into the environment.  
Explosion risk.

**6.3. Methods and material for containment and cleaning up****For containment**

Prevent spread over a wide area (e.g. by containment or oil barriers).

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

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**Other information**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Do not rinse down with water.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice 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.

When using do not eat, drink, smoke, sniff.

Personal protection equipment: see section 8

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

**Further information on handling**

Avoid contact with skin. Avoid contact with eyes.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Observe in addition any national regulations!

**Hints on joint storage**

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

Keep away from food, drink and animal feedingstuffs.

**Further information on storage conditions**

Protect against: Frost.

Protect against direct sunlight.

Store in a cool dry place.

Observe in addition any national regulations!

**7.3. Specific end use(s)**

Lubricating agent

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

| CAS No   | Substance | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|----------|-----------|-----|-------------------|-----------|---------------|--------|
| 106-97-8 | Butane    | 600 | 1450              |           | TWA (8 h)     | WEL    |
|          |           | 750 | 1810              |           | STEL (15 min) | WEL    |

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**DNEL/DMEL values**

| CAS No                   | Substance  |                |          |                    |
|--------------------------|--|----------------|----------|--------------------|
| DNEL type                |  | Exposure route | Effect   | Value              |
| 64741-66-8               | Hydrocarbons, C7-C9, isoalkanes  |                |          |                    |
| Worker DNEL, long-term   |  | inhalation     | systemic | 2035 mg/m³         |
| Worker DNEL, long-term   |  | dermal         | systemic | 773 mg/kg bw/day   |
| Consumer DNEL, long-term |  | inhalation     | systemic | 608 mg/m³          |
| Consumer DNEL, long-term |  | dermal         | systemic | 699 mg/kg bw/day   |
| Consumer DNEL, long-term |  | oral           | systemic | 699 mg/kg bw/day   |
| 97675-24-6               | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts |                |          |                    |
| Worker DNEL, long-term   |  | inhalation     | systemic | 0,66 mg/m³         |
| Worker DNEL, long-term   |  | dermal         | systemic | 3,33 mg/kg bw/day  |
| Consumer DNEL, long-term |  | inhalation     | systemic | 0,33 mg/m³         |
| Consumer DNEL, long-term |  | dermal         | systemic | 1,667 mg/kg bw/day |
| Consumer DNEL, long-term |  | oral           | systemic | 0,833 mg/kg bw/day |

**PNEC values**

| CAS No   | Substance  |  |
|--|--|--|
| Environmental compartment                        | Value  |  |
| 97675-24-6                                       | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts |  |
| Freshwater                                       | 1 mg/l   |  |
| Freshwater (intermittent releases)               | 10 mg/l  |  |
| Marine water                                     | 1 mg/l   |  |
| Freshwater sediment                              | 723500000 mg/kg  |  |
| Marine sediment                                  | 723500000 mg/kg  |  |
| Secondary poisoning                              | 16,667 mg/kg   |  |
| Micro-organisms in sewage treatment plants (STP) | 100 mg/l   |  |
| Soil   | 868700000 mg/kg  |  |

**Additional advice on limit values**

- a no restriction
- b End of exposure or end of shift
- c at long term exposure: after several previous shifts
- d before next shift

Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Z: A risk of reproductive effects cannot to be excluded if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Whole blood (B)

Urine (U)

**8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Protective and hygiene measures**

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

**Eye/face protection**

Tightly sealed safety glasses. (DIN EN 166)

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**Hand protection**

Wear suitable gloves. (EN ISO 374)

Suitable material: NBR (Nitrile rubber)

Breakthrough time:  $\geq 480$  minThickness of the glove material:  $\geq 0,45$  mm

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

**Skin protection**

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

**Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. exceeding exposure limit values: Filtering device with filter or ventilator filtering device of type: AX (DIN EN 141)

Observe the wear time limits as specified by the manufacturer.

Observe in addition any national regulations!

**Environmental exposure controls**

Avoid release to the environment.

Observe in addition any national regulations!

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|                  |                     |
|------------------|---------------------|
| Physical state:  | Aerosol             |
| Colour:          | white, light yellow |
| Odour:           | characteristic      |
| Odour threshold: | not determined      |

|                      | Test method              |
|----------------------|--------------------------|
| pH-Value (at 20 °C): | not determined DIN 19268 |

**Changes in the physical state**

|   |                |
|---|----------------|
| Melting point/freezing point:                             | not determined |
| Boiling point or initial boiling point and boiling range: | - 11,7 °C      |
| Flash point:  | - 80 °C        |

**Flammability**

|               |                    |
|---------------|--------------------|
| Solid/liquid: | Flammable aerosol. |
|---------------|--------------------|

**Explosive properties**

Heating may cause an explosion.

|  |                                  |
|--|----------------------------------|
| Lower explosion limits:                | 0,7 vol. %                       |
| Upper explosion limits:                | 15 vol. %                        |
| Auto-ignition temperature:             | not determined                   |
| Decomposition temperature:             | not determined                   |
| Vapour pressure:                       | not determined                   |
| Density (at 20 °C):                    | 0,79 g/cm <sup>3</sup> DIN 51757 |
| Water solubility:                      | practically insoluble            |
| <b>Solubility in other solvents</b>    |                                  |
| not determined                         |                                  |
| Partition coefficient n-octanol/water: | not determined                   |

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Viscosity / kinematic:

not determined

Relative vapour density:

not determined

**9.2. Other information**

Data apply to the technically active substance.: Relative density, Colour, Odour, Viscosity, pH

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Extremely flammable aerosol. Pressurized container: May burst if heated.

**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 sources of heat (e.g. hot surfaces), sparks and open flames. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

**10.5. Incompatible materials**

Oxidizing agent. Pyrophoric or self-heating substances.

**10.6. Hazardous decomposition products**In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, aldehydes, carbon black, Pyrolysis products, toxic.**Further information**

Do not mix with other chemicals.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

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

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l



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| CAS No     | Chemical name  |                          |         |                       |          |
|------------|--|--------------------------|---------|-----------------------|----------|
|            | Exposure route   | Dose                     | Species | Source                | Method   |
| 106-97-8   | butane   |                          |         |                       |          |
|            | inhalation gas   | LC50 658 ppm             | Rat     | GESTIS (Manufacturer) |          |
| 64741-66-8 | Hydrocarbons, C7-C9, isoalkanes  |                          |         |                       |          |
|            | oral   | LD50 > 7100 - 7800 mg/kg | Rat     | Manufacturer          | OECD 401 |
|            | dermal   | LD50 > 2200 - 2500 mg/kg | Rabbit  | Manufacturer          |          |
|            | inhalation (4 h) vapour  | LC50 > 21 mg/l           | Rat     | Manufacturer          | OECD 403 |
|            | inhalation (4 h) dust/mist   | LC50 > 9,4 mg/l          | Rat     | Manufacturer          |          |
| 17265-14-4 | Disodium sebacate  |                          |         |                       |          |
|            | oral   | LD50 > 5000 mg/kg        | Rat     | Manufacturer          |          |
|            | dermal   | LD50 > 2000 mg/kg        | Rat     | Manufacturer          |          |
| 68037-01-4 | 1-decene, homopolymer, hydrogenated                                      |                          |         |                       |          |
|            | oral   | LD50 > 5000 mg/kg        | Rat     | Manufacturer          |          |
|            | dermal   | LD50 > 2000 mg/kg        | Rabbit  | Manufacturer          |          |
|            | inhalation (4 h) dust/mist   | LC50 > 5,2 mg/l          | Rat     | Manufacturer          |          |
| 97675-24-6 | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts |                          |         |                       |          |
|            | oral   | LD50 > 5000 mg/kg        | Rat     | Manufacturer          | OECD 423 |
|            | dermal   | LD50 > 2000 mg/kg        | Rat     | Manufacturer          | OECD 402 |
|            | inhalation (4 h) dust/mist   | LC50 > 5 mg/l            | Rat     | Manufacturer          |          |

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.

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

**Sensitising effects**

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

Contains Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts. May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist. No indications of human reproductive toxicity exist.

**STOT-single exposure**

May cause drowsiness or dizziness. (Hydrocarbons, C7-C9, isoalkanes)

**STOT-repeated exposure**

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

**Aspiration hazard**

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

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**Specific effects in experiment on an animal**

No information available.

**11.2. Information on other hazards****Endocrine disrupting properties**

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

**Other information**

No information available.

**SECTION 12: Ecological information****12.1. Toxicity**

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| CAS No     | Chemical name  |               |           |         |   |  |
|------------|--|---------------|-----------|---------|---|--|
|            | Aquatic toxicity   | Dose          | [h]   [d] | Species | Source  | Method   |
| 106-97-8   | butane   |               |           |         |   |  |
|            | Acute fish toxicity  | LC50<br>mg/l  | 49,9      | 96 h    | piscis  | Manufacturer   |
|            | Acute algae toxicity   | ErC50<br>mg/l | 19,37     | 96 h    | algae   | Manufacturer   |
|            | Acute crustacea toxicity   | EC50<br>mg/l  | 69,43     | 48 h    | Daphnia sp.   | Manufacturer   |
| 75-28-5    | isobutane  |               |           |         |   |  |
|            | Acute fish toxicity  | LC50<br>mg/l  | 91,42     | 96 h    | piscis  | Manufacturer   |
|            | Acute algae toxicity   | ErC50<br>mg/l | 19,37     | 96 h    | algae   | Manufacturer   |
|            | Acute crustacea toxicity   | EC50<br>mg/l  | 69,43     | 48 h    | Daphnia sp.   | Manufacturer   |
| 64741-66-8 | Hydrocarbons, C7-C9, isoalkanes  |               |           |         |   |  |
|            | Acute fish toxicity  | LL50<br>mg/l  | > 13,4    | 96 h    | Oncorhynchus mykiss<br>(Rainbow trout)              | Manufacturer<br>OECD 203                               |
|            | Acute algae toxicity   | ErC50         | 12 mg/l   | 72 h    | Raphidocelis approx.<br>@1719.B01728subca<br>pitata | Manufacturer<br>OECD 201                               |
|            | Acute crustacea toxicity   | EL50          | 2,4 mg/l  | 48 h    | Daphnia magna (Big<br>water flea)                   | Manufacturer   |
|            | Fish toxicity  | NOEC<br>mg/l  | 0,778     | 28 d    | Oncorhynchus mykiss<br>(Rainbow trout)              | Manufacturer<br>CONCAWE,Bruss<br>els,<br>Belgium(2009) |
|            | Crustacea toxicity   | NOEC          | 1 mg/l    | 21 d    | Daphnia magna (Big<br>water flea)                   | Manufacturer<br>OECD 211                               |
| 74-98-6    | propane  |               |           |         |   |  |
|            | Acute fish toxicity  | LC50<br>mg/l  | 49,9      | 96 h    | piscis  | Manufacturer   |
|            | Acute algae toxicity   | ErC50<br>mg/l | 19,37     | 96 h    | algae   | Manufacturer   |
|            | Acute crustacea toxicity   | EC50<br>mg/l  | 69,43     | 48 h    | Daphnia sp.   | Manufacturer   |
| 68037-01-4 | 1-decene, homopolymer, hydrogenated                                      |               |           |         |   |  |
|            | Acute fish toxicity  | LC50<br>mg/l  | > 1000    | 96 h    | Oncorhynchus mykiss<br>(Rainbow trout)              | Manufacturer   |
|            | Acute algae toxicity   | ErC50<br>mg/l | > 1000    | 72 h    | Desmodesmus<br>subspicatus                          | Manufacturer   |
|            | Acute crustacea toxicity   | EC50<br>mg/l  | > 1000    | 48 h    | Daphnia magna (Big<br>water flea)                   | Manufacturer   |
| 97675-24-6 | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts |               |           |         |   |  |
|            | Acute fish toxicity  | LL50<br>mg/l  | > 10000   | 96 h    | Cyprinodon variegatus                               | Manufacturer<br>OECD 203                               |
|            | Acute algae toxicity   | ErC50<br>mg/l | > 100     | 72 h    | Desmodesmus<br>subspicatus                          | Manufacturer<br>EPA<br>OTS797.1300                     |
|            | Acute crustacea toxicity   | EC50<br>mg/l  | > 1000    | 48 h    | Daphnia magna (Big<br>water flea)                   | Manufacturer<br>OECD 201                               |

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

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**Partition coefficient n-octanol/water**

| CAS No     | Chemical name  | Log Pow |
|------------|--|---------|
| 106-97-8   | butane   | 1,09    |
| 75-28-5    | isobutane  | 1,09    |
| 64741-66-8 | Hydrocarbons, C7-C9, isoalkanes  | 4,5     |
| 74-98-6    | propane  | 1,09    |
| 97675-24-6 | Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts | 10,68   |

**BCF**

| CAS No     | Chemical name                   | BCF   | Species        | Source       |
|------------|---------------------------------|-------|----------------|--------------|
| 64741-66-8 | Hydrocarbons, C7-C9, isoalkanes | 198,7 | Mytilus edulis | Manufacturer |

**12.4. Mobility in soil**

The product has not been tested.

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

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

The product has not been tested.

**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.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

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.

**List of Wastes Code - residues/unused products**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**List of Wastes Code - used product**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

**Contaminated packaging**

Dispose of waste according to applicable legislation.

**SECTION 14: Transport information****Land transport (ADR/RID)**

- 14.1. UN number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -

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Hazard label:

2.1



Classification code:

5F

Special Provisions:

190 327 344 625

Limited quantity:

1 L

Excepted quantity:

E0

Transport category:

2

Tunnel restriction code:

D

**Inland waterways transport (ADN)****14.1. UN number:**

UN 1950

**14.2. UN proper shipping name:**

AEROSOLS

**14.3. Transport hazard class(es):**

2

**14.4. Packing group:**

-

Hazard label:

2.1



Classification code:

5F

Special Provisions:

190 327 344 625

Limited quantity:

1 L

Excepted quantity:

E0

**Marine transport (IMDG)****14.1. UN number:**

UN 1950

**14.2. UN proper shipping name:**

AEROSOLS

**14.3. Transport hazard class(es):**

2.1

**14.4. Packing group:**

-

Hazard label:

2.1



Marine pollutant:

-

Special Provisions:

63, 190, 277, 327, 344, 381, 959

Limited quantity:

1000 mL

Excepted quantity:

E0

EmS:

F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number:**

UN 1950

**14.2. UN proper shipping name:**

AEROSOLS, FLAMMABLE

**14.3. Transport hazard class(es):**

2.1

**14.4. Packing group:**

-

Hazard label:

2.1



Special Provisions:

A145 A167 A802

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y203

Excepted quantity:

E0

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|  |        |
|--|--------|
| IATA-packing instructions - Passenger: | 203    |
| IATA-max. quantity - Passenger:        | 75 kg  |
| IATA-packing instructions - Cargo:     | 203    |
| IATA-max. quantity - Cargo:            | 150 kg |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Extremely flammable aerosol.

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

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

Directive 2010/75/EU on industrial emissions: No information available.

Directive 2004/42/EC on VOC in paints and varnishes: No information available.

Information according to Directive 2012/18/EU (SEVESO III): P3a FLAMMABLE AEROSOLS

**Additional information**

Aerosol directive (75/324/EEC).

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

**Additional information**

Observe in addition any national regulations!

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****Abbreviations and acronyms**

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging

EU: European Union

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

REACH: Registration, Evaluation and Authorization of Chemicals

UN: United Nations

PBT: Persistent, Bioaccumulative, Toxic

SVHC: Substance of Very High Concern

vPvB: very Persistent, very Bioaccumulative

ATE: Acute Toxicity Estimates

BCF: Bio-Concentration Factor

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

VOC: Volatile Organic Compounds

DIN: Deutsches Institut für Normung e.V. (German Institute for Standardization)

EN: European Standard

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ISO: International Organization for Standardization  
 IUCLID: International Uniform Chemical Information Database  
 LC50: Lethal Concentration, 50 %  
 LD50: Lethal Dose, 50 %  
 LL50: Lethal Loading, 50 %  
 OECD: Organisation for Economic Co-operation and Development  
 EC50: Effective Concentration 50 %  
 M-Faktor: Multiplication Factor  
 EL50: Effect Loading, 50 %  
 ErC50: Effective Concentration 50 %, growth rate  
 M-Faktor: Multiplication Factor  
 NOEC: No Observed Effect Concentration  
 ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)  
 ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 DGR: Dangerous Goods Regulations  
 EmS: Emergency Schedules  
 IATA: International Air Transport Association  
 IBC: Intermediate Bulk Container  
 ICAO: International Civil Aviation Organization  
 IE: Industrial Emissions  
 IMDG: International Maritime Code for Dangerous Goods  
 LQ: Limited Quantity  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 MFAG: Medical First Aid Guide  
 RID: Regulations concerning the International carriage of Dangerous goods by rail  
 TI: Technical Instructions

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

| Classification          | Classification procedure      |
|-------------------------|-------------------------------|
| Aerosol 1; H222-H229    | On basis of test data         |
| Skin Irrit. 2; H315     | Bridging principle "Aerosols" |
| STOT SE 3; H336         | Bridging principle "Aerosols" |
| Aquatic Chronic 3; H412 | Calculation method            |

**Relevant H and EUH statements (number and full text)**

|        |  |
|--------|--|
| H220   | Extremely flammable gas.   |
| H222   | Extremely flammable aerosol.   |
| H225   | Highly flammable liquid and vapour.  |
| H229   | Pressurised container: May burst if heated.  |
| H280   | Contains gas under pressure; may explode if heated.  |
| H304   | May be fatal if swallowed and enters airways.  |
| H315   | Causes skin irritation.  |
| H317   | May cause an allergic skin reaction.   |
| H319   | Causes serious eye irritation.   |
| H336   | May cause drowsiness or dizziness.   |
| H411   | Toxic to aquatic life with long lasting effects.   |
| H412   | Harmful to aquatic life with long lasting effects.   |
| EUH208 | Contains Benzene, C9-13-alkyl derivs., distn. residues, sulfonated, calcium salts. May produce an allergic reaction. |

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*