Paint Tech Evo transparent 500ml

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

1.1. Product identifier

Trade name/designation:

Paint Tech Evo transparent 500ml

Article No.:
T120283

UFI:
H0AJ-S49A-V53Q-JV7N

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

Use of the substance/mixture:
Colour

Relevant identified uses:

Product Categories [PC]
PC 9a: Coatings and paints, thinners, paint removers
Process categories [PROC]
PROC 7: Industrial spraying
PROC 11: Non industrial spraying

*

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

2.2. Label elements

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

Hazard pictograms:

GHS07
Exclamation mark

GHS02
Flame

Signal word: Danger

Hazard components for labelling:
acetone; Hydrocarbons, C9, aromatics; 2-methoxy-1-methylethyl acetate; butan-1-ol

Hazard statements for physical hazards	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Hazard statements for health hazards	
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe spray.

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

Precautionary statements Disposal	
P501	Dispose of the contents/container in accordance with regional regulations.

Additional information:
Formation of explosive mixtures possible without adequate ventilation.

2.3. Other hazards

Other adverse effects:
The product does not meet the PBT/vPvB criteria.
Determination of endocrine disrupting properties: not applicable

SECTION 3: Composition/information on ingredients

*

3.2. Mixtures

Description:
Mixture of substances listed below with non-hazardous admixtures.

Additional information:
The content of benzene (EINECS No. 200-753-7) in the individual components is below 0.1% (Note P Annex VI of Directive (EC) No. 1272/2008).
Note P (Annex VI to Directive (EC) No 1272/2008) applies to xylene CAS: 1330-20-7.

Paint Tech Evo transparent 500ml

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 67-64-1 EC No.: 200-662-2 Index No.: 606-001-00-8 REACH No.: 01-2119471330-49	**acetone** Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336)  Danger EUH066 **Acute Toxicity Estimate** ATE (oral) 5,800 mg/kg ATE (dermal) 20,000 mg/kg ATE (inhalation, gases) 76 ppmV ATE (inhalation, vapour) 76 mg/L ATE (inhalation, dust/mist) 76 mg/L **Additional information:** EUH066	25 – < 50 %
CAS No.: 115-10-6 EC No.: 204-065-8 Index No.: 603-019-00-8 REACH No.: 01-2119472128-37	**dimethyl ether** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)  Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) 308.5 ppmV ATE (inhalation, dust/mist) 308.5 mg/L	20 – < 25 %
CAS No.: 74-98-6 EC No.: 200-827-9 Index No.: 601-003-00-5 REACH No.: 01-2119486944-21	**propane** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)  Danger **Acute Toxicity Estimate** ATE (oral) 5,840 mg/kg ATE (dermal) 13,900 mg/kg ATE (inhalation, gases) > 25 ppmV ATE (inhalation, vapour) ≥ 50 mg/L	5 – < 10 %
CAS No.: 106-97-8 EC No.: 203-448-7 Index No.: 601-004-00-0 REACH No.: 01-2119474691-32	**Butan (mit < 0,1 % Butadien (203-450-8))** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)  Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) 658 ppmV ATE (inhalation, vapour) > 800,000 mg/L **Additional information:** Butan (enthält < 0,1% Butadien (203-450-8))	5 – < 10 %
EC No.: 918-668-5 REACH No.: 01-2119455851-35	**Hydrocarbons, C9, aromatics** Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 3 (H226), STOT SE 3 (H335, H336)  Danger **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 2,000 mg/kg **Additional information:** EUH066	5 – < 10 %
CAS No.: 75-28-5 EC No.: 200-857-2 REACH No.: 01-2119485395-27	**Isobutan (mit < 0,1 % Butadien (203-450-8))** Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)  Danger	5 – < 10 %
CAS No.: 108-65-6 EC No.: 203-603-9 Index No.: 607-195-00-7 REACH No.: 01-2119475791-29	**2-methoxy-1-methylethyl acetate** Flam. Liq. 3 (H226), STOT SE 3 (H336)  Warning **Acute Toxicity Estimate** ATE (oral) 8,560 mg/kg ATE (dermal) > 5,000 mg/kg ATE (inhalation, gases) > 10,000 ppmV ATE (inhalation, vapour) > 10 mg/L	2.5 – < 5 %

Paint Tech Evo transparent 500ml

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 1330-20-7 EC No.: 215-535-7 Index No.: 601-022-00-9 REACH No.: 01-2119488216-32	**xylene** Acute Tox. 4 (H332, H312), Flam. Liq. 3 (H226), Skin Irrit. 2 (H315)  Warning **Acute Toxicity Estimate** ATE (oral) 4,300 mg/kg ATE (dermal) 12,126 mg/kg ATE (inhalation, gases) 29,000 ppmV ATE (inhalation, vapour) 29 mg/L ATE (inhalation, dust/mist) 6,350 mg/L	2.5 – < 5 %
EC No.: 905-588-0 REACH No.: 01-2119488216-32	**Reaction mass of ethylbenzene and xylene** Acute Tox. 4 (H312, H332), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319), Flam. Liq. 3 (H226), STOT RE 2 (H373), STOT SE 3 (H335), Skin Irrit. 2 (H315)  Danger **Acute Toxicity Estimate** ATE (oral) > 3,523 mg/kg ATE (dermal) 1,100 mg/kg ATE (inhalation, gases) 27.571 ppmV ATE (inhalation, vapour) 11 mg/L	< 2.5 %
CAS No.: 100-41-4 EC No.: 202-849-4 Index No.: 601-023-00-4 REACH No.: 01-2119489370-35	**ethylbenzene** Acute Tox. 4 (H332), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT RE 2 (H373)  Danger **Acute Toxicity Estimate** ATE (oral) 3,500 mg/kg ATE (dermal) 15,354 mg/kg ATE (inhalation, gases) 17.2 ppmV ATE (inhalation, dust/mist) 17.2 mg/L	< 2.5 %
CAS No.: 71-36-3 EC No.: 200-751-6 Index No.: 603-004-00-6 REACH No.: 01-2119484630-38	**butan-1-ol** Acute Tox. 4 (H302), Eye Dam. 1 (H318), Flam. Liq. 3 (H226), STOT SE 3 (H335, H336), Skin Irrit. 2 (H315)  Danger **Acute Toxicity Estimate** ATE (oral) 2,292 mg/kg ATE (dermal) 3,430 mg/kg ATE (inhalation, gases) 17,000 ppmV ATE (inhalation, vapour) 17 mg/L ATE (inhalation, dust/mist) 17,000 mg/L	≥ 1 – < 2.5 %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Following inhalation:
Fresh air supply, consult a doctor in case of complaints.

In case of skin contact:
In general, the product is not irritating to skin.

After eye contact:
Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist

Following ingestion:
Drink plenty of water. Provide fresh air. Call a physician immediately.

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

No further relevant information available.

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 media:

Adapt fire extinguishing measures to the surroundings.

5.2. Special hazards arising from the substance or mixture

Formation of toxic gases when heated or in case of fire.

5.3. Advice for firefighters

Special protective equipment: Put on breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Use appropriate respiratory protection. Wear protective equipment. Keep unprotected persons away. Keep away from sources of ignition - No smoking.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

In case of spillage into water or sewage system, inform the competent authorities.
Do not allow to enter drains/surface water/ground water.

6.3. Methods and material for containment and cleaning up

Other information:

Dispose of contaminated material as waste according to section 13. Provide adequate ventilation.

6.4. Reference to other sections

See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Ensure good ventilation/extraction at the workplace.

Fire prevent measures:

Do not spray against a flame or on a glowing object. Keep away from sources of ignition - No smoking.
Have breathing apparatus ready.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

The official regulations for the storage of pressurised gas packages must be observed.

Hints on storage assembly:

Not required.

Storage class (TRGS 510, Germany): 2B – Aerosol dispensers and lighters

Further information on storage conditions:

Keep container tightly closed.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

*

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**acetone** CAS No.: 67-64-1 EC No.: 200-662-2	② 2,000 ppm (4,800 mg/m³) ⑤ (max. 4x15 min./Schicht)
IOELV (EU)	**acetone** CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,210 mg/m³)
MAK (AT)	**acetone** CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,200 mg/m³)
MAK (AT)	**dimethyl ether** CAS No.: 115-10-6 EC No.: 204-065-8	① 1,000 ppm (1,910 mg/m³)
MAK (AT)	**dimethyl ether** CAS No.: 115-10-6 EC No.: 204-065-8	② 2,000 ppm (3,820 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
IOELV (EU)	**dimethyl ether** CAS No.: 115-10-6 EC No.: 204-065-8	① 1,000 ppm (1,920 mg/m³)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	② 2,000 ppm (3,600 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	① 1,000 ppm (1,800 mg/m³)
MAK (AT)	**Butan (mit < 0,1 % Butadien (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7	① 800 ppm (1,900 mg/m³)
MAK (AT)	**Butan (mit < 0,1 % Butadien (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**Isobutan (mit < 0,1 % Butadien (203-450-8))** CAS No.: 75-28-5 EC No.: 200-857-2	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./SchichtMomentanwert)
MAK (AT)	**Isobutan (mit < 0,1 % Butadien (203-450-8))** CAS No.: 75-28-5 EC No.: 200-857-2	① 800 ppm (1,900 mg/m³)
MAK (AT)	**2-methoxy-1-methylethyl acetate** CAS No.: 108-65-6 EC No.: 203-603-9	② 100 ppm (550 mg/m³) ⑤ (max. 8x5 min./Schicht, Momentanwert, kann über die Haut aufgenommen werden) H
IOELV (EU)	**2-methoxy-1-methylethyl acetate** CAS No.: 108-65-6 EC No.: 203-603-9	① 50 ppm (275 mg/m³) ② 100 ppm (550 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT)	**2-methoxy-1-methylethyl acetate** CAS No.: 108-65-6 EC No.: 203-603-9	① 50 ppm (275 mg/m³) ⑤ (kann über die Haut aufgenommen werden) H

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT) from 25 Sept 2018	**xylene** CAS No.: 1330-20-7 EC No.: 215-535-7	② 100 ppm (442 mg/m³) ⑤ (max. 4x15 min./Schicht)
IOELV (EU)	**xylene** CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (221 mg/m³) ② 100 ppm (442 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT) from 25 Sept 2018	**xylene** CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (221 mg/m³)
MAK (AT) from 25 Sept 2018	**Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0	② 100 ppm (442 mg/m³) ⑤ (max. 4x15 min./Schicht)
IOELV (EU)	**Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0	① 50 ppm (221 mg/m³) ② 100 ppm (442 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT) from 25 Sept 2018	**Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0	① 50 ppm (221 mg/m³)
MAK (AT)	**ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4	① 100 ppm (440 mg/m³) ⑤ (kann über die Haut aufgenommen werden) H
MAK (AT)	**ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4	② 200 ppm (880 mg/m³) ⑤ (max. 8x5 min./Schicht, Momentanwert, kann über die Haut aufgenommen werden) H
IOELV (EU)	**ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4	① 100 ppm (442 mg/m³) ② 200 ppm (884 mg/m³) ⑤ (may be absorbed through the skin)
MAK (AT)	**butan-1-ol** CAS No.: 71-36-3 EC No.: 200-751-6	① 50 ppm (150 mg/m³)
MAK (AT)	**butan-1-ol** CAS No.: 71-36-3 EC No.: 200-751-6	② 200 ppm (600 mg/m³) ⑤ (max. 4x15 min./Schicht)

8.1.2. Biological limit values
No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
acetone CAS No.: 67-64-1 EC No.: 200-662-2	1,210 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	200 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	2,420 mg/m³	① DNEL worker ② Acute - inhalation, local effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	186 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Paint Tech Evo transparent 500ml

Substance name	DNEL value	① DNEL type ② Exposure route
acetone CAS No.: 67-64-1 EC No.: 200-662-2	62 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	62 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	1,894 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	471 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	275 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	33 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	796 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	320 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	36 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	221 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	65.3 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	442 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	260 mg/m³	① DNEL Consumer ② Acute - inhalation, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	221 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	65.3 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	442 mg/m³	① DNEL worker ② Acute - inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	260 mg/m³	① DNEL Consumer ② Acute - inhalation, local effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	212 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	125 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects

Paint Tech Evo transparent 500ml

Substance name	DNEL value	① DNEL type ② Exposure route
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	12.5 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	77 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	14.8 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	289 mg/m³	① DNEL worker ② Acute - inhalation, local effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	180 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	108 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	1.6 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	77 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	15 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	293 mg/m³	① DNEL worker ② Acute - inhalation, local effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	180 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	1.6 mg/kg	① DNEL Consumer ② Long-term - oral, systemic effects
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	310 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	55 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	3.125 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
acetone CAS No.: 67-64-1 EC No.: 200-662-2	10.6 mg/L	① PNEC aquatic, freshwater
acetone CAS No.: 67-64-1 EC No.: 200-662-2	1.06 mg/L	① PNEC aquatic, marine water
acetone CAS No.: 67-64-1 EC No.: 200-662-2	100 mg/L	① PNEC sewage treatment plant
acetone CAS No.: 67-64-1 EC No.: 200-662-2	30.4 mg/kg	① PNEC sediment, freshwater

Paint Tech Evo transparent 500ml

Substance name	PNEC Value	① PNEC type
acetone CAS No.: 67-64-1 EC No.: 200-662-2	3.04 mg/kg	① PNEC sediment, marine water
acetone CAS No.: 67-64-1 EC No.: 200-662-2	29.5 mg/kg	① PNEC soil
acetone CAS No.: 67-64-1 EC No.: 200-662-2	21 mg/L	① PNEC aquatic, intermittent release
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.155 mg/L	① PNEC aquatic, freshwater
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.016 mg/L	① PNEC aquatic, marine water
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.681 mg/kg	① PNEC sediment, freshwater
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.069 mg/kg	① PNEC sediment, marine water
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	0.045 mg/kg	① PNEC soil
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	1.549 mg/L	① PNEC aquatic, intermittent release
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	0.0635 mg/L	① PNEC aquatic, freshwater
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	0.0064 mg/L	① PNEC aquatic, marine water
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	100 mg/L	① PNEC sewage treatment plant
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	3.29 mg/L	① PNEC sediment, freshwater
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	0.329 mg/L	① PNEC sediment, marine water
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	0.29 mg/kg	① PNEC soil
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	0.327 mg/L	① PNEC aquatic, marine water
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	6.58 mg/L	① PNEC sewage treatment plant
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	12.46 mg/L	① PNEC sediment, freshwater
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	12.46 mg/L	① PNEC sediment, marine water
Reaction mass of ethylbenzene and xylene EC No.: 905-588-0	2.31 mg/kg	① PNEC soil

Substance name	PNEC Value	① PNEC type
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	0.1 mg/L	① PNEC aquatic, freshwater
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	0.01 mg/L	① PNEC aquatic, marine water
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	13.7 mg/kg	① PNEC sediment, freshwater
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	1.37 mg/kg	① PNEC sediment, marine water
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	2.68 mg/kg	① PNEC soil
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4	0.1 mg/L	① PNEC aquatic, intermittent release
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	0.082 mg/L	① PNEC aquatic, freshwater
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	0.0082 mg/L	① PNEC aquatic, marine water
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	2,476 mg/L	① PNEC sewage treatment plant
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	0.178 mg/kg	① PNEC sediment, freshwater
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	0.0178 mg/kg	① PNEC sediment, marine water
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	0.015 mg/kg	① PNEC soil
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	2.25 mg/L	① PNEC aquatic, intermittent release

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No further details. See section 7.

8.2.2. Personal protection equipment

Eye/face protection:

Tight-fitting safety goggles

Skin protection:

Hand protection:
Wear protective gloves.
Glove material: Butyl caoutchouc (butyl rubber); The selection of a suitable glove depends not only on the material, but also on other quality features and varies from manufacturer to manufacturer.
Penetration time of the glove material: Gloves made of butyl rubber with a material thickness of 0.4mm are resistant to: Acetone 480 min; Butyl acetate 60 min; Ethyl acetate 170 min; Xylene 42 min. Gloves made of butyl rubber with a layer thickness of 0.4 mm are resistant to solvents for 42 - 480 minutes. As

a precautionary measure, we recommend users and those responsible for occupational safety to take a resistance of 42 minutes as a basis. Taking into account the information in chapter 3 of the MSDS, it is possible to assume a higher resistance in individual cases.

Respiratory protection:

In case of short or low exposure use breathing filter apparatus; in case of intensive or prolonged exposure use self-contained breathing apparatus. Filter A2/P2

Other protection measures:

General protective and hygienic measures: Keep away from food, drink and animal feed. Remove contaminated, saturated clothing immediately. Wash hands before breaks and after work. Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Form: Aerosol
Colour: colourless
Odour: solvent-like
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		② insoluble in: Water
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	*not applicable*		② Aerosol
Flash point	*not applicable*		② Aerosol
Evaporation rate	*No data available*		
Auto-ignition temperature	240 °C		② dimethyl ether
Upper/lower flammability or explosive limits	2.6 – 26.2 Vol-%		② acetone - dimethyl ether
Vapour pressure	4,000 hPa	20 °C	② dimethyl ether
Vapour density	*No data available*		
Density	0.7 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	Immiscible		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		

9.2. Other information

Organic solvents: 89,7 %
VOC limit value: 665,0 g/l, 89,75 %
Solid content: 10,3 %

9.2.1. Information with regard to physical hazard classes

Aerosols:

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

SECTION 10: Stability and reactivity

10.1. Reactivity

No further relevant information available.

10.2. Chemical stability

Thermal decomposition / Conditions to avoid: No decomposition when used as directed.

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

acetone CAS No.: 67-64-1 EC No.: 200-662-2
ATE (oral): 5,800 mg/kg
ATE (dermal): 20,000 mg/kg
ATE (inhalation, vapour): 76 mg/L
ATE (inhalation, dust/mist): 76 mg/L
LD_{50} oral: 5,800 mg/kg (Rat)
LD_{50} dermal: >15,800 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): 76 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): 5,540 mg/L 4 d (Oncorhynchus mykiss (Rainbow trout))
LC_{50} Acute inhalation toxicity (dust/mist): 76 mg/L 4 h (Rat)
Hydrocarbons, C9, aromatics EC No.: 918-668-5
LD_{50} oral: >5,000 mg/kg (Ratte) OECD 401
LD_{50} dermal: >2,000 mg/kg (Kaninchen) OECD 402
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9
LD_{50} oral: 8,560 mg/kg (Rat)
LD_{50} dermal: >5,000 mg/kg (Rabbit) OECD 402
LC_{50} Acute inhalation toxicity (gas): >10,000 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): >10 mg/L 4 h (Rat)
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
LD_{50} oral: 4,300 mg/kg (Rat)
LD_{50} dermal: 12,126 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): 29,000 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): 29 mg/L 4 h (Rat)
LC_{50} Acute inhalation toxicity (dust/mist): 6,350 mg/L 4 h (Rat)
ethylbenzene CAS No.: 100-41-4 EC No.: 202-849-4
LD_{50} oral: 3,500 mg/kg (Rat)
LD_{50} dermal: 15,354 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): 17.2 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (dust/mist): 17.2 mg/L (Rat)
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6
LD_{50} oral: 2,292 mg/kg (Rat)
LD_{50} dermal: 3,430 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): 17,000 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): 17 mg/L 4 h (Rat)
LC_{50} Acute inhalation toxicity (dust/mist): 17,000 mg/L 4 h (Rat)

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

No irritant effect.

Serious eye damage/irritation:
Causes serious eye irritation.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.
No sensitising effect known.

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 are included.

SECTION 12: Ecological information

*

12.1. Toxicity

acetone CAS No.: 67-64-1 EC No.: 200-662-2
LC_{50}: 8,300 mg/L 4 d (fish)
LC_{50}: 8,450 mg/L 2 d (crustaceans, water flea)
LC_{50}: 8,300 mg/L 4 d (fish)
EC_{50}: 7,200 mg/L 4 d (Algae/water plant)
EC_{50}: 7,200 mg/L 4 d (Alge)
EC_{50}: 8,800 mg/L (Daphnia magna)
NOEC: 2,212 mg/L (crustaceans, Daphnia magna)
dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8
LC_{50}: >4,000 mg/L 2 d (crustaceans, Daphnia magna)
LC_{50}: >4,000 mg/L 4 d (fish)
EC_{50}: 155 mg/L 4 d (Algae/water plant)
LC_{50}: >4,000 mg/L 2 d (daphnia magna)
EC_{50}: 155 mg/L 4 d (Alge)
EC_{50}: 155 mg/L 4 d (algae)
Hydrocarbons, C9, aromatics EC No.: 918-668-5
EC_{50}: 2.75 mg/L 3 d (Pseudokirchneriella subcapitata)
EC_{50}: 302 mg/L 2 d (daphnia magna)
EC_{50}: 9.2 mg/L 4 d (Regenbogenforelle)

2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9
LC_{50}: <180 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout))
LC_{50}: 18 – 24 mg/L 4 d (fish, Pimephales promelas (fathead minnow))
LC_{50}: 100 – 180 mg/L 4 d (fish, Regenbogenforelle)
EC_{50}: >400 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: 10 mg/L (Activated sludge) OECD 204
EC_{50}: >500 mg/L 2 d (crustaceans, daphnia magna)
NOEC: 47.5 mg/L (fish, Oryzias latipes)
NOEC: 100 mg/L (crustaceans, Daphnia magna)
IC_{50}: >25,000 mg/L 4 d (fish, Danio rerio (zebrafish))
ErC_{50}: >85 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 203
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
LC_{50}: 8.9 – 16.4 mg/L 4 d (fish, Pimephales promelas)
EC_{50}: 3.2 – 9.5 mg/L 2 d (crustaceans, Daphnia magna)
LC_{50}: 13.5 mg/L 4 d (fish)
EC_{50}: 7.4 mg/L 2 d (daphnia magna)
LC_{50}: >10 – 100 mg/L 4 d (fish)
EC_{50}: >10 – 100 mg/L 2 d (crustaceans)
NOEC: 1.3 mg/L (fish, Oncorhynchus mykiss)
NOEC: 1.17 mg/L (crustaceans, Ceriodaphnia dubia)
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6
LC_{50}: 1,376 mg/L 4 d (fish)
LC_{50}: 1,376 mg/L 4 d (fish)
LC_{50}: 1,376 mg/L 4 d (fish)
EC_{50}: 225 mg/L (Selenastrum capricornutum)
NOEC: 4.1 mg/L 21 d (Daphnia magna)
EC_{50}: 1,328 mg/L 2 d (Daphnia magna)

12.2. Persistence and degradability

acetone CAS No.: 67-64-1 EC No.: 200-662-2
Biodegradation: Yes, rapidly
Isobutan (mit < 0,1 % Butadien (203-450-8)) CAS No.: 75-28-5 EC No.: 200-857-2
Biodegradation: Yes, rapidly
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9
Biodegradation: Yes, rapidly

12.3. Bioaccumulative potential

acetone CAS No.: 67-64-1 EC No.: 200-662-2
Log K_{OW}: -0.24
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9
Log K_{OW}: 1.2
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
Log K_{OW}: 2.77

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

acetone CAS No.: 67-64-1 EC No.: 200-662-2
Results of PBT and vPvB assessment: —

dimethyl ether CAS No.: 115-10-6 EC No.: 204-065-8	
Results of PBT and vPvB assessment: —	
Hydrocarbons, C9, aromatics EC No.: 918-668-5	
Results of PBT and vPvB assessment: —	
Isobutan (mit < 0,1 % Butadien (203-450-8)) CAS No.: 75-28-5 EC No.: 200-857-2	
Results of PBT and vPvB assessment: —	
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	
Results of PBT and vPvB assessment: —	
xylene CAS No.: 1330-20-7 EC No.: 215-535-7	
Results of PBT and vPvB assessment: —	
butan-1-ol CAS No.: 71-36-3 EC No.: 200-751-6	
Results of PBT and vPvB assessment: —	

The product does not meet the PBT/vPvB criteria.

12.6. Endocrine disrupting properties
The product does not contain any substances with endocrine-disrupting properties.

12.7. Other adverse effects
water hazard class 2: obviously hazardous to water
Harmful to fish.
Harmful to aquatic life.
Do not allow to enter drains/surface water/ground water. Drinking water hazard even when small quantities leak into the subsoil.

SECTION 13: Disposal considerations

*
13.1. Waste treatment methods
Must not be disposed of together with household waste. Do not allow to enter drains/surface water/ground water. Full and empty containers are to be disposed of by private end users at the responsible hazardous waste collection centre.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

08 01 11 *	Waste paint and varnish containing organic solvents or other dangerous substances

**: Evidence for disposal must be provided.*

Waste code packaging

15 01 04	metallic packaging

Waste treatment options

Appropriate disposal / Package:
Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, Flammable
14.3. Transport hazard class(es)			
 2.1	No data available	 2.1	 2.1
14.4. Packing group			
		-	

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.5. Environmental hazards			
No data available	No data available	No data available	No data available
14.6. Special precautions for user			
Special Provisions: Attention: Gases **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0 **Classification code:** 5F **Tunnel restriction code:** (D) **Remark:** Transport category 2	No data available	**Special Provisions:** Attention: Gases **Limited quantity (LQ):** 1L **Excepted Quantities (EQ):** E0 **EmS-No.:** F-D,S-U **Remark:** Stowage Code: SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.	**Special Provisions:** Attention: Gases

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

15.1.1. EU legislation

Restrictions on use:

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients are included.
Seveso category P3a FLAMMABLE AEROSOLS
Quantity threshold (in tons) for use in lower class farms150t
Quantity threshold (in tons) for use in upper-tier establishments 500t
Regulation (EC) 2019/1021 [POP Regulation] None of the ingredients are included.
Regulation (EC) No 1907/2006 ANNEX XVII Restriction conditions: 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 are included.
Substances of Very High Concern (SVHC) according to REACH, Article 57 None of the ingredients are included.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:
Volatile organic compounds (VOC) content in percent by weight: 665 g/L

15.1.2. National regulations
No data available

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out.

SECTION 16: Other information

*
16.1. Indication of changes

1.3.	Details of the supplier of the safety data sheet
3.2.	Mixtures
8.1.	Control parameters
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
13.1.	Waste treatment methods
16.1.	Indication of changes

Limit value / limit values updated: DE, HR, SI

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
ES	Exposure scenario
EWC	European Waste Catalogue
IC_{50}	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PC	Product category
PNEC	Predicted No Effect Concentration
PROC	Process Category
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

16.3. Key literature references and sources for data
No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
STOT-single exposure *(STOT SE 3)*	H336: May cause drowsiness or dizziness.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.