

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 10.04.2024

Version number 10 (replaces version 9)

Revision: 10.04.2024

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

1.1 Product identifier

Trade name: **Plastic Adhesion Promoter**

Article number: 90211, 90212

UFI: 41K0-F0QE-N008-RAUP

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

No further relevant information available.

Application of the substance / the mixture

Priming

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg

Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER/doctor if you feel unwell.

Storage: Store in a well-ventilated place. Keep cool.
Store locked up.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS02 GHS07

Signal word

Danger

Hazard-determining components of labelling:

ethyl acetate
n-butyl acetate

Hazard statements

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

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| | | |
|---|--|---|
| · <u>Precautionary statements</u> | P101 P102 P103 P210 P211 P251 P260 P280 P305+P351+P338 P410+P412 P501 | If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read carefully and follow all instructions. 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. Do not pierce or burn, even after use. Do not breathe spray. Wear protective gloves / eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| · <u>Additional information:</u> | EUH066 Repeated exposure may cause skin dryness or cracking. Contains epoxy constituents. May produce an allergic reaction. Buildup of explosive mixtures possible without sufficient ventilation. | |
| · 2.3 Other hazards | | |
| · <u>Results of PBT and vPvB assessment</u> | | |
| · PBT: | Not applicable. | |
| · vPvB: | Not applicable. | |
| · <u>Determination of endocrine-disrupting properties</u> | For information on endocrine disrupting properties see section 11. | |

SECTION 3: Composition/information on ingredients**3.2 Mixtures**· Description: Mixture of substances listed below with nonhazardous additions.· Dangerous components:

| | | |
|---|--|----------|
| CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46 | ethyl acetate Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336 EUH066 | 25-50% |
| CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21 | propane Flam. Gas 1A, H220 Press. Gas (Comp.), H280 | 12.5-25% |
| CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32 | butane, pure Flam. Gas 1A, H220 Press. Gas (Comp.), H280 | 12.5-25% |
| CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29 | n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 | <10% |

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| | | |
|---|--|------|
| CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27 | isobutane Flam. Gas 1A, H220 Press. Gas (Comp.), H280 | <10% |
| EC number: 905-588-0 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32 01-2119486136-34 | reaction mass of ethylbenzole and xylene Flam. Liq. 3, H226 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 | 1-5% |

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: Take affected persons out into the fresh air.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulty
Headache
Dizziness
Dizziness
Nausea

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- For safety reasons unsuitable extinguishing agents:

Water with full jet

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Carbon monoxide (CO)
Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

- Protective equipment: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
- Additional information Cool endangered receptacles with water spray.

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

Keep away from ignition sources.
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.

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- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Dispose of the material collected according to regulations.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections** See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Keep away from heat and direct sunlight.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Fumes can combine with air to form an explosive mixture.
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Storage class:** 2 B
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection· **8.1 Control parameters**

-
- Ingredients with limit values that require monitoring at the workplace:**

141-78-6 ethyl acetate

| | |
|-------|--|
| IOELV | Short-term value: 1468 mg/m ³ , 400 ppm Long-term value: 734 mg/m ³ , 200 ppm |
|-------|--|

123-86-4 n-butyl acetate

| | |
|-------|--|
| IOELV | Short-term value: 723 mg/m ³ , 150 ppm Long-term value: 241 mg/m ³ , 50 ppm |
|-------|--|

reaction mass of ethylbenzole and xylene

| | |
|-----|--|
| AGW | Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm |
| | H |

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· DNELs**141-78-6 ethyl acetate**

| | | |
|------------|-----------------------------|-----------------------------------|
| Oral | DNEL (Langzeit-wiederholt) | 4.5 mg/kg bw/day (BEV) |
| Dermal | DNEL (Langzeit-wiederholt) | 63 mg/kg bw/day (ARB) |
| | | 37 mg/kg bw/day (BEV) |
| Inhalative | DNEL (Kurzzeit-akut) | 1,468 mg/m ³ Air (ARB) |
| | | 734 mg/m ³ Air (BEV) |
| | DNEL (Langzeit-wiederholt) | 734 mg/m ³ Air (ARB) |
| | | 367 mg/m ³ Air (BEV) |

123-86-4 n-butyl acetate

| | | |
|------------|-----------------------------|-------------------------------------|
| Oral | DNEL (Kurzzeit-akut) | 2 mg/kg bw/day (BEV) |
| | DNEL (Langzeit-wiederholt) | 2 mg/kg bw/day (BEV) |
| Dermal | DNEL (Kurzzeit-akut) | 11 mg/kg bw/day (ARB) |
| | | 6 mg/kg bw/day (BEV) |
| Inhalative | DNEL (Langzeit-wiederholt) | 11 mg/kg bw/day (ARB) |
| | | 6 mg/kg bw/day (BEV) |
| | DNEL (Kurzzeit-akut) | 600 mg/m ³ Air (ARB) |
| | | 300 mg/m ³ Air (BEV) |
| | DNEL (Langzeit-wiederholt) | 48-300 mg/m ³ Air (ARB) |
| | | 12-35.7 mg/m ³ Air (BEV) |

reaction mass of ethylbenzole and xylene

| | | |
|------------|-----------------------------|---------------------------------------|
| Oral | DNEL (Langzeit-wiederholt) | 1.6 mg/kg bw/day (BEV) |
| Dermal | DNEL (Langzeit-wiederholt) | 180-212 mg/kg bw/day (ARB) |
| | | 108 mg/kg bw/day (BEV) |
| Inhalative | DNEL (Kurzzeit-akut) | 289-442 mg/m ³ Air (ARB) |
| | | 260 mg/m ³ Air (BEV) |
| | DNEL (Langzeit-wiederholt) | 211-221 mg/m ³ Air (ARB) |
| | | 14.8-65.3 mg/m ³ Air (BEV) |

· PNECs**141-78-6 ethyl acetate**

| | |
|----------------|------------------------------|
| PNEC (wässrig) | 650 mg/l (KA) |
| | 0.024 mg/l (MW) |
| | 0.24 mg/l (SW) |
| | 1.65 mg/l (WAS) |
| PNEC (fest) | 0.148 mg/kg Trockengew (BO) |
| | 0.115 mg/kg Trockengew (MWS) |
| | 1.15 mg/kg Trockengew (SWS) |

123-86-4 n-butyl acetate

| | |
|----------------|-------------------------------|
| PNEC (wässrig) | 35.6 mg/l (KA) |
| | 0.018 mg/l (MW) |
| | 0.18 mg/l (SW) |
| | 0.36 mg/l (WAS) |
| PNEC (fest) | 0.0903 mg/kg Trockengew (BO) |
| | 0.0981 mg/kg Trockengew (MWS) |
| | 0.981 mg/kg Trockengew (SWS) |

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reaction mass of ethylbenzole and xylene

| | |
|----------------|------------------------------|
| PNEC (wässrig) | 6.58 mg/l (KA) |
| | 0.327 mg/l (MW) |
| | 0.327 mg/l (SW) |
| | 0.327 mg/l (WAS) |
| PNEC (fest) | 2.31 mg/kg Trockengew (BO) |
| | 12.46 mg/kg Trockengew (MWS) |
| | 12.46 mg/kg Trockengew (SWS) |

- Additional information: The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:
 - Do not eat, drink, smoke or sniff while working.
 - Use skin protection cream for skin protection.
 - Clean skin thoroughly immediately after handling the product.
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Do not inhale gases / fumes / aerosols.
 - Avoid contact with the eyes.
 - Avoid contact with the eyes and skin.
- Respiratory protection:
 - Filter AX
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - Use suitable respiratory protective device in case of insufficient ventilation.
- Hand protection
 - Preventive skin protection by use of skin-protecting agents is recommended.
 - After use of gloves apply skin-cleaning agents and skin cosmetics.
 - The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.
 - This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves
 - Butyl rubber, BR
 - Chloroprene rubber, CR
 - Nitrile rubber, NBR
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- Penetration time of glove material Value for the permeation: Level ≤ 1 , 10 min
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- As protection from splashes gloves made of the following materials are suitable: Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)
Chloroprene rubber, CR
- Not suitable are gloves made of the following materials: Leather gloves
Strong material gloves
- Eye/face protection  Tightly sealed goggles
- Body protection: Protective work clothing

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

- General Information
- Colour: Colourless
- Odour: Specific type
- Melting point/freezing point: Undetermined.
- Boiling point or initial boiling point and boiling range Not applicable, as aerosol.
- Lower and upper explosion limit
- Lower: 1.5 Vol %
- Upper: 11.5 Vol %
- Flash point: Not applicable, as aerosol.
- Auto-ignition temperature: 365 °C
- pH Not determined.
- Viscosity: Not applicable
- Kinematic viscosity Not determined.
- Dynamic: Not applicable
- Solubility
- water: Not miscible or difficult to mix.
- Vapour pressure at 20 °C: 8,300 hPa
- Density and/or relative density
- Density at 20 °C: 0.7 g/cm³

9.2 Other information

- Appearance:
- Form: Aerosol
- Important information on protection of health and environment, and on safety.
- Ignition temperature: Product is not selfigniting.
- Explosive properties: In use, may form flammable/explosive vapour-air mixture.
- Solvent content:
- Organic solvents: 91.6 %
- Solids content: 1.3 %

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| | |
|--|--|
| · Information with regard to physical hazard classes | |
| · <u>Explosives</u> | Void |
| · <u>Flammable gases</u> | Void |
| · <u>Aerosols</u> | Extremely flammable aerosol. Pressurised container: May burst if heated. |
| · <u>Oxidising gases</u> | Void |
| · <u>Gases under pressure</u> | Void |
| · <u>Flammable liquids</u> | Void |
| · <u>Flammable solids</u> | Void |
| · <u>Self-reactive substances and mixtures</u> | Void |
| · <u>Pyrophoric liquids</u> | Void |
| · <u>Pyrophoric solids</u> | Void |
| · <u>Self-heating substances and mixtures</u> | Void |
| · <u>Substances and mixtures, which emit flammable gases in contact with water</u> | Void |
| · <u>Oxidising liquids</u> | Void |
| · <u>Oxidising solids</u> | Void |
| · <u>Organic peroxides</u> | Void |
| · <u>Corrosive to metals</u> | Void |
| · <u>Desensitised explosives</u> | Void |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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.

· LD/LC50 values relevant for classification:**141-78-6 ethyl acetate**

| | | |
|------------|-------------|---|
| Oral | LD50 | 4,100 mg/kg (mouse) 5,620 mg/kg (rat) 4,934 mg/kg (rabbit) (OECD 401) |
| | NOAEL-Werte | 900 mg/kg (rat) |
| | Dermal LD50 | >18,000 mg/kg (rabbit) |
| Inhalative | LC50 | 58 mg/l (rat) |
| | LC50/4 h | 56 mg/l (rat) |
| | LC50/1h | 200 mg/l (rat) |
| | LC50/8h | 5.86 mg/l (rat) |
| | LC50/48h | 333 mg/l (Leuciscus idus) |

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74-98-6 propane

Inhalative LC50/4 h >20 mg/l (rat)

106-97-8 butane, pure

Inhalative LC50/4 h 658 mg/l (rat)

123-86-4 n-butyl acetate

| | | |
|------------|----------|-----------------------------------|
| Oral | LD50 | 10,760 mg/kg (rat) (OECD 423) |
| Dermal | LD50 | >14,112 mg/kg (rabbit) (OECD 402) |
| Inhalative | LC50/4 h | 23.4 mg/l (rat) (OECD 403) |
| | LC50 | 390 mg/m ³ (rat) |
| | LC50/48h | 64 mg/l (Brachydanio rerio) |

75-28-5 isobutane

Inhalative LC50/4 h >50 mg/l (rat)

reaction mass of ethylbenzole and xylene

| | | |
|------------|-------------|--------------------------------|
| Oral | LD50 | 3,523 mg/kg (rat) |
| | NOAEL-Werte | 250 mg/kg (rat) |
| Dermal | LD50 | 12,126 mg/kg (rabbit) |
| Inhalative | LC50/4h | 29,000 mg/m ³ (rat) |
| | LC50/4 h | 27.124 mg/l (rat) |

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- 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.
- 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

None of the ingredients is listed.

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

- Aquatic toxicity:

141-78-6 ethyl acetate

| | |
|-----------|--|
| EC50/24h | 2,300-3,090 mg/l (daphnia magna) |
| EC50/96h | 220 mg/l (Pimephales promelas) |
| EC10/18h | 2,900 mg/l (pseudomonas putida) |
| EC50/48h | 610 mg/l (daphnia magna) (DIN 38412) |
| | 5,600 mg/l (Scenedesmus subspicatus) |
| IC50/48h | 3,300 mg/l (Scenedesmus subspicatus) |
| LC 0 | 29.3 mg/l (rat) |
| NOELR/72h | >100 mg/l (Desmodesmus subspicatus) (OECD 201) |
| NOEC/21d | 2.4 mg/l (daphnia magna) (DIN 38412 Part 11) |
| EC10 | 2,900 mg/l (pseudomonas putida) |
| EC50/48h | 3,300 mg/l (Scenedesmus subspicatus) |

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| | |
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| EC50/72h | 1,800-3,200 mg/l (selenastrum capricornutum) |
| LC50/96h | 300-600 mg/l (Oncorhynchus mykiss) |
| | 230 mg/l (Pimephales promelas) |

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| | |
|----------|--|
| EC50/24h | 72.8 mg/l (daphnia magna) (DIN 38412) |
| EC50/96h | 320 mg/l (algae) |
| LC50/24h | 205 mg/l (daphnia magna) |
| IC50/72h | 648 mg/l (Desmodesmus subspicatus) |
| EC10/18h | 959 mg/l (pseudomonas putida) |
| EC50/48h | 44 mg/l (daphnia magna) (OECD 202) |
| EC50/16h | 959 mg/l (pseudomonas putida) |
| NOEC | 200 mg/kg (Desmodesmus subspicatus) |
| NOEC/21d | 23 mg/l (daphnia magna) (OECD 211) |
| EC50/72h | 647.7 mg/l (Desmodesmus subspicatus) (Zellvermehrungshemmtest) |
| | 397 mg/l (Scenedesmus subspicatus) |
| LC50/96h | 62 mg/l (Danio rerio.) |
| | 81 mg/l (piscis) |
| | 100 mg/l (Iepomis macrochirus) |
| | 62 mg/l (Leuciscus idus) (DIN 38412) |
| | 18 mg/l (pimephales promelas) (OECD 203) |

reaction mass of ethylbenzole and xylene

| | |
|-----------|---|
| LC50/24h | 1 mg/l (daphnia magna) (OECD 202) |
| EC50/48h | 3.2-9.5 mg/l (daphnia magna) (US EPA) |
| ErC50/72h | 4.9 mg/l (Pseudokirchneriella subcapitata) (OECD 201) |
| NOEC | 16 mg/l (BES) |
| | 1.3 mg/l (Oncorhynchus mykiss) |
| NOELR/72h | 0.44 mg/l (algae) |
| NOEC/21d | 1.57 mg/l (daphnia magna) (OECD 211) |
| NOELR/28d | 16 mg/l (bacteria) |
| EC50/72h | 1-10 mg/l (algae) |
| | 2.2 mg/l (selenastrum capricornutum) (OECD 201) |
| LC50/96h | 1-10 mg/l (fish) |
| | 86 mg/l (Leuciscus idus) |
| | 2.6 mg/l (Oncorhynchus mykiss) (OECD 203) |
| | 8.9-16.4 mg/l (pimephales promelas) |

- **12.2 Persistence and degradability**

No further relevant information available.

- **12.3 Bioaccumulative potential**

No further relevant information available.

- **12.4 Mobility in soil**

No further relevant information available.

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

- PBT: Not applicable.

- vPvB: Not applicable.

- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

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· **12.7 Other adverse effects**· Additional ecological information:· General notes:

Do not allow product to reach ground water, water course or sewage system.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

SECTION 13: Disposal considerations· **13.1 Waste treatment methods**· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

| | |
|-----------|---|
| 08 00 00 | WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS |
| 08 01 00 | wastes from MFSU and removal of paint and varnish |
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances |
| 15 00 00 | WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED |
| 15 01 00 | packaging (including separately collected municipal packaging waste) |
| 15 01 04 | metallic packaging |
| 15 00 00 | WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED |
| 15 01 00 | packaging (including separately collected municipal packaging waste) |
| 15 01 10* | packaging containing residues of or contaminated by hazardous substances |

· Uncleaned packaging:· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information· **14.1 UN number or ID number**· ADR, IMDG, IATA

UN1950

· **14.2 UN proper shipping name**· ADR

1950 AEROSOLS

· IMDG

AEROSOLS

· IATA

AEROSOLS, flammable

· **14.3 Transport hazard class(es)**· ADR· Class

2 5F Gases.

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| | |
|---|--|
| · <u>Label</u> | 2.1 |
| · <u>IMDG, IATA</u> | |
|  | |
| · <u>Class</u> | 2.1 Gases. |
| · <u>Label</u> | 2.1 |
| · 14.4 Packing group | |
| · <u>ADR, IMDG, IATA</u> | Void |
| · 14.5 Environmental hazards: | |
| · <u>Marine pollutant:</u> | No |
| · 14.6 Special precautions for user | Warning: Gases. |
| · <u>Hazard identification number (Kemler code):</u> | - |
| · <u>EMS Number:</u> | F-D,S-U |
| · <u>Stowage Code</u> | 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. |
| · <u>Segregation Code</u> | 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. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · <u>Transport/Additional information:</u> | |
| · <u>ADR</u> | |
| · <u>Limited quantities (LQ)</u> | 1L |
| · <u>Excepted quantities (EQ)</u> | Code: E0 Not permitted as Excepted Quantity |
| · <u>Transport category</u> | 2 |
| · <u>Tunnel restriction code</u> | D |
| · <u>IMDG</u> | |
| · <u>Limited quantities (LQ)</u> | 1L |
| · <u>Excepted quantities (EQ)</u> | Code: E0 Not permitted as Excepted Quantity |
| · <u>UN "Model Regulation":</u> | UN 1950 AEROSOLS, 2.1 |

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I

None of the ingredients is listed.

· Seveso category

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- Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

· Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· VOC EU 690.2 g/l

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Department issuing SDS: Laboratory

· Date of previous version: 04.11.2022

· Version number of previous version: 9

· Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Flam. Gas 1A: Flammable gases – Category 1A
Aerosol 1: Aerosols – Category 1
Press. Gas (Comp.): Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1

EU