

Safety Data Sheet

according to UK REACH Regulation

DINITROL 441 Spray

Revision date: 09.11.2021

Product code: 30441

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

DINITROL 441 Spray

UFI: 7H9Q-F2XY-F003-69CX

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Anti-corrosive coating

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|----------------------|--------------------------------|
| Company name: | DINOL GmbH | |
| Street: | Pyrmonter Strasse 76 | |
| Place: | D-32676 Luegde | |
| Telephone: | + 49 (0) 5281 982980 | Telefax: + 49 (0) 5281 9829860 |
| e-mail: | msds@dinol.com | |
| Contact person: | Labor | |
| Responsible Department: | msds@dinol.com | |

1.4. Emergency telephone number: Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)

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

Aerosol 1; H222-H229
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H336
STOT RE 2; H373
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

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

ethyl acetate
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
Fatty acids, C18-unsatd., trimers, compds. with oleylamine
Fatty acids, tall-oil, compds. with oleylamine
Cobalt bis(2-ethylhexanoate)

Signal word: Danger**Pictograms:****Hazard statements**

| | |
|------|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H315 | Causes skin irritation. |

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| | |
|------|--|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statements

| | |
|-----------|--|
| 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. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |

Special labelling of certain mixtures

| | |
|--------|---|
| EUH211 | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Restricted to professional users. |
|--------|---|

Additional advice on labelling

The classification of the aerosol was carried out according to EC 1272/2008, Annex 1, point 1.1.3.7.

Labelling of packages where the contents do not exceed 125 ml**Signal word:** Danger**Pictograms:****Hazard statements**

H222-H229-H317-H412

Precautionary statements

P210-P211-P251-P280-P410+P412

2.3. Other hazards

No information available.

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 | |
| | Classification (GB CLP Regulation) | | | |
| 141-78-6 | ethyl acetate | | | 20 - < 25 % |
| | 205-500-4 | 607-022-00-5 | 01-2119475103-46 | |
| | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066 | | | |
| 74-98-6 | propane | | | 12,5 - 20 % |
| | 200-827-9 | 601-003-00-5 | 01-2119486944-21 | |
| | Flam. Gas 1, Liquefied gas; H220 H280 | | | |
| 106-97-8 | butane | | | 5 - 10 % |
| | 203-448-7 | 601-004-00-0 | 01-2119474691-32 | |
| | Flam. Gas 1, Liquefied gas; H220 H280 | | | |
| 75-28-5 | isobutane | | | 5 - 10 % |
| | 200-857-2 | 601-004-00-0 | 01-2119485395-27 | |
| | Flam. Gas 1, Liquefied gas; H220 H280 | | | |
| 13463-67-7 | Titanium dioxide | | | 5 - < 10 % |
| | 236-675-5 | | | |
| | | | | |
| 1330-20-7 | xylene | | | 5 - < 10 % |
| | 215-535-7 | 601-022-00-9 | 01-2119488216-32 | |
| | Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H226 H332 H312 H315 H319 H335 H373 H304 H412 | | | |
| | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | | | 1 - < 5 % |
| | 919-446-0 | 649-330-00-2 | 01-2119458049-33 | |
| | Flam. Liq. 3, STOT SE 3, STOT RE 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H372 H304 H411 EUH066 | | | |
| 1330-20-7 | xylene | | | 1 - < 5 % |
| | 215-535-7 | 601-022-00-9 | 01-2119488216-32 | |
| | Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304 | | | |
| 100-41-4 | ethylbenzene | | | < 1 % |
| | 202-849-4 | 601-023-00-4 | 01-2119489370-35 | |
| | Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304 | | | |
| 147900-93-4 | Fatty acids, C18-unsatd. , trimers, compds. with oleylamine | | | < 1 % |
| | 604-612-4 | | | |
| | Acute Tox. 4, Skin Sens. 1, STOT RE 2, Aquatic Chronic 2; H302 H317 H373 H411 | | | |
| 85711-55-3 | Fatty acids, tall-oil, compds. with oleylamine | | | < 1 % |
| | 288-315-1 | | 01-2119974148-28 | |
| | Eye Dam. 1, Skin Sens. 1A, STOT RE 2; H318 H317 H373 | | | |
| 136-52-7 | Cobalt bis(2-ethylhexanoate) | | | < 0.1 % |
| | 205-250-6 | | 01-2119524678-29 | |
| | Repr. 1B, Eye Irrit. 2, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 3; H360F H319 H317 H400 H412 | | | |

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

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Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-------------|-----------|--|-------------|
| | | Specific Conc. Limits, M-factors and ATE | |
| 141-78-6 | 205-500-4 | ethyl acetate | 20 - < 25 % |
| | | inhalation: LC50 = 30 mg/l (vapours); dermal: LD50 = >20000 mg/kg; oral: LD50 = > 2000 mg/kg | |
| 106-97-8 | 203-448-7 | butane | 5 - 10 % |
| | | inhalation: LC50 = 273000 ppm (gases) | |
| 13463-67-7 | 236-675-5 | Titanium dioxide | 5 - < 10 % |
| | | dermal: LD50 = > 10000 mg/kg; oral: LD50 = > 20000 mg/kg | |
| 1330-20-7 | 215-535-7 | xylene | 5 - < 10 % |
| | | inhalation: LC50 = 10-20 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 2000 mg/kg; oral: LD50 = 8700 mg/kg | |
| | 919-446-0 | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | 1 - < 5 % |
| | | dermal: LD50 = >3400 mg/kg; oral: LD50 = >15000 mg/kg | |
| 1330-20-7 | 215-535-7 | xylene | 1 - < 5 % |
| | | inhalation: LC50 = 20 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 2000 mg/kg; oral: LD50 = 4300 mg/kg | |
| 100-41-4 | 202-849-4 | ethylbenzene | < 1 % |
| | | inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg | |
| 147900-93-4 | 604-612-4 | Fatty acids, C18-unsatd. , trimers, compds. with oleylamine | < 1 % |
| | | oral: LD50 = > 1570 mg/kg | |
| 85711-55-3 | 288-315-1 | Fatty acids, tall-oil, compds. with oleylamine | < 1 % |
| | | oral: LD50 = > 2000 mg/kg | |
| 136-52-7 | 205-250-6 | Cobalt bis(2-ethylhexanoate) | < 0.1 % |
| | | dermal: LD50 = >2000 mg/kg; oral: LD50 = 3129 mg/kg | |

Further Information

The homogeneous mixing of this product is controlled by continuous physical tests. Formerly dusty raw materials are completely integrated into the liquid/pasty mass. Possible AGW-values for solid substances are therefore not given, as there is no longer any risk of inhalation of these substances (when handling this mixture).

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

In all cases of doubt, or when symptoms persist, seek medical advice.
 Never give anything by mouth to an unconscious person or a person with cramps.
 If unconscious but breathing normally, place in recovery position and seek medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest.
 If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

Change contaminated clothing.
 Wash with plenty of water/Soap.
 If skin irritation occurs: Get medical advice/attention.

After contact with eyes

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.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

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Call a physician immediately.
Put victim at rest, cover with a blanket and keep warm.
Do NOT induce vomiting.

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

Nausea, Dizziness, Headache.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO₂), Extinguishing powder, Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Danger of serious damage to health by prolonged exposure.
Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

5.3. Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear personal protection equipment.
Avoid contact with skin, eyes and clothes.

For emergency responders

For further specification, refer to section 8 of the SDS.

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.

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).
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Provide adequate ventilation.
Clear contaminated areas thoroughly.
Do not rinse down with water.

Other information

No information available.

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8

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Disposal: see section 13

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

Handle and open container with care.

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

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Do not spray on naked flames or any incandescent material.

Keep away from sources of ignition - No smoking.

Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from food, drink and animal feedingstuffs. 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 or drink.

Remove contaminated, saturated clothing immediately.

Do not breathe gas/vapour/aerosol.

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

Keep container tightly closed in a cool, well-ventilated place.

Do not keep the container sealed. Keep container dry.

Keep away from heat. Protect from direct sunlight.

7.3. Specific end use(s)

No information available.

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

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|------------|------------------------------|-----|-------------------|-----------|---------------|--------|
| 106-97-8 | Butane | 600 | 1450 | | TWA (8 h) | WEL |
| | | 750 | 1810 | | STEL (15 min) | WEL |
| 141-78-6 | Ethyl acetate | 200 | 734 | | TWA (8 h) | WEL |
| | | 400 | 1468 | | STEL (15 min) | WEL |
| 100-41-4 | Ethylbenzene | 100 | 441 | | TWA (8 h) | WEL |
| | | 125 | 552 | | STEL (15 min) | WEL |
| 14807-96-6 | Talc respirable dust | - | 1 | | TWA (8 h) | WEL |
| 13463-67-7 | Titanium dioxide, respirable | - | 4 | | TWA (8 h) | WEL |
| 1330-20-7 | Xylene: mixed isomers | 50 | 220 | | TWA (8 h) | WEL |
| | | 100 | 441 | | STEL (15 min) | WEL |

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Biological Monitoring Guidance Values (EH40)

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|-----------|-------------------------------------|--------------------------------------|-----------------|---------------|---------------|
| 1330-20-7 | Xylene, o-, m-, p- or mixed isomers | methyl hippuric acid (creatinine) | 650 mmol/mol | urine | Post shift |

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DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|--------------------------|---|----------------|----------|------------------------|
| 141-78-6 | ethyl acetate | | | |
| Worker DNEL, long-term | | inhalation | systemic | 734 mg/m ³ |
| Worker DNEL, acute | | inhalation | systemic | 1468 mg/m ³ |
| Worker DNEL, long-term | | inhalation | local | 734 mg/m ³ |
| Worker DNEL, acute | | inhalation | local | 1468 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 63 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 367 mg/m ³ |
| Consumer DNEL, acute | | inhalation | systemic | 734 mg/m ³ |
| Consumer DNEL, long-term | | dermal | systemic | 37 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 4,5 mg/kg bw/day |
| 1330-20-7 | xylene | | | |
| Consumer DNEL, long-term | | oral | systemic | 1,6 mg/kg bw/day |
| Worker DNEL, long-term | | dermal | systemic | 180 mg/kg bw/day |
| Consumer DNEL, long-term | | dermal | systemic | 108 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 77 mg/m ³ |
| Consumer DNEL, long-term | | inhalation | systemic | 14,8 mg/m ³ |
| | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | | | |
| Worker DNEL, long-term | | inhalation | systemic | 330 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 44 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 71 mg/m ³ |
| Consumer DNEL, long-term | | dermal | systemic | 26 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 26 mg/kg bw/day |
| 1330-20-7 | xylene | | | |
| Worker DNEL, long-term | | dermal | systemic | 108 mg/kg bw/day |
| Worker DNEL, acute | | inhalation | systemic | 289 mg/m ³ |
| Worker DNEL, acute | | inhalation | local | 174 mg/m ³ |
| Worker DNEL, long-term | | inhalation | systemic | 77 mg/m ³ |
| Consumer DNEL, long-term | | oral | systemic | 1,6 mg/kg bw/day |
| Consumer DNEL, long-term | | dermal | systemic | 108 mg/kg bw/day |
| Consumer DNEL, acute | | inhalation | systemic | 174 mg/m ³ |
| Consumer DNEL, acute | | inhalation | local | 174 mg/m ³ |
| Consumer DNEL, long-term | | inhalation | systemic | 14,8 mg/m ³ |
| | | | | |
| 100-41-4 | ethylbenzene | | | |
| Worker DNEL, long-term | | inhalation | systemic | 77 mg/m ³ |
| Worker DNEL, acute | | inhalation | local | 293 mg/m ³ |
| Worker DNEL, long-term | | dermal | systemic | 180 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 15 mg/m ³ |
| Consumer DNEL, long-term | | oral | systemic | 1,6 mg/kg bw/day |
| | | | | |

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PNEC values

| CAS No | Substance | Value |
|--|---------------|-------------|
| Environmental compartment | | |
| 141-78-6 | ethyl acetate | |
| Freshwater | | 0,24 mg/l |
| Marine water | | 0,024 mg/l |
| Freshwater sediment | | 1,15 mg/kg |
| Marine sediment | | 0,115 mg/kg |
| Secondary poisoning | | 0,20 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 650 mg/l |
| Soil | | 0,148 mg/kg |
| 1330-20-7 | xylene | |
| Freshwater | | 0,327 mg/l |
| Marine water | | 0,327 mg/l |
| Freshwater sediment | | 12,46 mg/kg |
| Marine sediment | | 12,46 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 6,58 mg/l |
| Soil | | 2,31 mg/kg |
| 1330-20-7 | xylene | |
| Freshwater | | 0,327 mg/l |
| Marine water | | 0,327 mg/l |
| Freshwater sediment | | 12,46 mg/kg |
| Marine sediment | | 12,46 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 6,58 mg/l |
| Soil | | 2,31 mg/kg |
| 100-41-4 | ethylbenzene | |
| Freshwater | | 0,1 mg/l |
| Marine water | | 0,01 mg/l |
| Freshwater sediment | | 13,7 mg/kg |
| Marine sediment | | 1,37 mg/kg |
| Secondary poisoning | | 0,02 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 9,6 mg/l |
| Soil | | 2,68 mg/kg |

8.2. Exposure controls
Appropriate engineering controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Individual protection measures, such as personal protective equipment
Eye/face protection

Eye glasses with side protection (EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374):

PVA (Polyvinyl alcohol), Breakthrough time:: 480 min

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Butyl caoutchouc (butyl rubber) Breakthrough time:: 30 min
 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.
 Protective gloves have to be replaced at the first sign of deterioration.
 Protect skin by using skin protective cream.

Skin protection

Wear anti-static footwear and clothing

Respiratory protection

Work in well-ventilated zones or use proper respiratory protection.
 gas filtering equipment (EN 141), Filter material/medium: A/P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Changes in the physical state

| | |
|---|----------------|
| Melting point/freezing point: | not determined |
| Boiling point or initial boiling point and boiling range: | not applicable |
| Flash point: | <-10 °C |

Flammability

| | |
|---------------|----------------|
| Solid/liquid: | not applicable |
| Gas: | not applicable |

Explosive properties

not determined

| | |
|----------------------------|-------------|
| Lower explosion limits: | 1,5 vol. % |
| Upper explosion limits: | 10,9 vol. % |
| Auto-ignition temperature: | 365 °C |

Self-ignition temperature

| | |
|--------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |

| | |
|----------------------------|----------------|
| Decomposition temperature: | not determined |
|----------------------------|----------------|

| | |
|-----------|----------------|
| pH-Value: | not determined |
|-----------|----------------|

| | |
|----------------------|----------------|
| Viscosity / dynamic: | not determined |
|----------------------|----------------|

| | |
|------------------------|----------------|
| Viscosity / kinematic: | not determined |
|------------------------|----------------|

| | |
|-------------------|--|
| Water solubility: | The study does not need to be conducted because the substance is known to be insoluble in water. |
|-------------------|--|

Solubility in other solvents

not determined

| | |
|--|----------------|
| Partition coefficient n-octanol/water: | not determined |
|--|----------------|

| | |
|------------------|----------|
| Vapour pressure: | 4000 hPa |
|------------------|----------|

| | |
|---------------------|------------------------|
| Density (at 20 °C): | 0,83 g/cm ³ |
|---------------------|------------------------|

| | |
|--------------------------|----------------|
| Relative vapour density: | not determined |
|--------------------------|----------------|

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9.2. Other information**Information with regard to physical hazard classes**Oxidizing properties
not determined**Other safety characteristics**Solvent content: 72,0 %
Solid content: 28,0 %
Evaporation rate: not determined**Further Information**

No information available.

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

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

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

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| CAS No | Chemical name | | | | |
|-------------|---|--------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 141-78-6 | ethyl acetate | | | | |
| | oral | LD50 > 2000 mg/kg | Rabbit | | |
| | dermal | LD50 >20000 mg/kg | Rabbit | | |
| | inhalation (4 h) vapour | LC50 30 mg/l | Rat | | |
| 106-97-8 | butane | | | | |
| | inhalation (4 h) gas | LC50 273000 ppm | Rat | GESTIS | |
| 13463-67-7 | Titanium dioxide | | | | |
| | oral | LD50 > 20000 mg/kg | Rat | | |
| | dermal | LD50 > 10000 mg/kg | Rabbit | | |
| 1330-20-7 | xylene | | | | |
| | oral | LD50 8700 mg/kg | Rat | | |
| | dermal | LD50 2000 mg/kg | Rabbit | | |
| | inhalation (4 h) vapour | LC50 10-20 mg/l | Rat | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |
| | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | | | | |
| | oral | LD50 >15000 mg/kg | Rat | | |
| | dermal | LD50 >3400 mg/kg | Rat | | |
| 1330-20-7 | xylene | | | | |
| | oral | LD50 4300 mg/kg | Rat | | |
| | dermal | LD50 2000 mg/kg | Rabbit | | |
| | inhalation (4 h) vapour | LC50 20 mg/l | Rat | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |
| 100-41-4 | ethylbenzene | | | | |
| | oral | LD50 3500 mg/kg | Rat | GESTIS | |
| | dermal | LD50 15400 mg/kg | Rabbit | GESTIS | |
| | inhalation (4 h) vapour | LC50 17,2 mg/l | Rat | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |
| 147900-93-4 | Fatty acids, C18-unsatd., trimers, compds. with oleylamine | | | | |
| | oral | LD50 > 1570 mg/kg | Rat | | |
| 85711-55-3 | Fatty acids, tall-oil, compds. with oleylamine | | | | |
| | oral | LD50 > 2000 mg/kg | Rat | | |
| 136-52-7 | Cobalt bis(2-ethylhexanoate) | | | | |

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| | | | | | | |
|--|--------|---------------|-------|-----|--|--|
| | oral | LD50 mg/kg | 3129 | Rat | | |
| | dermal | LD50 mg/kg | >2000 | Rat | | |

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (Fatty acids, C18-unsatd. , trimers, compds. with oleylamine; Fatty acids, tall-oil, compds. with oleylamine; Cobalt bis(2-ethylhexanoate))

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause drowsiness or dizziness. (ethyl acetate)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Endocrine disrupting properties

Endocrine disrupting potential No information available.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

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| CAS No | Chemical name | | | | | |
|-----------|---|-------------|-----------|---------|--------------------------------------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 141-78-6 | ethyl acetate | | | | | |
| | Acute fish toxicity | LC50 | 230 mg/l | 96 h | Pimephales promelas (fathead minnow) | |
| | Acute algae toxicity | ErC50 mg/l | 3300 | | Desmodesmus subspicatus | 48 h |
| | Acute crustacea toxicity | EC50 | 717 mg/l | 48 h | Daphnia magna (Big water flea) | |
| | Acute bacteria toxicity | (EC50 mg/l) | 2900 | | Pseudomonas putida | 16 h |
| 1330-20-7 | xylene | | | | | |
| | Acute fish toxicity | LC50 | 86 mg/l | 96 h | Leuciscus idus (golden orfe) | |
| | Acute algae toxicity | ErC50 | 2-8 mg/l | | Selenastrum capricornutum | |
| | Acute crustacea toxicity | EC50 mg/l | 1-10 | 48 h | | |
| | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | | | | | |
| | Acute fish toxicity | LL50 mg/l | 10-30 | 96 h | Oncorhynchus mykiss (Rainbow trout) | |
| | Acute algae toxicity | ErC50 | 4,6 mg/l | 72 h | Pseudokirchneriella subcapitata | |
| | Acute crustacea toxicity | EL50 mg/l | 10-22 | 48 h | Daphnia magna (Big water flea) | |
| 100-41-4 | ethylbenzene | | | | | |
| | Acute fish toxicity | LC50 | 80 mg/l | 96 h | fish | GESTIS |
| | Acute algae toxicity | ErC50 | 5 mg/l | 72 h | alga | GESTIS |
| | Acute crustacea toxicity | EC50 mg/l | 4,75 | 48 h | | GESTIS |

12.2. Persistence and degradability

There are no data available on the mixture itself.

| CAS No | Chemical name | | | | |
|----------|---|--------|----|--------|--|
| | Method | Value | d | Source | |
| | Evaluation | | | | |
| 141-78-6 | ethyl acetate | | | | |
| | OECD 301D/ EEC 92/69/V, C.4-E | 100 % | 28 | | |
| | Readily biodegradable (according to OECD criteria). | | | | |
| | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | | | | |
| | | 74,7 % | 28 | | |
| | Leicht biologisch abbaubar | | | | |

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|-----------|---------------|---------|
| 141-78-6 | ethyl acetate | 0,73 |
| 106-97-8 | butane | 2,89 |
| 1330-20-7 | xylene | 3 |
| 100-41-4 | ethylbenzene | 3,15 |

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BCF

| CAS No | Chemical name | BCF | Species | Source |
|-----------|---------------|------|--|--------|
| 1330-20-7 | xylene | 25,9 | Oncorhynchus mykiss (Rainbow trout) | |

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

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

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

Dispose of waste according to applicable legislation. Do not mix with other wastes.

List of proposed waste codes/waste designations in accordance with EWC:

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 - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Remove according to the regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|--|----------|
| <u>14.1. UN number or ID number:</u> | UN1950 |
| <u>14.2. UN proper shipping name:</u> | AEROSOLS |
| <u>14.3. Transport hazard class(es):</u> | 2 |
| <u>14.4. Packing group:</u> | - |
| Hazard label: | 2.1 |



| | |
|--------------------------|-----------------|
| Classification code: | 5F |
| Special Provisions: | 190 327 344 625 |
| Limited quantity: | 1 L |
| Transport category: | 2 |
| Tunnel restriction code: | D |

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Other applicable information (land transport)

E0

Marine transport (IMDG)

14.1. UN number or ID 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: no
 Special Provisions: 63, 190, 277, 327, 344, 959
 Limited quantity: 1000 mL
 Excepted quantity: E0
 EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN1950
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
 IATA-packing instructions - Passenger: 203
 IATA-max. quantity - Passenger: 75 kg
 IATA-packing instructions - Cargo: 203
 IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)

E0

Passenger-LQ: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Gases under pressure

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

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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 28, Entry 40, Entry 75

2004/42/EC (VOC): 72,0 % (595 g/l)

Additional information

Observe in addition any national regulations!

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,7,9.

Abbreviations and acronyms

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

| Classification | Classification procedure |
|-------------------------|-------------------------------|
| Aerosol 1; H222-H229 | On basis of test data |
| Asp. Tox. 1; H304 | Calculation method |
| Skin Irrit. 2; H315 | Bridging principle "Aerosols" |
| Eye Irrit. 2; H319 | Bridging principle "Aerosols" |
| Skin Sens. 1; H317 | Bridging principle "Aerosols" |
| STOT SE 3; H336 | Bridging principle "Aerosols" |
| STOT RE 2; H373 | Bridging principle "Aerosols" |
| Aquatic Chronic 3; H412 | Calculation method |

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Relevant H and EUH statements (number and full text)

| | |
|--------|--|
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H229 | Pressurised container: May burst if heated. |
| H280 | Contains gas under pressure; may explode if heated. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H360F | May damage fertility. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH211 | Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. |

Further 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.

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