



Version number: GHS 1.0 Date of compilation: 2025-01-21

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

1.1 Product identifier

Trade name TECWERK ZINK-ALU-SPRAY - 400 ml

Unique formula identifier (UFI) K050-H0T2-G00W-6KJ8

Article number 2000 354 070

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

Relevant identified uses General use

Paint, coating and lacquer

1.3 Details of the supplier of the safety data sheet

NORDWEST Handel AG Robert-Schuman-Str. 17 44263 Dortmund Germany

Telephone: +49 231 2222-3001 Telefax: +49 231 2222-3099 Website: www.nordwest.com

e-mail (competent person)

sdb@nordwest.com

1.4 Emergency telephone number

| Poison centre | | | | | | | |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------|--|--|--|--|
| Country | Name | Postal code/city | Telephone | | | | |
| Austria | Vergiftungsinformationszentrale (VIZ) | | +43 (0)1 406 43 43 | | | | |
| Germany | Gemeinsamen Giftinformationszentrum (GGIZ) der Laender Mecklenburg-Vor- pommern, Sachsen, Sachsen-Anhalt und Thueringen c/o HELIOS Klinikum Erfurt | 99089 Erfurt | +49-361-730730 | | | | |
| Luxembourg | Poison Centre Luxemburg | | (+352) 8002 5500 | | | | |
| Switzerland | Tox Info Suisse | | +145, 24h oder +41 44 251 51 51 | | | | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class | Category | Hazard class and cat- egory | Hazard state- ment |
|---------|---------------------------------------------------------------------------------|----------|--------------------------------|-----------------------|
| 2.3 | aerosols | 1 | Aerosol 1 | H222,H229 |
| 3.3 | serious eye damage/eye irritation | 2 | Eye Irrit. 2 | H319 |
| 3.8D | specific target organ toxicity - single exposure (narcotic effects, drowsiness) | 3 | STOT SE 3 | H336 |
| 3.10 | aspiration hazard | 1 | Asp. Tox. 1 | H304 |
| 4.1C | hazardous to the aquatic environment - chronic hazard | 3 | Aquatic Chronic 3 | H412 |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

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

<u>Signal word</u> danger

<u>Pictograms</u>

GHS02, GHS07



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<u>Hazard statements</u> H222 H229

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

Causes serious eye irritation. H319 H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

<u>Precautionary statements</u> P101 If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

P102 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source.

P211 P251 P271 Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331

Do NOT induce vomiting.

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

Dispose of contents/container in accordance with local/regional/national/international regulations.

<u>Supplemental hazard information</u> EUH066 Repeated exposure may cause skin dryness or cracking.

Child-resistant fastening Tactile warning of danger yes

Hazardous ingredients for labelling ethyl acetate, acetone, xylene, Hydrocarbons, C9, aromatics

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of \geq 0,1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 **Mixtures**

Description of the mixture

| Identifier | Name of substance | Wt% | Classification acc. to GHS | Pictograms | Notes | Specific Conc. Limits |
|---------------------------------------------------|-------------------|-----------|----------------------------------------------------------------|------------|---------------------|-----------------------|
| CAS No 106-97-8 | butane | 25 - < 50 | Flam. Gas 1B / H221 Press. Gas C / H280 | | C GHS-HC U(b) | |
| EC No 203-448-7 | | | | | O(b) | |
| Index No 601-004-00-0 | | | | | | |
| REACH Reg. No 01- 2119474691- 32-xxxx | | | | | | |
| CAS No 74-98-6 | propane | 10-<25 | Flam. Gas 1A / H220 Press. Gas L / H280 | | GHS-HC U(c) | |
| EC No 200-827-9 | | | | | | |
| Index No 601-003-00-5 | | | | | | |
| REACH Reg. No 01- 2119486944- 21 | | | | | | |
| CAS No 141-78-6 | ethyl acetate | 10-<25 | Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336 | (!) | GHS-HC IOELV | |
| EC No 205-500-4 | | | 3101 3E 37 H330 | | | |
| Index No 607-022-00-5 | | | | | | |

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| Identifier | Name of substance | Wt% | Classification acc. to GHS | Pictograms | Notes | Specific Conc. Limits |
|---------------------------------------------------|--------------------------------|--------|-------------------------------------------------------------------|------------|-------------|-----------------------|
| REACH Reg. No 01- 2119475103- 46-xxxx | | | | | | |
| CAS No 67-64-1 | acetone | 10-<25 | Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 | <u>(1)</u> | IOELV | |
| EC No 200-662-2 | | | STOT SE 3 / H336 | | | |
| Index No 606-001-00-8 | | | | | | |
| REACH Reg. No 01- 2119471330- 49-xxxx | | | | | | |
| CAS No 1330-20-7 | xylene | 1-<5 | Flam. Liq. 3 / H226 Acute Tox. 4 / H312 | <u>(1)</u> | C GHS-HC | |
| EC No 215-535-7 | | | Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Asp. Tox. 1 / H304 | | IOELV | |
| Index No 601-022-00-9 | | | | | | |
| REACH Reg. No 01- 2119488216- 32-xxxx | | | | | | |
| CAS No 64742-95-6 | Hydrocarbons, C9, aromatics | 1-<5 | Flam. Liq. 3 / H226 STOT SE 3 / H335 | <u>(1)</u> | P(b) | |
| EC No 265-199-0 | | | STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Acute 1 / | | | |
| Index No 649-356-00-4 | | | H400 Aquatic Chronic 2 / H411 | | | |
| REACH Reg. No 01- 2119455851- 35-xxxx | | | | | | |
| CAS No 7429-90-5 | Aluminium powder (Stabil- | 1-<5 | Flam. Sol. 1 / H228 | <u>(N)</u> | Т | |
| EC No 231-072-3 | ized) | | | | | |
| Index No 013-001-00-6 | | | | | | |
| REACH Reg. No 01- 2119529243- 45-xxxx | | | | | | |
| CAS No 7440-66-6 | zinc | 1-<5 | Aquatic Acute 1 / H400 | \$ | GHS-HC | |
| EC No 231-175-3 | | | Aquatic Chronic 1 / H410 | | | |
| Index No 030-001-00-1 | | | | | | |
| REACH Reg. No 01- 2119467174- 37-xxxx | | | | | | |

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| Identifier | Name of substance | Wt% | Classification acc. to GHS | Pictograms | Notes | Specific Conc. Limits |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------|-------------------------------|--------------|-------|-----------------------|
| EC No 918-481-9 REACH Reg. No 01- 2119457273- 39-xxxx | Kohlenwasser- stoffe, C10-C13, n- Alkane, Isoalkane, Cycloalkane, <2% Aromaten | 1-<5 | Asp. Tox. 1 / H304 | & | | |
| CAS No 64742-48-9 EC No 265-150-3 Index No 649-327-00-6 REACH Reg. No 01- 2119457273- 39 | Naphtha (petro- leum), hydro- treated heavy | 1-<5 | Asp. Tox. 1 / H304 | & | | |

Notes

| C: | Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In |
|----|-------------------------------------------------------------------------------------------------------------------|
| | this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers |

GHS- Harmonised classification (the classification of the substance corresponds to the entry in the list according to

HC: 1272/2008/EC, Annex VI)

IOELV: Substance with a community indicative occupational exposure limit value

P(b): The classification as a carcinogen or mutagen is not required. The substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310-P331 shall apply

T: This substance may be marketed in a form which does not have the physical hazards as indicated by The classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

U(b): The allocation to the group 'compressed gas' is based on the physical state in which the gas is packaged U(c): The allocation to the group 'liquefied gas' is based on the physical state in which the gas is packaged

| Hazardous ingredients, Sរុ | Hazardous ingredients, Specific Conc. Limits, M-factors, ATE | | | | | | | | |
|----------------------------|----------------------------------------------------------------------|---|----------------------------------------------------------------------------|------------------------------|--|--|--|--|--|
| Name of substance | Name of substance Specific Conc. Limits M-Factors ATE Exposure route | | | | | | | | |
| xylene | - | - | 1,100 ^{mg} / _{kg} 11 ^{mg} / _l /4h | dermal inhalation: vapour | | | | | |

Remarks

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Narcotic effects.

4.3 Indication of any immediate medical attention and special treatment needed

none

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, D-Powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Flammability hazards

Do not spray on an open flame or other ignition source. Protect from sunlight.

Packaging compatibilities

Keep only in original container.

Storage class (LGK) TRGS 510

LGK 2 B (aerosol dispensers or lighters)

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| Occup | Occupational exposure limit values (Workplace Exposure Limits) | | | | | | | | | | |
|--------------|----------------------------------------------------------------|---------------|-----------------|--------------|--------------------|---------------|---------------------|---------------------|------------------------------|---------------|-------------|
| Coun- try | Name of agent | CAS No | Iden- tifier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling- C [ppm] | Ceiling- C [mg/m³] | Nota- tion | Source |
| DE | butane | 106-97-8 | AGW | 1,000 | 2,400 | 4,000 | 9,600 | | | | TRGS 900 |
| DE | xylene, mixture of isomers | 1330-20- 7 | MAK | 50 | 220 | 100 | 440 | | | Н | DFG |

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| Occup | ational exposure l | imit values | (Workpl | ace Expo | sure Limit | s) | | | | | |
|--------------|---------------------------------------------------|----------------|-----------------|--------------|--------------------|---------------|---------------------|---------------------|------------------------------|---------------|---------------------|
| Coun- try | Name of agent | CAS No | Iden- tifier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling- C [ppm] | Ceiling- C [mg/m³] | Nota- tion | Source |
| DE | xylene, mixture of isomers | 1330-20- 7 | AGW | 50 | 220 | 100 | 440 | | | Н | TRGS 900 |
| DE | ethyl acetate | 141-78-6 | MAK | 200 | 750 | 400 | 1,500 | | | | DFG |
| DE | ethyl acetate | 141-78-6 | AGW | 200 | 730 | 400 | 1,460 | | | Y | TRGS 900 |
| DE | Naphtha (petro- leum), hydro- treated heavy | 64742- 48-9 | MAK | 50 | 300 | 100 | 600 | | | | DFG |
| DE | acetone | 67-64-1 | AGW | 500 | 1,200 | 1,000 | 2,400 | | | Y | TRGS 900 |
| DE | propane | 74-98-6 | AGW | 1,000 | 1,800 | 4,000 | 7,200 | | | | TRGS 900 |
| DE | aluminium | 7429-90- 5 | MAK | | 0.5 | | 4 | | | i | DFG |
| DE | aluminium | 7429-90- 5 | MAK | | 0.05 | | 0.4 | | | r | DFG |
| DE | zinc | 7440-66- 6 | MAK | | 2 | | 4 | | | i | DFG |
| DE | zinc | 7440-66- 6 | MAK | | 0.1 | | 0.4 | | | r | DFG |
| EU | xylene | 1330-20- 7 | IOEL V | 50 | 221 | 100 | 442 | | | pure, H | 2000/ 39/EC |
| EU | ethyl acetate | 141-78-6 | IOEL V | 200 | 734 | 400 | 1,468 | | | | 2017/ 164/E U |
| EU | acetone | 67-64-1 | IOEL V | 500 | 1,210 | | | | | | 2000/ 39/EC |

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

absorbed through the skin Н

inhalable fraction pure substance pure respirable fraction

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) STEL

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified) TWA

a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the biological limit value (BGW) are adhered to

| Biologica | Biological limit values | | | | | | | | |
|-----------|---------------------------------|----------------------|----------|------------|------------|----------|--|--|--|
| Country | Name of agent | Parameter | Notation | Identifier | Value | Source | | | |
| DE | xylene, mixture of iso- mers | methylhippuric acids | | BLV | 2,000 mg/l | TRGS 903 | | | |
| DE | xylene, mixture of iso- mers | methylhippuric acids | crea | BAT | 1,800 mg/g | DFG | | | |
| DE | acetone | acetone | | BAT | 50 mg/l | DFG | | | |
| DE | acetone | acetone | | BAT (BAR) | 2.5 mg/l | DFG | | | |
| DE | acetone | acetone | | BLV | 50 mg/l | TRGS 903 | | | |
| DE | aluminium | aluminium | crea | BAT | 50 μg/g | DFG | | | |
| DE | aluminium | aluminium | crea | BAT (BAR) | 15 μg/g | DFG | | | |

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| Biologica | Biological limit values | | | | | | | | |
|-----------|------------------------------------------------------------------|-----------|------|-----|---------|----------|--|--|--|
| Country | Country Name of agent Parameter Notation Identifier Value Source | | | | | | | | |
| DE | aluminium | aluminium | crea | BLV | 50 μg/l | TRGS 903 | | | |

Notation

creatinine crea

| Relevant DNELs of | components | | | | | |
|-----------------------------|------------|----------|-----------------------|------------------------------------|-------------------|-------------------------------|
| Name of substance | CAS No | Endpoint | Threshold level | Protection goal, route of exposure | Used in | Exposure time |
| ethyl acetate | 141-78-6 | DNEL | 1,468 mg/m³ | human, inhalat- ory | worker (industry) | acute - local ef- fects |
| ethyl acetate | 141-78-6 | DNEL | 1,468 mg/m³ | human, inhalat- ory | worker (industry) | acute - systemic effects |
| ethyl acetate | 141-78-6 | DNEL | 734 mg/m³ | human, inhalat- ory | worker (industry) | chronic - local ef- fects |
| ethyl acetate | 141-78-6 | DNEL | 63 mg/kg | human, dermal | worker (industry) | chronic - systemic effects |
| ethyl acetate | 141-78-6 | DNEL | 734 mg/m³ | human, inhalat- ory | worker (industry) | chronic - systemic effects |
| acetone | 67-64-1 | DNEL | 1,210 mg/m³ | human, inhalat- ory | worker (industry) | chronic - systemic effects |
| acetone | 67-64-1 | DNEL | 2,420 mg/m³ | human, inhalat- ory | worker (industry) | acute - local ef- fects |
| acetone | 67-64-1 | DNEL | 186 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| xylene | 1330-20-7 | DNEL | 221 mg/m³ | human, inhalat- ory | worker (industry) | chronic - systemic effects |
| xylene | 1330-20-7 | DNEL | 442 mg/m³ | human, inhalat- ory | worker (industry) | acute - systemic effects |
| xylene | 1330-20-7 | DNEL | 221 mg/m ³ | human, inhalat- ory | worker (industry) | chronic - local ef- fects |
| xylene | 1330-20-7 | DNEL | 442 mg/m³ | human, inhalat- ory | worker (industry) | acute - local ef- fects |
| xylene | 1330-20-7 | DNEL | 212 mg/kg bw/day | human, dermal | worker (industry) | chronic - systemic effects |
| Hydrocarbons, C9, aromatics | 64742-95-6 | DNEL | 25 mg/kg | human, dermal | worker (industry) | chronic - systemic effects |
| Hydrocarbons, C9, aromatics | 64742-95-6 | DNEL | 150 mg/m ³ | human, inhalat- ory | worker (industry) | chronic - systemic effects |
| zinc | 7440-66-6 | DNEL | 83 mg/kg | human, dermal | worker (industry) | chronic - systemic effects |
| zinc | 7440-66-6 | DNEL | 5 mg/m³ | human, inhalat- ory | worker (industry) | chronic - systemic effects |

| Relevant PNECs of c | Relevant PNECs of components | | | | | |
|---------------------|------------------------------|----------|------------------------------------|------------------------|------------------------------|------------------------------|
| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
| ethyl acetate | 141-78-6 | PNEC | 0.24 ^{mg} / _l | aquatic organ- isms | freshwater | short-term (single instance) |
| ethyl acetate | 141-78-6 | PNEC | 0.024 ^{mg} / _l | aquatic organ- isms | marine water | short-term (single instance) |
| ethyl acetate | 141-78-6 | PNEC | 650 ^{mg} / _l | aquatic organ- isms | sewage treatment plant (STP) | short-term (single instance) |
| ethyl acetate | 141-78-6 | PNEC | 1.15 ^{mg} / _{kg} | aquatic organ- | freshwater sedi- | short-term (single |

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| Relevant PNECs of | components | | | | | |
|-------------------|------------|----------|------------------------------------|----------------------------|---------------------------------|------------------------------|
| Name of substance | CAS No | Endpoint | Threshold level | Organism | Environmental compartment | Exposure time |
| | | | | isms | ment | instance) |
| ethyl acetate | 141-78-6 | PNEC | 0.115 ^{mg} / kg | aquatic organ- isms | marine sediment | short-term (single instance) |
| ethyl acetate | 141-78-6 | PNEC | 0.148 ^{mg} / kg | terrestrial organ- isms | soil | short-term (single instance) |
| ethyl acetate | 141-78-6 | PNEC | 1.65 ^{mg} / _l | aquatic organ- isms | water | intermittent re- lease |
| acetone | 67-64-1 | PNEC | 21 ^{mg} / _l | aquatic organ- isms | water | intermittent re- lease |
| acetone | 67-64-1 | PNEC | 10.6 ^{mg} / _l | aquatic organ- isms | freshwater | short-term (single instance) |
| acetone | 67-64-1 | PNEC | 1.06 ^{mg} / _l | aquatic organ- isms | marine water | short-term (single instance) |
| acetone | 67-64-1 | PNEC | 100 ^{mg} / _I | aquatic organ- isms | sewage treatment plant (STP) | short-term (single instance) |
| acetone | 67-64-1 | PNEC | 30.4 ^{mg} / _{kg} | aquatic organ- isms | freshwater sedi- ment | short-term (single instance) |
| acetone | 67-64-1 | PNEC | 3.04 ^{mg} / _{kg} | aquatic organ- isms | marine sediment | short-term (single instance) |
| acetone | 67-64-1 | PNEC | 29.5 ^{mg} / _{kg} | terrestrial organ- isms | soil | short-term (single instance) |
| xylene | 1330-20-7 | PNEC | 0.327 ^{mg} / _l | aquatic organ- isms | water | intermittent re- lease |
| xylene | 1330-20-7 | PNEC | 0.327 ^{mg} / _l | aquatic organ- isms | freshwater | short-term (single instance) |
| xylene | 1330-20-7 | PNEC | 0.327 ^{mg} / _l | aquatic organ- isms | marine water | short-term (single instance) |
| xylene | 1330-20-7 | PNEC | 6.58 ^{mg} / _l | aquatic organ- isms | sewage treatment plant (STP) | short-term (single instance) |
| xylene | 1330-20-7 | PNEC | 12.46 ^{mg} / kg | aquatic organ- isms | freshwater sedi- ment | short-term (single instance) |
| xylene | 1330-20-7 | PNEC | 12.46 ^{mg} / kg | aquatic organ- isms | marine sediment | short-term (single instance) |
| xylene | 1330-20-7 | PNEC | 2.31 ^{mg} / _{kg} | terrestrial organ- isms | soil | short-term (single instance) |
| zinc | 7440-66-6 | PNEC | 20.6 ^{µg} / _I | aquatic organ- isms | freshwater | short-term (single instance) |
| zinc | 7440-66-6 | PNEC | 6.1 ^{µg} / _I | aquatic organ- isms | marine water | short-term (single instance) |
| zinc | 7440-66-6 | PNEC | 100 ^{µg} / _I | aquatic organ- isms | sewage treatment plant (STP) | short-term (single instance) |
| zinc | 7440-66-6 | PNEC | 117.8 ^{mg} / kg | aquatic organ- isms | freshwater sedi- ment | short-term (single instance) |
| zinc | 7440-66-6 | PNEC | 56.5 ^{mg} / _{kg} | aquatic organ- isms | marine sediment | short-term (single instance) |
| zinc | 7440-66-6 | PNEC | 35.6 ^{mg} / _{kg} | terrestrial organ- isms | soil | short-term (single instance) |

8.2 **Exposure controls**

Appropriate engineering controls

General ventilation.

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Individual protection measures (personal protective equipment)





Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Eye/face protection

Use protective eyewear to guard against splash of liquids.

Skin protection

Hand protection

Wear protective gloves. (Splash protection)

Type of material

NR: natural rubber, latex, FKM: fluoro-elastomer

Breakthrough times of the glove material

>480 minutes (permeation: level 6)

Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Full face mask/half mask/quarter mask (EN 136/140). Type: AX-P2 (gas filters and combined filters against low-boiling point organic compounds and particles, colour code: Brown/White)

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state aerosol (spray aerosol)

Colour silver grey Odour characteristic Melting point/freezing point not determined Boiling point or initial boiling point and boiling range

-161.5 °C at 1,013 hPa

Flammability flammable aerosol in accordance with GHS criteria

Lower and upper explosion limit 0.6 vol% - 15 vol% -88.6 °C at 1.013 hPa Flash point

Auto-ignition temperature >200 °C (auto-ignition temperature (liquids and gases))

Decomposition temperature not relevant pH (value) not determined Kinematic viscosity not relevant Solubility(ies) not determined

Partition coefficient

Partition coefficient n-octanol/water this information is not available

(log value)

Vapour pressure 4,200 hPa at 20 °C

Density and/or relative density

Density 0.712 ^g/_{ml} (calculated value)

Relative vapour density information on this property is not available

9.2 Other information

Information with regard to physical there is no additional information

hazard classes

Other safety characteristics

Temperature class (EU, acc. to ATEX) T3 (maximum permissible surface temperature on the equipment: 200°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

10.2 **Chemical stability**

See below "Conditions to avoid".

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73 h

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10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Do not spray on an open flame or other ignition source. Keep away from heat.

Hints to prevent fire or explosion

Protect from sunlight.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity estimate (ATE) of components | | | |
|---------------------------------------------|-----------|--------------------|-------------------------------------|
| Name of substance | CAS No | Exposure route | ATE |
| xylene | 1330-20-7 | dermal | 1,100 ^{mg} / _{kg} |
| xylene | 1330-20-7 | inhalation: vapour | 11 ^{mg} / _l /4h |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

May be fatal if swallowed and enters airways.

Other information

Repeated exposure may cause skin dryness or cracking.

1330-20-7

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

xylene

Acc. to 1272/2008/EC: Harmful to aquatic life with long lasting effects. Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV): WGK 2, obviously hazardous to water (Germany)

Aquatic toxicity (chronic) of components Name of substance **CAS No Endpoint Value Species** Exposure time ethyl acetate 141-78-6 EC50 2,306 mg/_I aquatic invertebrates 24 h microorganisms acetone 67-64-1 EC50 61.15 g/ı 30 min $2.9 \, \frac{mg}{I}$ xylene 1330-20-7 **EL50** aquatic invertebrates 21 d 4.36 ^{mg}/_I 1330-20-7 ErC50 73 h xylene algae

2.2 mg/_I

algae

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EC50



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| Aquatic toxicity (chronic) of components | | | | | |
|------------------------------------------|------------|----------|----------------------------------|----------------|------------------|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
| Hydrocarbons, C9, aromatics | 64742-95-6 | EC50 | >99 ^{mg} / _l | microorganisms | 10 min |

12.2 Persistence and degradability

| Degradability o | Degradability of components | | | | | |
|------------------------------------------------------|-----------------------------|------------------------------|------------------|------|--------|--------|
| Name of sub- stance | CAS No | Process | Degradation rate | Time | Method | Source |
| ethyl acetate | 141-78-6 | oxygen deple- tion | 62 % | 5 d | | |
| acetone | 67-64-1 | carbon dioxide generation | 90.9 % | 28 d | | ECHA |
| xylene | 1330-20-7 | oxygen deple- tion | 98 % | 28 d | | ECHA |
| Hydrocarbons, C9, aromatics | 64742-95-6 | oxygen deple- tion | 30.9 % | 2 d | | ECHA |
| Naphtha (pet- roleum), hy- drotreated heavy | 64742-48-9 | oxygen deple- tion | 10 % | 5 d | | ECHA |

12.3 Bioaccumulative potential

Data are not available.

| Bioaccumulative potential of components | | | | |
|-----------------------------------------|-----------|--------------|---------------------------|----------|
| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
| butane | 106-97-8 | | 1.09 (pH value: 7, 20 °C) | |
| propane | 74-98-6 | | 1.09 (pH value: 7, 20 °C) | |
| ethyl acetate | 141-78-6 | 30 | 0.68 (pH value: 7, 25 °C) | |
| acetone | 67-64-1 | | -0.23 | 963.5 |
| xylene | 1330-20-7 | >5.5 - <12.2 | 3.2 (pH value: 7, 20 °C) | |

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes, (Recommendations)

Product

08 01 11* Waste paint and varnish containing organic solvents or other hazardous substances **Product residues**

16 05 04* Gases in pressure containers (including halons) containing hazardous substances $\underline{\textbf{Packagings}}$

15 01 04 Metallic packaging

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Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN UN 1950
IMDG-Code UN 1950
ICAO-TI UN 1950

14.2 UN proper shipping name

ADR/RID/ADN AEROSOLS
IMDG-Code AEROSOLS

ICAO-TI Aerosols, flammable

14.3 Transport hazard class(es)

 ADR/RID/ADN
 2 (2.1)

 IMDG-Code
 2.1

 ICAO-TI
 2.1

14.4 Packing group not assigned

14.5 Environmental hazards non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) Additional information

Classification code 5F Danger label(s) 2.1



Special provisions (SP) 190, 327, 344, 625

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) D

International Maritime Dangerous Goods Code (IMDG) Additional information

Marine pollutant - Danger label(s) 2.1



Special provisions (SP) 63, 190, 277, 327, 344, 381, 959

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
EmS F-D, S-U
Stowage category -

International Civil Aviation Organization (ICAO-IATA/DGR) Additional information

Danger label(s) 2.1



Special provisions (SP) A145, A167
Excepted quantities (EQ) E0
Limited quantities (LQ) 30 kg

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Deco-Paint Directive (2004/42/EC)

| VOC content | 646.4 ^g / _l |
|-------------|-----------------------------------|
|-------------|-----------------------------------|

| Maximum VOC content limit | | | | |
|------------------------------|---------------------|-----------|------|---------|
| Product category | Product subcategory | Coating | Туре | VOC g/l |
| vehicle refinishing products | special finishes | all types | | 840 |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

| Pollutant release and transfer registers (PRTR) | | | |
|-------------------------------------------------|-----------|--------------|-----------------------------------------|
| Name of substance | CAS No | Remarks | Threshold for releases to air (kg/year) |
| xylene | 1330-20-7 | (17) (11) | |
| zinc | 7440-66-6 | (8) | 200 |

Legend

- (11) Single pollutants are to be reported if the threshold for BTEX (the sum parameter of benzene, toluene, ethyl benzene, xylenes) is exceeded
- (17) Total mass of xylene (ortho-xylene, meta-xylene, para-xylene)
- (8) All metals shall be reported as the total mass of the element in all chemical forms present in the release

Water Framework Directive (WFD)

| List of pollutants (WFD) | | | |
|-----------------------------------------|--------|-----------|---------|
| Name of substance | CAS No | Listed in | Remarks |
| zinc | | a) | |
| Aluminium powder (Stabilized) | | a) | |
| Naphtha (petroleum), hydrotreated heavy | | a) | |

Legend

a) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

This product is regulated by Regulation (EU) No 2019/1148: All suspicious transactions as well as the loss and theft of significant quantities must be reported to the competent authority.

| Explosives precursors which are subject to restrictions | | | | | |
|---------------------------------------------------------|-----------|----------------------|-----------------------------|-------------|------------------------------------------------------------------------------------|
| Name of substance | CAS No | Type of registration | Remarks | Limit value | Upper limit value for the purpose of licensing under Art- icle 5(3) |
| acetone | 67-64-1 | Annex II | | | |
| Aluminium powder (Stabilized) | 7429-90-5 | Annex II | powd d < 200 μm > 70% | | |

Legend

| > 70% | As a substance or in mixtures containing 70 % or more, by weight, of aluminium and/or magnesium. |
|------------|-------------------------------------------------------------------------------------------------------------|
| Annex II | Substances on their own or in mixtures or in substances for which suspicious transactions shall be reported |
| d < 200 um | With a particle size less than 200 um. |

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Legend

powd Powder

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed National regulations (Germany)

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK (water 2 obviously hazardous to water

hazard class)

Technical instructions on air quality control (Germany)

| Number | Group of substances | Class | Conc. | Mass flow | Mass concentra- tion | Notation |
|--------|---------------------|-------|----------|----------------------------------|----------------------------------|----------|
| 5.2.5 | organic substances | | ≥ 25 wt% | 0.5 ^{kg} / _h | 50 ^{mg} / _{m³} | 3) |

Notation

a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

National inventories

| Country | Inventory | Status | |
|---------|------------|--------------------------------|--|
| EU | REACH Reg. | not all ingredients are listed | |

Legend

REACH Reg. REACH registered substances

Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Abbr

Descriptions of used abbreviations.
Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC. Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.
Acute toxicity.
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).
Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road).
Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road).
Accord relatif au transport international Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN).
Workplace exposure limit.
Hazardous to the aquatic environment - acute hazard.
Hazardous to the aquatic environment - chronic hazard.
Aspiration hazard.
Acute Toxicity Estimate.
Bioconcentration factor.
Biochemical Oxygen Demand.
Chemical Oxygen Demand.
Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).
Ceiling value.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
Chemical oxygen demand.
Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim.
Dangerous Goods Regulations (see IATA/DGR). 2000/39/EC. 2017/164/EU.

Acute Tox. ADN

ADR.

ADR/RID/ADN.

AGW.
Aquatic Acute.
Aquatic Chronic.
Asp. Tox.
ATE.
BCF.
BOD.
CAS

CAS. Ceiling-C. CLP. COD. DFG.

weining.
Dangerous Goods Regulations (see IATA/DGR).
Derived No-Effect Level.
Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on EC50.

growth) during a specified time interval.

The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union).

Endocrine disruptor.

European Inventory of Existing Commercial Chemical Substances.

Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms.

European List of Notified Chemical Substances. EC No.

ED. EINECS. EL50. ELINCS.

EmS. ErC50.

European List of Notified Chemical Substances.
Emergency Schedule.

■ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control.
Seriously damaging to the eye.
Irritant to the eye.
Flammable gas.
Flammable liquid.
Flammable solid

Eye Dam. Eye Irrit. Flam. Gas. Flam. Liq. Flam. Sol.

GHS.
IATA.
IATA/DGR.
ICAO.
ICAO-TI.
IMDG.
IMDG-Code.

Flammable liquid.
Flammable solid.
Flamm Index No. IOELV.

LGK. Log KOW. NLP. PBT.

PNEC Predicted No-Effect Concentration. Parts per million. Ppm.

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Abbr. Descriptions of used abbreviations.

Descriptions of used abbreviations.
Gas under pressure.
Registration, Evaluation, Authorisation and Restriction of Chemicals.
Registration, Evaluation, Authorisation and Restriction of Chemicals.
Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail).
Corrosive to skin.
Irritant to skin.
Short-term exposure limit.
Specific target organ toxicity - single exposure.
Substance of Very High Concern.
Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany).
Arbeitsplatzgrenzwerte (TRGS 900).
Biologische Grenzwerte (TRGS 903).
Time-weighted average.
Volatile Organic Compounds.
Very Persistent and very Bioaccumulative. Press. Gas. REACH. RID.

Skin Corr. Skin Irrit. STEL. STOT SE. SVHC.

TRGS. TRGS 900. TRGS 903. TWA. VOC. VPvB.

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture

List of relevant phrases (code and full text as stated in section 2 and 3)

Extremely flammable gas.
Flammable gas.
Extremely flammable aerosol.
Highly flammable liquid and vapour.
Flammable liquid and vapour.
Flammable solid.
Pressurised container: May burst if heated.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
Harmful in contact with skin.
Causes skin irritation.
Causes serious eye irritation.
Harmful if inhaled.
May cause respiratory irritation. H220. H221. H222. H225. H226. H228. H229. H280. H304, H312, H315, H319, H332, H336, Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Very toxic to aquatic life.
Yery toxic to aquatic life with long lasting effects.
Toxic to aquatic life with long lasting effects.
Harmful to aquatic life with long lasting effects. H400. H410.

Disclaimer

This SDS has been compiled and is solely intended for this product. This information is based on the present state of our knowledge and does not constitute an assurance of product properties nor establishes contract legal rights. All data about health and safety are only for information. They should therefore not be construed as specifications.

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