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

### 1.1. Product identifier

Disinfectant Spray Colorless

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

**Use of the substance/mixture**

Disinfectant

Product-type 2: Disinfectants and algaecides not intended for direct application to humans or animals

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

| | | |
|---|---|---|
| Company name: | Friedrich Huber aeronova GmbH & Co. | |
| Street: | Sobrigauer Weg 4 | |
| Place: | D-01257 Dresden | |
| Telephone: | 0049-(0)351-27046-0 | Telefax: 0049-(0)351-2704616 |
| E-mail: | info@aeronova.de | |
| Contact person: | Labor | Telephone: 0049-(0)351-2704615 |
| E-mail: | labor@aeronova.de | |
| Internet: | www.aeronova.de | |

### 1.4. Emergency telephone number:

0049-(0)351-27046-0

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) No 1272/2008**

Aerosol 1; H222-H229
Eye Irrit. 2; H319
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

**Regulation (EC) No 1272/2008**

**Hazard components for labelling**

Propan-2-ol

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

| | |
|---|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

**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. |

| | |
|---|---|
| P264 | Wash hands thoroughly after handling. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P405 | Store locked up. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| P501 | Dispose of contents/container to in accordance with local/regional/national/international regulation. |

**Special labelling**

Active substances: 98g / 100g 2-Propanol, 0.1g / 100g Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14))

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

**Relevant ingredients**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 67-63-0 | Propan-2-ol | | | 55 - < 60 % |
| | 200-661-7 | 603-117-00-0 | 01-2119457558-25 | |
| | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 | | | |
| 106-97-8 | Butane | | | 25 - < 30 % |
| | 203-448-7 | 601-004-00-0 | 01-2119474691-32 | |
| | Flam. Gas 1, Press. Gas (Liq.); H220 H280 | | | |
| 74-98-6 | Propane | | | 12.5 - < 15 % |
| | 200-827-9 | 601-003-00-5 | 01-2119486944-21 | |
| | Flam. Gas 1, Press. Gas (Liq.); H220 H280 | | | |
| 102-71-6 | 2,2',2''-nitrilotriethanol | | | 0.1 - < 0.5 % |
| | 203-049-8 | | 01-2119486482-31 | |
| | | | | |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | | | < 0.1 % |
| | 287-089-1 | | 01-2120754638-42 | |
| | Acute Tox. 4, Skin Corr. 1A, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H318 H400 H410 | | | |

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 | | |
| 67-63-0 | 200-661-7 | Propan-2-ol | 55 - < 60 % |
| | dermal: LD50 = 13100 mg/kg; oral: LD50 = 5840 mg/kg | | |
| 102-71-6 | 203-049-8 | 2,2',2''-nitrilotriethanol | 0.1 - < 0.5 % |
| | dermal: LD50 = > 2000 mg/kg; oral: LD50 = 6400 mg/kg | | |
| 85409-22-9 | 287-089-1 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | < 0.1 % |
| | dermal: LD50 = 3412,5 mg/kg; oral: LD50 = 795 mg/kg | | |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information**

When in doubt or if symptoms are observed, get medical advice.
If medical advice is needed, have product container or label at hand.

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Headache, Dizziness, Dizziness
Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**

Water spray jet, Carbon dioxide (CO2), Foam, ABC-powder.

**Unsuitable extinguishing media**

Full water jet

### 5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurized container: May burst if heated. Vapours can form explosive mixtures with air.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

**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. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Do not breathe aerosol.

**For non-emergency personnel**

Remove persons to safety. Ventilate affected area.

**For emergency responders**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

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

**For cleaning up**

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.

### 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**

Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

**Advice on protection against fire and explosion**

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

**Advice 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, smoke, sniff.

**Further information on handling**

Heating causes rise in pressure with risk of bursting.

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

**Requirements for storage rooms and vessels**

Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Hints on joint storage**

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

### 7.3. Specific end use(s)

Disinfectants

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**DNEL/DMEL values**

| CAS No | Name of agent | | | |
|---|---|---|---|---|
| DNEL type | | Exposure route | Effect | Value |
| 67-63-0 | Propan-2-ol | | | |
| Consumer DNEL, long-term | | dermal | systemic | 319 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 89 mg/m³ |
| Consumer DNEL, long-term | | oral | systemic | 26 mg/kg bw/day |
| Worker DNEL, long-term | | dermal | systemic | 888 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 500 mg/m³ |
| 102-71-6 | 2,2',2''-nitrilotriethanol | | | |
| Worker DNEL, long-term | | inhalation | local | 1 mg/m³ |
| Consumer DNEL, long-term | | inhalation | local | 0,4 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 7,5 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 5 mg/m³ |
| Consumer DNEL, long-term | | dermal | systemic | 2,66 mg/kg bw/day |
| Consumer DNEL, long-term | | inhalation | systemic | 1,25 mg/m³ |
| Consumer DNEL, long-term | | oral | systemic | 3,3 mg/kg bw/day |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | | | |
| Consumer DNEL, long-term | | inhalation | systemic | 1,64 mg/m³ |
| Consumer DNEL, long-term | | dermal | systemic | 3,4 mg/kg bw/day |
| Consumer DNEL, long-term | | oral | systemic | 3,4 mg/kg bw/day |
| Worker DNEL, long-term | | inhalation | systemic | 3,96 mg/m³ |
| Worker DNEL, long-term | | dermal | systemic | 5,7 mg/kg bw/day |

**PNEC values**

| CAS No | Name of agent | |
|---|---|---|
| Environmental compartment | | Value |
| 67-63-0 | Propan-2-ol | |
| Freshwater | | 140,9 mg/l |
| Freshwater (intermittent releases) | | 140,9 mg/l |
| Marine water | | 140,9 mg/l |
| Freshwater sediment | | 552 mg/kg |
| Marine sediment | | 552 mg/kg |
| Secondary poisoning | | 160 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 2251 mg/l |
| Soil | | 28 mg/kg |
| 102-71-6 | 2,2',2''-nitrilotriethanol | |
| Freshwater | | 0,32 mg/l |
| Freshwater (intermittent releases) | | 5,12 mg/l |
| Marine water | | 0,032 mg/l |
| Freshwater sediment | | 1,7 mg/kg |
| Marine sediment | | 0,17 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 10 mg/l |
| Soil | | 0,151 mg/kg |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | |
| Freshwater | | 0,001 mg/l |
| Freshwater (intermittent releases) | | 0 mg/l |
| Marine water | | 0,001 mg/l |
| Freshwater sediment | | 12,27 mg/kg |
| Marine sediment | | 13,09 mg/kg |
| Micro-organisms in sewage treatment plants (STP) | | 0,4 mg/l |
| Soil | | 7 mg/kg |

**Additional advice on limit values**

To date, no national critical limit values exist.

## 8.2. Exposure controls

**Appropriate engineering controls**

Do not breathe gas/fumes/vapour/spray. Use only outdoors or in a well-ventilated area. Do not breathe aerosol.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear eye protection/face protection. Suitable eye protection: goggles EN ISO 16321

**Hand protection**

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.
Suitable material: Butyl caoutchouc (butyl rubber) (EN ISO 374)
Thickness of the glove material: 0,5 mm
Breakthrough time: 480min
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 anti-static footwear and clothing

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Suitable respiratory protection apparatus: Combination filtering device A-P2

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| Physical state: | Liquid |
| Colour: | colourless |
| Odour: | like: Alcohol |

| | | Test method |
|---|---|---|
| Melting point/freezing point: | not determined | |
| Boiling point or initial boiling point and boiling range: | < -20 °C | |
| Flammability: | not determined | |
| Lower explosion limits: | 1,5 vol. % | |
| Upper explosion limits: | 13 vol. % | |
| Flash point: | < -20 °C | |
| Auto-ignition temperature: | 365 °C | |
| Decomposition temperature: | not determined | |
| pH-Value: | not determined | |
| Water solubility: (at 20 °C) | partially miscible | |
| Solubility in other solvents | | |
| not determined | | |
| Partition coefficient n-octanol/water: | not determined | |
| Vapour pressure: | not determined | |
| Density (at 20 °C): | 0,675 g/cm³ | calculated. |
| Relative vapour density: | not determined | |
| Particle characteristics: | not applicable | |

### 9.2. Other information

**Information with regard to physical hazard classes**

Explosive properties

Heating may cause an explosion.

Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

| | |
|---|---|
| Evaporation rate: | not determined |
| Solid content: | not determined |
| Viscosity / dynamic: | not determined |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Extremely flammable aerosol. Pressurized container: May burst if heated. No information available.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

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. Vapours can form explosive mixtures with air.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide, carbon black, Pyrolysis products, toxic

## SECTION 11: Toxicological information

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

**Acute toxicity**

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

**ATEmix calculated**

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

| CAS No | Chemical name | | | | | |
|---|---|---|---|---|---|---|
| | Exposure route | Dose | | Species | Source | Method |
| 67-63-0 | Propan-2-ol | | | | | |
| | oral | LD50 mg/kg | 5840 | Rat | | OECD 401 |
| | dermal | LD50 mg/kg | 13100 | Rabbit | | OECD 402 |
| 102-71-6 | 2,2',2''-nitrilotriethanol | | | | | |
| | oral | LD50 mg/kg | 6400 | Rat | Study report (1966) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | > 2000 | Rabbit | Other company data (1989) | OECD Guideline 402 |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | | | | | |
| | oral | LD50 mg/kg | 795 | Rat | Study report (1986) | OECD Guideline 401 |
| | dermal | LD50 mg/kg | 3412,5 | Rabbit | Study report (1977) | EPA OPPTS 870.1200 |

**Irritation and corrosivity**

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

**Sensitising effects**

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

**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.

**STOT-single exposure**

May cause drowsiness or dizziness. (Propan-2-ol)

**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.

### 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**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

## SECTION 12: Ecological information

### 12.1. Toxicity

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

| CAS No | Chemical name | | | | | | |
|---|---|---|---|---|---|---|---|
| | Aquatic toxicity | Dose | | [h] \| [d] | Species | Source | Method |
| 67-63-0 | Propan-2-ol | | | | | | |
| | Acute fish toxicity | LC50 | 9640 mg/l | 96 h | | publication (1983) | OECD Guideline 203 |
| | Acute crustacea toxicity | EC50 | 0,9 mg/l | 48 h | Daphnia magna (Big water flea) | | OECD 202 |
| | Fish toxicity | NOEC | > 1000 mg/l | 28 d | Danio rerio (previous name: Brachydanio rerio) | McGrath J, Fanelli CJ, Di Toro M, Pakert | other: REACH Guidance on QSARs R.6 |
| | Crustacea toxicity | NOEC | > 1000 mg/l | 21 d | | McGrath J, Fanelli CJ, Di Toro M, Pakert | other: REACH Guidance on QSARs R.6 |
| | Acute bacteria toxicity | EC50 | >100 mg/l ( ) | | | | |
| 74-98-6 | Propane | | | | | | |
| | Acute fish toxicity | LC50 | 53,141 mg/l | 96 h | Fish, no other information | review article or handbook (2008) | The Ecosar class program has been develo |
| | Acute algae toxicity | ErC50 | 20,586 mg/l | 96 h | Green algea (no further information) | other: (2008) | The Ecosar class program has been develo |
| | Acute crustacea toxicity | EC50 | 29,662 mg/l | 48 h | Daphnid no other information. | review article or handbook (2008) | The Ecosar class program has been develo |
| | Fish toxicity | NOEC | 3,599 mg/l | 30 d | Fish, no other information | other: (2008) | The Ecosar class program has been develo |
| | Crustacea toxicity | NOEC | 1,95 mg/l | 30 d | Daphnid no other information. | review article or handbook (2008) | The Ecosar class program has been develo |
| 102-71-6 | 2,2',2''-nitrilotriethanol | | | | | | |
| | Acute fish toxicity | LC50 | 11800 mg/l | 96 h | | Publication (1990) | other: APHA method |
| | Acute algae toxicity | ErC50 | 512 mg/l | 72 h | Desmodesmus subspicatus | Preliminary Report 82-102 05 308. Bayeri | other: German Industrial Standard DIN 38 |
| | Acute crustacea toxicity | EC50 | 609,88 mg/l | 48 h | Ceriodaphnia dubia | Ecotoxicol Environ Saf 44(2), 196-206. ( | other: New South Wales Gouvernment Envir |
| | Crustacea toxicity | NOEC | 16 mg/l | 21 d | | Water Research 23(4): 501-510. (1989) | other: Provisional proposal by German Fe |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | | | | | | |
| | Acute fish toxicity | LC50 | 0,93 mg/l | 96 h | Danio rerio (zebrafish) | REACh Registration Dossier | |
| | Acute algae toxicity | ErC50 | 0,01 mg/l | 96 h | Pseudokirchneriella subcapitata | Study report (1996) | OECD Guideline 201 |
| | Acute crustacea toxicity | EC50 | 0,016 mg/l | 48 h | | REACh Registration Dossier | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Fish toxicity | NOEC mg/l | 0,0322 | 28 d | | REACh Registration Dossier | |
| | Crustacea toxicity | NOEC mg/l | 0,00415 | 21 d | | REACh Registration Dossier | |
| | Acute bacteria toxicity | EC50 mg/l ( ) | 7,75 | 3 h | | REACh Registration Dossier | |

**12.2. Persistence and degradability**

No information available.

| CAS No | Chemical name | | | |
|---|---|---|---|---|
| | Method | Value | d | Source |
| | Evaluation | | | |
| 67-63-0 | Propan-2-ol | | | |
| | Biodegradation | 53% | 5 | |
| | Readily biodegradable (according to OECD criteria). | | | |
| 102-71-6 | 2,2',2''-nitrilotriethanol | | | |
| | Biodegradation | 100% | 5 | |
| | Readily biodegradable (according to OECD criteria). | | | |

**12.3. Bioaccumulative potential**

No information available.

**Partition coefficient n-octanol/water**

| CAS No | Chemical name | Log Pow |
|---|---|---|
| 67-63-0 | Propan-2-ol | 0,05 |
| 106-97-8 | Butane | 2,89 |
| 74-98-6 | Propane | 2,36 |
| 102-71-6 | 2,2',2''-nitrilotriethanol | -2,3 |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | -0,21 |

**BCF**

| CAS No | Chemical name | BCF | Species | Source |
|---|---|---|---|---|
| 67-63-0 | Propan-2-ol | 0,994 | | Meylan,WM, Howard,PH |
| 102-71-6 | 2,2',2''-nitrilotriethanol | < 0,4 | Cyprinus carpio | http://www.safe.nite |
| 85409-22-9 | Alkyl (C12-C14) dimethylbenzylammonium chloride (ADBAC (C12-C14)) | 79 | Lepomis macrochirus | Study report (1989) |

**12.4. Mobility in soil**

No information available.

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

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.

**Further information**

Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal recommendations**

Do not allow to enter into surface water or drains. 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

**Contaminated packaging**

Completely emptied packages can be recycled.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number or ID 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 |
| Transport category: | 2 |
| Tunnel restriction code: | D |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number or ID 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 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 |

| | |
|---|---|
| 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 or ID 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 | |
| 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: Flammable gases. No special measures are necessary.

**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 28, Entry 29, Entry 40, Entry 75

| | |
|---|---|
| Directive 2010/75/EU on industrial emissions: | 99,82 % (673,785 g/l) |
| Directive 2004/42/EC on VOC in paints and varnishes: | 99,879 % (674,182 g/l) |
| 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): | 1 - slightly hazardous to water |
| Biocide registry number: | N-49417 |

**15.2. Chemical safety assessment**

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

## SECTION 16: Other information

**Changes**

This data sheet contains changes from the previous version in section(s): 2,4,5,6,7,8,9,10,11,12,14,15,16.

**Abbreviations and acronyms**

Flam. Gas 1: Flammable gases, hazard category 1
Aerosol 1: Aerosols, hazard category 1
Press. Gas (Liq.): Gases under pressure: Liquefied gas
Flam. Liq. 2: Flammable liquids, hazard category 2
Acute Tox. 4: Acute toxicity, hazard category 4
Skin Corr. 1A: Skin corrosion, sub-category 1A
Eye Dam. 1: Serious eye damage, hazard category 1
Eye Irrit. 2: Eye irritation, hazard category 2
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road )
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
EC/EEC: European Community/European Economic Community
EU: European Union
M-factor: Multiplying factor
IATA: International Air Transport Association
DGR: Dangerous Goods Regulations
ICAO: International Civil Aviation Organization
TI: Technical Instructions
VOC: volatile organic compound
For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

| Classification | Classification procedure |
|---|---|
| Aerosol 1; H222-H229 | On basis of test data |
| Eye Irrit. 2; H319 | Bridging principle "Aerosols" |
| STOT SE 3; H336 | Bridging principle "Aerosols" |

**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. |
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**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.

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