

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830



PUP-001

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

1.1. Product identifier

Product name : PUP-001
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Coating

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
☎ +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
☎ +32 14 85 97 38
info@tec7.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.
Skin Sens.	category 1	H317: May cause an allergic skin reaction.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
STOT SE	category 3	H336: May cause drowsiness or dizziness.

2.2. Label elements



Contains: ethyl acetate; reaction product: bisfenol-A-epichlorohydrins, epoxy-resins (average molecular weight 700-1100); fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine.

Signal word Danger

H-statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

P-statements

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

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P211 Do not spray on an open flame or other ignition source.
 P251 Do not pierce or burn, even after use.
 P280 Wear protective gloves, protective clothing and eye protection/face protection.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

Supplemental information

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
dimethyl ether 01-2119472128-37	115-10-6 204-065-8	25%<C<50%	Flam. Gas 1; H220 Press. Gas - Liquefied gas;	(1)(2)(10)	Propellant
ethyl acetate 01-2119475103-46	141-78-6 205-500-4	10%<C<25%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
acetone 01-2119471330-49	67-64-1 200-662-2	10% ≤C≤12.5%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
propan-2-ol 01-2119457558-25	67-63-0 200-661-7	2.5%<C<10%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
xylene 01-2119488216-32	1330-20-7 215-535-7	2.5%<C<10%	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Asp. Tox. 1; H304 STOT RE 2; H373 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Chronic 3; H412	(1)(2)(6)(10)	Constituent
ethanol 01-2119457610-43	64-17-5 200-578-6	2.5%<C<10%	Flam. Liq. 2; H225 Eye Irrit. 2; H319	(1)(2)(6)(8)(10)	Constituent
n-butyl acetate 01-2119485493-29	123-86-4 204-658-1	0.1%≤C≤5%	Flam. Liq. 3; H226 STOT SE 3; H336	(1)(2)(10)	Constituent
reaction product: bisfenol-A-epichlorohydrins, epoxy-resins (average molecular weight 700-1100)	25068-38-6	1%≤C<2.5%	Skin Sens. 1; H317 Skin Irrit. 2; H315 Eye Irrit. 2; H319	(1)(8)	Constituent
nitrocellulose	9004-70-0	0.1%≤C<2.5%	Expl. 1.1; H201	(1)	Constituent
2-methoxy-1-methylethyl acetate 01-2119475791-29	108-65-6 203-603-9	0.1% ≤C<2.5%	Flam. Liq. 3; H226 STOT SE 3; H336	(1)(2)(10)	Constituent
ethylbenzene 01-2119489370-35	100-41-4 202-849-4	0.1% ≤C<2.5%	Flam. Liq. 2; H225 Acute Tox. 4; H332 Asp. Tox. 1; H304 STOT RE 2; H373 Aquatic Chronic 3; H412	(1)(2)(6)(10)	Constituent
fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	162627-17-0	0.1%≤C≤1%	Skin Sens. 1A; H317	(1)(10)	Constituent

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

(8) Specific concentration limits, see heading 16

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

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SECTION 4: First aid measures

4.1. Description of first aid measures

General:

GENERAL. Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Do not apply (chemical) neutralizing agents without medical advice. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not apply (chemical) neutralizing agents without medical advice. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Drowsiness. Dizziness.

After skin contact:

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

After eye contact:

Irritation of the eye tissue.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

Major fire: Quantities of water.

5.2. Special hazards arising from the substance or mixture

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours, hydrogen chloride. Pressurised container: May burst if heated.

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: compressed air apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective goggles (EN 166). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Dam up the liquid spill.

6.3. Methods and material for containment and cleaning up

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Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe very strict hygiene - avoid contact.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Keep out of direct sunlight. Keep container in a well-ventilated place. Fireproof storeroom. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, ignition sources.

7.2.3 Suitable packaging material:

Aerosol.

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

2-Methoxy-1-methylethylacetate	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	50 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	275 mg/m ³
	Short time value (Indicative occupational exposure limit value)	100 ppm
	Short time value (Indicative occupational exposure limit value)	550 mg/m ³
Acetone	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	500 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1210 mg/m ³
Dimethylether	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1000 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1920 mg/m ³
Ethyl acetate	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	734 mg/m ³
	Short time value (Indicative occupational exposure limit value)	400 ppm
	Short time value (Indicative occupational exposure limit value)	1468 mg/m ³
Ethylbenzene	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	100 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	442 mg/m ³
	Short time value (Indicative occupational exposure limit value)	200 ppm
	Short time value (Indicative occupational exposure limit value)	884 mg/m ³
n-Butyl acetate	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	50 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	241 mg/m ³
	Short time value (Indicative occupational exposure limit value)	150 ppm
	Short time value (Indicative occupational exposure limit value)	723 mg/m ³
Xylene, mixed isomers, pure	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	50 ppm

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Xylene, mixed isomers, pure	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	221 mg/m ³
	Short time value (Indicative occupational exposure limit value)	100 ppm
	Short time value (Indicative occupational exposure limit value)	442 mg/m ³

Belgium

Acétate d'éthyle	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	734 mg/m ³
	Short time value	400 ppm
	Short time value	1468 mg/m ³
Acétate de 2-(1-méthoxy)propyle	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	275 mg/m ³
	Short time value	100 ppm
	Short time value	550 mg/m ³
Acétate de n-butyle	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	238 mg/m ³
	Short time value	150 ppm
	Short time value	712 mg/m ³
Acétone	Time-weighted average exposure limit 8 h	500 ppm
	Time-weighted average exposure limit 8 h	1210 mg/m ³
	Short time value	1000 ppm
	Short time value	2420 mg/m ³
Alcool éthylique	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1907 mg/m ³
Alcool isopropylique	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	500 mg/m ³
	Short time value	400 ppm
	Short time value	1000 mg/m ³
Ethylbenzène	Time-weighted average exposure limit 8 h	20 ppm
	Time-weighted average exposure limit 8 h	87 mg/m ³
	Short time value	125 ppm
	Short time value	551 mg/m ³
Oxyde de diméthyle	Time-weighted average exposure limit 8 h	1000 ppm
	Time-weighted average exposure limit 8 h	1920 mg/m ³
Xylène, isomères mixtes, purs	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	221 mg/m ³
	Short time value	100 ppm
	Short time value	442 mg/m ³

The Netherlands

1-methoxy-2-propylacetaat	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	100 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	550 mg/m ³
Aceton	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	501 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1210 mg/m ³
	Short time value (Public occupational exposure limit value)	1002 ppm
	Short time value (Public occupational exposure limit value)	2420 mg/m ³
Dimethylether	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	496 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	950 mg/m ³
	Short time value (Public occupational exposure limit value)	783 ppm
	Short time value (Public occupational exposure limit value)	1500 mg/m ³
Ethanol	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	136 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	260 mg/m ³
	Short time value (Public occupational exposure limit value)	992 ppm
	Short time value (Public occupational exposure limit value)	1900 mg/m ³
Ethylacetaat	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	734 mg/m ³
	Short time value (Public occupational exposure limit value)	1468 mg/m ³
Ethylbenzeen	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	49 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	215 mg/m ³
	Short time value (Public occupational exposure limit value)	97 ppm

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Ethylbenzeen	Short time value (Public occupational exposure limit value)	430 mg/m ³
Xyleen (o-,m- en p-isomeren)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	48 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	210 mg/m ³
	Short time value (Public occupational exposure limit value)	100 ppm
	Short time value (Public occupational exposure limit value)	442 mg/m ³

France

Acétate de 2-méthoxy-1-méthyléthyle	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	50 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	275 mg/m ³
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	550 mg/m ³
Acétate de n-butyle	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	150 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	710 mg/m ³
	Short time value (VL: Valeur non réglementaire indicative)	200 ppm
	Short time value (VL: Valeur non réglementaire indicative)	940 mg/m ³
Acétate d'éthyle	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	400 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1400 mg/m ³
Acétone	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	500 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1210 mg/m ³
	Short time value (VRC: Valeur réglementaire contraignante)	1000 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	2420 mg/m ³
Alcool éthylique	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m ³
	Short time value (VL: Valeur non réglementaire indicative)	5000 ppm
	Short time value (VL: Valeur non réglementaire indicative)	9500 mg/m ³
Alcool isopropylique	Short time value (VL: Valeur non réglementaire indicative)	400 ppm
	Short time value (VL: Valeur non réglementaire indicative)	980 mg/m ³
Ethylbenzène	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	20 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	88.4 mg/m ³
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	442 mg/m ³
Oxyde de diméthyle	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1000 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	1920 mg/m ³
Xylènes, isomères mixtes, purs	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	50 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	221 mg/m ³
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	442 mg/m ³

Germany

2-Methoxy-1-methylethylacetat	Time-weighted average exposure limit 8 h (TRGS 900)	50 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	270 mg/m ³
Aceton	Time-weighted average exposure limit 8 h (TRGS 900)	500 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1200 mg/m ³
Dimethylether	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1900 mg/m ³
Ethanol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	380 mg/m ³
Ethylacetat	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	730 mg/m ³
Ethylbenzol	Time-weighted average exposure limit 8 h (TRGS 900)	20 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	88 mg/m ³
n-Butylacetat	Time-weighted average exposure limit 8 h (TRGS 900)	62 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	300 mg/m ³

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Propan-2-ol	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	500 mg/m ³
Xylol (alle Isomeren)	Time-weighted average exposure limit 8 h (TRGS 900)	100 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	440 mg/m ³

UK

1-Methoxypropyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	50 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	274 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	100 ppm
	Short time value (Workplace exposure limit (EH40/2005))	548 mg/m ³
Acetone	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	500 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1210 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	1500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	3620 mg/m ³
Butyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	150 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	724 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	200 ppm
	Short time value (Workplace exposure limit (EH40/2005))	966 mg/m ³
Dimethyl ether	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	400 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	766 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	958 mg/m ³
Ethanol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1000 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1920 mg/m ³
Ethyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	200 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	734 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	400 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1468 mg/m ³
Ethylbenzene	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	100 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	441 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	125 ppm
	Short time value (Workplace exposure limit (EH40/2005))	552 mg/m ³
Propan-2-ol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	400 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	999 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1250 mg/m ³
Xylene, o-,m-,p- or mixed isomers	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	50 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	220 mg/m ³
	Short time value (Workplace exposure limit (EH40/2005))	100 ppm
	Short time value (Workplace exposure limit (EH40/2005))	441 mg/m ³

USA (TLV-ACGIH)

2-propanol	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	200 ppm
	Short time value (TLV - Adopted Value)	400 ppm
Acetone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	250 ppm
	Short time value (TLV - Adopted Value)	500 ppm
Butyl acetates, all isomers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	50 ppm
	Short time value (TLV - Adopted Value)	150 ppm
Ethanol	Short time value (TLV - Adopted Value)	1000 ppm
Ethyl acetate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	400 ppm
Ethyl benzene	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	20 ppm
Xylene (all isomers)	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	100 ppm
	Short time value (TLV - Adopted Value)	150 ppm

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b) National biological limit values

If limit values are applicable and available these will be listed below.

Germany

Aceton (Aceton)	Urin: expositionsende, bzw. schichtende	80 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Ethylbenzol (Mandelsäure plus Phenylglyoxylsäure)	Urin: expositionsende, bzw. schichtende	250 mg/g Kreatinin	11/2016 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Propan-2-ol (Aceton)	Urin: expositionsende, bzw. schichtende	25 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Propan-2-ol (Aceton)	Vollblut: expositionsende, bzw. schichtende	25 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Vitamin K-Antagonisten (Quick-Wert)	Vollblut: keine beschränkung	Reduktion auf nicht weniger als 70%	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Xylol (alle isomeren) (Methylhippur-(Tolur-)säure (alle isomere))	Urin: expositionsende, bzw. schichtende	2000 mg/l	11/2016 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Xylol (alle isomeren) (Xylol)	Vollblut: expositionsende, bzw. schichtende	1,5 mg/l	11/2016 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG

UK

Xylene, o-, m-, p- or mixed isomers (methyl hippuric acid)	Urine: post shift	650 mmol/mol creatinine	
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USA (BEI-ACGIH)

2-Propanol (Acetone)	Urine: end of shift at end of workweek	40 mg/L	
Acetone (Acetone)	Urine: end of shift	25 mg/L	
Ethyl benzene (Sum of mandelic acid and phenylglyoxylic acid)	Urine: end of shift	0,15 mg/g creatinine	
Xylen (Methylhippuric acids)	Urine: end of shift	1,5 g/g creatinine	

8.1.2 Sampling methods

Product name	Test	Number
1-Methoxy-2-Propyl Acetate	OSHA	99
Acetone (ketones 1)	NIOSH	1300
Acetone (ketones I)	NIOSH	2555
Acetone (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Acetone (Volatile Organic compounds)	NIOSH	2549
ACETONE and METHYL ETHYL KETONE in urine	NIOSH	8319
Acetone	OSHA	69
Butyl acetate (Volatile Organic compounds)	NIOSH	2549
Ethanol (Volatile Organic compounds)	NIOSH	2549
ethanol	NIOSH	8002
Ethyl acetate (Volatile Organic compounds)	NIOSH	2549
Ethyl Acetate	NIOSH	1457
Ethyl Acetate	OSHA	7
Ethyl Alcohol (Ethanol)(Alcohols I)	NIOSH	1400
Ethyl Alcohol	OSHA	100
Ethyl Benzene (Hydrocarbons, Aromatic)	NIOSH	1501
Ethyl Benzene	OSHA	1002
Ethyl Benzene	OSHA	7
Isopropanol (Volatile Organic compounds)	NIOSH	2549
Isopropyl Alcohol (Alcohols I)	NIOSH	1400
Isopropyl Alcohol	OSHA	109
n-Butyl Acetate (Esters I)	NIOSH	1450
n-Butyl Acetate	OSHA	1009
Propylene glycol monomethyl ether acetate (glycol ethers)	NIOSH	2554
Xylene (Hydrocarbons, aromatic)	NIOSH	1501
Xylene (Volatile Organic compounds)	NIOSH	2549

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

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ethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	734 mg/m ³	
	Acute systemic effects inhalation	1468 mg/m ³	
	Long-term local effects inhalation	734 mg/m ³	
	Acute local effects inhalation	1468 mg/m ³	
	Long-term systemic effects dermal	63 mg/kg bw/day	

acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1210 mg/m ³	
	Acute local effects inhalation	2420 mg/m ³	
	Long-term systemic effects dermal	186 mg/kg bw/day	

propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	500 mg/m ³	
	Long-term systemic effects dermal	888 mg/kg bw/day	

xylene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	221 mg/m ³	
	Acute systemic effects inhalation	442 mg/m ³	
	Long-term local effects inhalation	221 mg/m ³	
	Acute local effects inhalation	442 mg/m ³	
	Long-term systemic effects dermal	212 mg/kg bw/day	

ethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	950 mg/m ³	
	Long-term systemic effects dermal	343 mg/kg bw/day	

n-butyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	300 mg/m ³	
	Acute systemic effects inhalation	600 mg/m ³	
	Long-term local effects inhalation	300 mg/m ³	
	Acute local effects inhalation	600 mg/m ³	
	Long-term systemic effects dermal	11 mg/kg bw/day	
	Acute systemic effects dermal	11 mg/kg bw/day	

2-methoxy-1-methylethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	275 mg/m ³	
	Acute local effects inhalation	550 mg/m ³	
	Long-term systemic effects dermal	796 mg/kg bw	

ethylbenzene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	77 mg/m ³	
	Acute local effects inhalation	293 mg/m ³	
	Long-term systemic effects dermal	180 mg/kg bw/day	

DNEL/DMEL - General population

ethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	367 mg/m ³	
	Acute systemic effects inhalation	734 mg/m ³	
	Long-term local effects inhalation	367 mg/m ³	
	Acute local effects inhalation	734 mg/m ³	
	Long-term systemic effects dermal	37 mg/kg bw/day	
	Long-term systemic effects oral	4.5 mg/kg bw/day	

acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	200 mg/m ³	
	Long-term systemic effects dermal	62 mg/kg bw/day	
	Long-term systemic effects oral	62 mg/kg bw/day	

propan-2-ol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	89 mg/m ³	
	Long-term systemic effects dermal	319 mg/kg bw/day	
	Long-term systemic effects oral	26 mg/kg bw/day	

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xylene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	65.3 mg/m ³	
	Acute systemic effects inhalation	260 mg/m ³	
	Long-term local effects inhalation	65.3 mg/m ³	
	Acute local effects inhalation	260 mg/m ³	
	Long-term systemic effects dermal	125 mg/kg bw/day	
	Long-term systemic effects oral	12.5 mg/kg bw/day	

ethanol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	114 mg/m ³	
	Long-term systemic effects dermal	206 mg/kg bw/day	
	Long-term systemic effects oral	87 mg/kg bw/day	

n-butyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	35.7 mg/m ³	
	Acute systemic effects inhalation	300 mg/m ³	
	Long-term local effects inhalation	35.7 mg/m ³	
	Acute local effects inhalation	300 mg/m ³	
	Long-term systemic effects dermal	6 mg/kg bw/day	
	Acute systemic effects dermal	6 mg/kg bw/day	
	Long-term systemic effects oral	2 mg/kg bw/day	
	Acute systemic effects oral	2 mg/kg bw/day	

2-methoxy-1-methylethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	33 mg/m ³	
	Long-term local effects inhalation	33 mg/m ³	
	Long-term systemic effects dermal	320 mg/kg bw	
	Long-term systemic effects oral	36 mg/kg bw	

ethylbenzene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	15 mg/m ³	
	Long-term systemic effects oral	1.6 mg/kg bw/day	

PNEC

ethyl acetate

Compartments	Value	Remark
Fresh water	0.24 mg/l	
Aqua (intermittent releases)	1.65 mg/l	
Marine water	0.024 mg/l	
STP	650 mg/l	
Fresh water sediment	1.15 mg/kg sediment dw	
Marine water sediment	0.115 mg/kg sediment dw	
Soil	0.148 mg/kg soil dw	
Oral	0.2 g/kg food	

acetone

Compartments	Value	Remark
Fresh water	10.6 mg/l	
Marine water	1.06 mg/l	
Fresh water (intermittent releases)	21 mg/l	
STP	100 mg/l	
Fresh water sediment	30.4 mg/kg sediment dw	
Marine water sediment	3.04 mg/kg sediment dw	
Soil	29.5 mg/kg soil dw	

propan-2-ol

Compartments	Value	Remark
Fresh water	140.9 mg/l	
Marine water	140.9 mg/l	
Fresh water (intermittent releases)	140.9 mg/l	
STP	2251 mg/l	
Fresh water sediment	552 mg/kg sediment dw	
Marine water sediment	552 mg/kg sediment dw	
Soil	28 mg/kg soil dw	
Oral	160 mg/kg food	

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xylene

Compartments	Value	Remark
Fresh water	0.327 mg/l	
Marine water	0.327 mg/l	
Fresh water (intermittent releases)	0.327 mg/l	
STP	6.58 mg/l	
Fresh water sediment	12.46 mg/kg sediment dw	
Marine water sediment	12.46 mg/kg sediment dw	
Soil	2.31 mg/kg soil dw	

ethanol

Compartments	Value	Remark
Fresh water	0.96 mg/l	
Marine water	0.79 mg/l	
Aqua (intermittent releases)	2.75 mg/l	
STP	580 mg/l	
Fresh water sediment	3.6 mg/kg sediment dw	
Marine water sediment	2.9 mg/kg sediment dw	
Soil	0.63 mg/kg soil dw	
Oral	0.38 g/kg food	

n-butyl acetate

Compartments	Value	Remark
Fresh water	0.18 mg/l	
Marine water	0.018 mg/l	
Aqua (intermittent releases)	0.36 mg/l	
Fresh water sediment	0.981 mg/kg sediment dw	
Marine water sediment	0.098 mg/kg sediment dw	
Soil	0.09 mg/kg soil dw	
STP	35.6 mg/l	

2-methoxy-1-methylethyl acetate

Compartments	Value	Remark
Fresh water	0.635 mg/l	
Marine water	0.064 mg/l	
Aqua (intermittent releases)	6.35 mg/l	
STP	100 mg/l	
Fresh water sediment	3.29 mg/kg sediment dw	
Marine water sediment	0.329 mg/kg sediment dw	
Soil	0.29 mg/kg soil dw	

ethylbenzene

Compartments	Value	Remark
Fresh water	0.1 mg/l	
Marine water	0.01 mg/l	
Fresh water (intermittent releases)	0.1 mg/l	
STP	9.6 mg/l	
Fresh water sediment	13.7 mg/kg sediment dw	
Marine water sediment	1.37 mg/kg sediment dw	
Soil	2.68 mg/kg soil dw	
Oral	0.02 g/kg food	

fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

Compartments	Value	Remark
Soil	5.8 mg/kg soil ww	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Head/neck protection. Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

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See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Aerosol
Odour	Characteristic odour
Odour threshold	No data available in the literature
Colour	Variable in colour, depending on the composition
Particle size	Not applicable (liquid)
Explosion limits	2.1 - 18.6 vol % ; Propellant
Flammability	Extremely flammable aerosol.
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available in the literature
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature
Boiling point	56 °C ; Liquid
Evaporation rate	No data available in the literature
Relative vapour density	No data available in the literature
Vapour pressure	5200 hPa ; 20 °C ; Propellant
Solubility	Water ; insoluble ; Liquid
Relative density	0.87 ; 20 °C ; Liquid
Decomposition temperature	No data available in the literature
Auto-ignition temperature	Not applicable (aerosol)
Flash point	Not applicable (aerosol)
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available in the literature

9.2. Other information

Absolute density	873 kg/m ³ ; 20 °C ; Liquid
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SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO₂ and small quantities of nitrous vapours, hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

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No (test)data on the mixture available

Judgement is based on the relevant ingredients

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ethyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	10200 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	24 hour cuff method	> 20000 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC0	Equivalent to OECD 403	29.3 mg/l	4 h	Rat	Experimental value	

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5800 mg/kg		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	20000 mg/kg		Rabbit (male)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 15800 mg/kg bw	24 h	Rabbit (male)	Weight of evidence	
Inhalation (vapours)	LC50	Other	76 mg/l	4 h	Rat (female)	Weight of evidence	

propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5840 mg/kg bw		Rat	Experimental value	
Dermal	LD50	Equivalent to OECD 402	16400 mg/kg bw	24 h	Rabbit	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 10000 ppm	6 h	Rat (male / female)	Experimental value	

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to EU Method B.1	3523 mg/kg bw		Rat (male)	Experimental value	
Dermal	LD50		> 4200 mg/kg bw	4 h	Rabbit (male)	Weight of evidence	
Dermal			category 4			Annex VI	
Inhalation (vapours)	LC50	Equivalent to EU Method B.2	29 mg/l	4 h	Rat (male)	Experimental value	
Inhalation			category 4			Annex VI	

ethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	10470 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation (vapours)	LC50	Equivalent to OECD 403	124.7 mg/l air	4 h	Rat (male / female)	Experimental value	

n-butyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 423	10760 mg/kg bw - 12789 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	14112 mg/kg bw		Rabbit (male / female)	Experimental value	

nitrocellulose

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 5000 mg/kg		Rat		

2-methoxy-1-methylethyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	6190 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 5000 mg/kg bw		Rabbit (male / female)	Experimental value	
Inhalation	LC0	Equivalent to OECD 403	10.8 mg/l	3 h	Rat (male)	Experimental value	

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ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		3500 mg/kg		Rat (male / female)	Experimental value	
Dermal	LD50		15432 mg/kg	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50		17.8 mg/l	4 h	Rat (male)		

fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 10000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation						Data waiving	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

PUP-001

No (test)data on the mixture available

Classification is based on the relevant ingredients

ethyl acetate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating	Equivalent to OECD 405		1; 24; 48; 72 hrs; 7; 14; 21 days	Rabbit	Experimental value	Single treatment
Eye	Irritating; category 2					Annex VI	
Skin	Slightly irritating	Equivalent to OECD 404	24 h	24; 48; 72 hours	Rabbit	Experimental value	

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

acetone

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405		24; 48; 72 hours	Rabbit	Weight of evidence	
Skin	Not irritating	Other	3 day(s)	24; 48; 72 hours	Guinea pig	Weight of evidence	
Inhalation	Slightly irritating	Human observation study	20 minutes		Human	Literature	

propan-2-ol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	Equivalent to OECD 405		24 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating		4 h	4; 24; 48; 72 hours	Rabbit	Experimental value	

xylene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Moderately irritating			24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Moderately irritating		24 h	24; 72 hours	Rabbit	Experimental value	
Inhalation (vapours)	Irritating		4 h		Human	Read-across	
Inhalation	Irritating; STOT SE cat.3					Annex VI	

ethanol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405	14 day(s)	24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating	OECD 404	24 h	1; 2; 3; 4; 5; 7 days	Rabbit	Experimental value	Single treatment

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n-butyl acetate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	
Dermal	Not irritating	Equivalent to OECD 404		24; 48; 72 hours	Rabbit	Experimental value	

reaction product: bisfenol-A-epichlorohydrins, epoxy-resins (average molecular weight 700-1100)

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Literature study	
Skin	Irritating; category 2					Literature study	

2-methoxy-1-methylethyl acetate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

ethylbenzene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating			7 days	Rabbit	Experimental value	
Skin	Moderately irritating		24 h	24 hours	Rabbit	Experimental value	

Conclusion

Causes serious eye irritation.
 Not classified as irritating to the skin
 Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

PUP-001

No (test) data on the mixture available
 Classification is based on the relevant ingredients

ethyl acetate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Intradermal	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (female)	Experimental value	

acetone

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Human observation			Human	Literature	

propan-2-ol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (male / female)	Experimental value	

xylene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 429			Mouse	Experimental value	

ethanol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 429			Mouse (male)	Experimental value	
Inhalation (vapours)	Not sensitizing				Rat (male / female)	Experimental value	

n-butyl acetate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 408			Guinea pig	Experimental value	

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reaction product: bisfenol-A-epichlorohydrins, epoxy-resins (average molecular weight 700-1100)

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
	Sensitizing; category 1					Literature study	

2-methoxy-1-methylethyl acetate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406		24; 48 hours	Guinea pig (male / female)	Experimental value	

ethylbenzene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	

fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Sensitizing	OECD 429			Mouse (female)	Experimental value	

Conclusion

May cause an allergic skin reaction.
Not classified as sensitizing for inhalation

Specific target organ toxicity

PUP-001

No (test)data on the mixture available

Classification is based on the relevant ingredients
ethyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	EPA OTS 795.2600	900 mg/kg bw/day	General	No effect	90 day(s) - 92 day(s)	Rat (male / female)	Experimental value
Oral (stomach tube)	LOAEL	EPA OTS 795.2600	3600 mg/kg bw/day	General	Body weight, organ weight, food consumption	90 day(s) - 92 day(s)	Rat (male / female)	Experimental value
Inhalation	NOEC	EPA OTS 798.2450	350 ppm	General	No adverse systemic effects	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation			STOT SE cat.3		Drowsiness, dizziness			Annex VI

acetone

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	Equivalent to OECD 408	20 mg/l		No effect	13 week(s)	Mouse (male / female)	Experimental value
Inhalation (vapours)	NOAEC		19000 ppm		No effect	8 week(s)	Rat (male)	Weight of evidence
Inhalation (vapours)	Dose level	Human observation study	361 ppm	Central nervous system	neurotoxic effects	2 day(s)	Human	Epidemiological study

propan-2-ol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (vapours)	NOAEC	OECD 451	5000 ppm		No effect	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation (vapours)	Dose level	Equivalent to OECD 403	5000 ppm	Central nervous system	Drowsiness, dizziness	6 h	Rat (male / female)	Experimental value

xylene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	150 mg/kg bw/day	Liver	Weight gain	90 day(s)	Rat (male)	Experimental value
Inhalation (vapours)	NOAEC		≥ 3515 mg/m ³		No effect	13 weeks (6h / day, 5 days / week)	Rat (male)	Experimental value

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ethanol

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	3160 mg/kg	Liver; kidney	No effect	7 weeks (daily) - 14 weeks (daily)	Rat (male)	Experimental value
Dermal								Data waiving
Inhalation (vapours)	LOAEC	Equivalent to OECD 453	1.3 mg/l air	Pituitary	Histology	12 month(s)	Rat (male / female)	Read-across

n-butyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Inhalation	NOAEC	EPA OTS 798.2450	500 ppm		No adverse systemic effects	13 weeks (daily, 5 days / week)	Rat (male / female)	Experimental value

2-methoxy-1-methylethyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 422	≥ 1000 mg/kg		No effect	41 day(s) - 45 day(s)	Rat (male / female)	Experimental value
Dermal	NOAEL	Equivalent to OECD 410	> 1000 mg/kg bw/day		No effect	3 weeks (5 days / week)	Rabbit (male / female)	Read-across
Inhalation (vapours)	NOEL	OECD 453	300 ppm		No effect	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Read-across

ethylbenzene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 408	75 mg/kg bw/day		No effect	13 week(s)	Rat (male / female)	Experimental value
Oral (stomach tube)	LOAEL	OECD 408	250 mg/kg bw/day	Liver	Enlargement/affection of the liver	13 week(s)	Rat (male / female)	Experimental value
	NOAEC		78 mg/kg bw/day	Hearing organs			Rat	
Inhalation	NOAEL	Equivalent to OECD 413	1000 ppm		No effect	13 weeks (6h / day, 5 days / week)	Mouse (male / female)	Experimental value
Inhalation	NOAEC		114 ppm	Hearing organs	No effect	90 day(s)	Rat	Experimental value
Inhalation	Dose level		> 200 ppm	Hearing organs	Impairment/deneration	90 day(s)	Rat	Experimental value

Due to differences in metabolism the relevance for humans if swallowed is questioned

Conclusion

May cause drowsiness or dizziness.
Not classified for subchronic toxicity

Mutagenicity (in vitro)

PUP-001

No (test) data on the mixture available
Judgement is based on the relevant ingredients

ethyl acetate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

acetone

Result	Method	Test substrate	Effect	Value determination	Remark
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

propan-2-ol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

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PUP-001

xylene

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to EU Method B.19	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

ethanol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	

n-butyl acetate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative	OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative	OECD 473	Chinese hamster lung fibroblasts (V79)		Experimental value	

2-methoxy-1-methylethyl acetate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

ethylbenzene

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	

Mutagenicity (in vivo)

PUP-001

No (test)data on the mixture available

Judgement is based on the relevant ingredients

ethyl acetate

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male)		Experimental value

acetone

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative		13 week(s)	Mouse (male / female)		Literature

propan-2-ol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male / female)		Experimental value

xylene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 478		Mouse (male / female)		Experimental value

ethanol

Result	Method	Exposure time	Test substrate	Organ	Value determination
Ambiguous (Oral (stomach tube))	Equivalent to OECD 478	5 days (1x / day)	Mouse (male)	General	Experimental value

n-butyl acetate

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474		Mouse (male / female)		Read-across

ethylbenzene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474		Mouse (male)		Experimental value

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

PUP-001

No (test)data on the mixture available

Publication date: 2020-01-10

PUP-001

Judgement is based on the relevant ingredients

acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Dermal	NOEL	Other	79 mg	51 week(s)	Mouse (female)	No effect		Literature

propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOEL	OECD 451	5000 ppm	104 weeks (6h / day, 5 days / week)	Rat (male / female)	No carcinogenic effect		Experimental value

xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	NOAEL	Equivalent to EU Method B.32	≥ 500 mg/kg bw/day	103 weeks (5 days / week)	Rat (male / female)	No carcinogenic effect		Experimental value
Oral	NOAEL	Equivalent to EU Method B.32	≥ 1000 mg/kg bw/day	103 weeks (5 days / week)	Mouse (male / female)	No carcinogenic effect		Experimental value

ethanol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	≥ 1.3 ppm	24 month(s)	Rat (male / female)	No carcinogenic effect		Read-across
Oral (diet)	NOAEL	Equivalent to OECD 451	> 3000 mg/kg bw/day	104 weeks (daily)	Rat (male / female)	No carcinogenic effect		Experimental value

2-methoxy-1-methylethyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOEL	OECD 453	≥ 11.07 mg/l air	104 weeks (6h / day, 5 days / week)	Mouse (male / female)	No carcinogenic effect		Read-across

ethylbenzene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	250 ppm	104 weeks (6h / day, 5 days / week)	Rat (male / female)	No carcinogenic effect		Experimental value

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

PUP-001

No (test) data on the mixture available

Judgement is based on the relevant ingredients

ethyl acetate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	> 3600 mg/kg bw/day	7 day(s)	Mouse	No effect	Foetus	Read-across
Maternal toxicity	NOAEL	Equivalent to OECD 414	2200 mg/kg bw/day	8 days (gestation, daily) - 14 days (gestation, daily)	Mouse	No effect		Read-across
	LOAEL	Equivalent to OECD 414	3600 mg/kg bw/day	8 days (gestation, daily) - 14 days (gestation, daily)	Mouse	Mortality	General	Read-across
Effects on fertility	NOAEL	Equivalent to OECD 416	20700 mg/kg bw/day	13 weeks (6h / day, 5 days / week)	Mouse (male / female)	No effect		Experimental value

acetone

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	11000 ppm	6 days (gestation, daily) - 19 days (gestation, daily)	Rat (male / female)			Experimental value
Effects on fertility	NOAEL	Other	900 mg/kg bw/day	13 week(s)	Rat (male)	No effect		Literature

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propan-2-ol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat	No effect	Foetus	Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	400 mg/kg bw/day	10 day(s)	Rat (female)	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL	Equivalent to OECD 415	853 mg/kg bw/day	21 day(s) - 70 day(s)	Rat (male / female)	No effect		Experimental value

xylene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (vapours))	BMCL10	Equivalent to OECD 414	1082 ppm	15 days (gestation, daily)	Rat (female)	No effect		Experimental value
Maternal toxicity (Inhalation (vapours))	BMCL10	Equivalent to OECD 414	887 ppm	15 days (gestation, daily)	Rat (female)	No effect		Experimental value
Effects on fertility (Inhalation (vapours))	NOAEC (P)	EPA OPPTS 870.3800	≥ 500 ppm	70 days (6h / day)	Rat (male / female)	No effect		Read-across

ethanol

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	≥ 20000 ppm	20 days (7h / day)	Rat (male)	No effect	Stomach	Experimental value
Maternal toxicity (Inhalation (vapours))	NOAEL	Equivalent to OECD 414	16000 ppm	20 days (7h / day)	Rat (female)	No effect		Experimental value
Effects on fertility (Oral (drinking water))	NOAEL (P)	Equivalent to OECD 416	20700 mg/kg bw/day	18 week(s)	Mouse (male / female)	No effect		Experimental value

n-butyl acetate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	LOAEC	Equivalent to OECD 414	1500 ppm		Rat	Body weight, organ weight, food consumption		Experimental value
	NOAEC	Equivalent to OECD 414	1500 ppm		Rabbit			Experimental value
Effects on fertility	NOAEC	OECD 416	2000 ppm	> 90 day(s)	Rat (male / female)	No effect		Experimental value

2-methoxy-1-methylethyl acetate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	1500 ppm	10 days (gestation, daily)	Rat	No effect	Foetus	Read-across
Maternal toxicity	NOAEL	Equivalent to OECD 414	1500 ppm	10 days (gestation, daily)	Rat	No effect		Read-across
Effects on fertility	NOEL	OECD 416	1000 ppm		Rat (male / female)	No effect		Read-across

ethylbenzene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	OECD 414	500 ppm	15 days (gestation, daily)	Rat (female)	No effect	Foetus	Experimental value
Maternal toxicity	NOAEC	OECD 414	500 ppm	15 days (gestation, daily)	Rat	No effect		Experimental value
Effects on fertility	NOAEC (P/F1/F2)	OECD 416	500 ppm	70 days (6h / day)	Rat (male / female)	No effect		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

PUP-001

No (test)data on the mixture available

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ethyl acetate

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Dehydration	6 days (1x / day)	Human	Experimental value Skin
			Skin	Skin dryness or cracking			Literature Skin

acetone

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study Skin

n-butyl acetate

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
NOEC	EPA OTS 798.6050	1500 ppm		Hypoactivity	6 h	Rat (male / female)	Experimental value
NOAEC	EPA OTS 798.6050	500 ppm		no neurotoxic effects	13 week(s)	Rat (male / female)	Experimental value

Conclusion

Repeated exposure may cause skin dryness or cracking.

Chronic effects from short and long-term exposure

PUP-001

Skin rash/inflammation.

SECTION 12: Ecological information

12.1. Toxicity

PUP-001

No (test) data on the mixture available

Judgement of the mixture is based on the relevant ingredients

ethyl acetate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	230 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	EC50		154 mg/l	48 h	Daphnia magna			Literature
Toxicity algae and other aquatic plants	NOEC	OECD 201	> 100 mg/l	72 h	Scenedesmus subspicatus	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	ECOSAR v1.00	6.3 mg/l	32 day(s)	Pisces		Fresh water	QSAR
	NOEC	OECD 210	< 9.65 mg/l	32 day(s)	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2.4 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC50		5870 mg/l	15 minutes	Photobacterium phosphoreum	Static system	Salt water	Experimental value; Inhibition

acetone

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EU Method C.1	5540 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea						Static system	Fresh water	Experimental value
	LC50	Other	12600 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50		> 7000 mg/l	96 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2212 mg/l	28 day(s)	Daphnia magna	Flow-through system	Fresh water	Experimental value

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propan-2-ol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	9640 mg/l - 10000 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	LC50	Equivalent to OECD 202	> 10000 mg/l	24 h	Daphnia magna	Static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	Toxicity threshold		1800 mg/l	7 day(s)	Scenedesmus quadricauda	Static system	Fresh water	Experimental value; Toxicity test
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea	NOEC		2344 µmol/l	16 day(s)	Daphnia magna		Fresh water	Experimental value; Growth
Toxicity aquatic micro-organisms	Toxicity threshold	Equivalent to DIN 38412/8	1050 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Toxicity test
	EC50	ISO 8192	41676 mg/l	30 minutes	Activated sludge			Experimental value

xylene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2.6 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Read-across; Lethal
Acute toxicity crustacea	IC50	OECD 202	1 mg/l	24 h	Daphnia magna	Static system	Fresh water	Read-across
Toxicity algae and other aquatic plants	ErC50	OECD 201	4.36 mg/l	73 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; GLP
	NOEC	OECD 201	0.44 mg/l	73 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; GLP
Long-term toxicity fish	NOEC		> 1.3 mg/l	56 day(s)	Oncorhynchus mykiss	Flow-through system	Fresh water	Read-across; Lethal
Long-term toxicity aquatic crustacea	NOEC	EPA 600/4-91-003	0.96 mg/l	7 day(s)	Ceriodaphnia dubia	Daily renewal	Fresh water	Read-across; Reproduction
Toxicity aquatic micro-organisms	EC50	OECD 209	> 157 mg/l	3 h	Activated sludge	Static system	Fresh water	Read-across; GLP

ethanol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	15300 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	LC50	ASTM E729-80	5012 mg/l	48 h	Ceriodaphnia dubia	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	Equivalent to OECD 201	275 mg/l	3 day(s)	Chlorella vulgaris	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish	ChV	US EPA	245 mg/l	30 day(s)	Pisces		Fresh water	QSAR; Lethal
Long-term toxicity aquatic crustacea	NOEC		9.6 mg/l	9 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Nominal concentration
Toxicity aquatic micro-organisms	EC50		5800 mg/l	4 h	Paramecium caudatum	Static system	Fresh water	Experimental value; Nominal concentration

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PUP-001

n-butyl acetate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	18 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	EC50		44 mg/l	48 h	Daphnia sp.	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50		674.7 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value
	NOEC		200 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value
Long-term toxicity aquatic crustacea	NOEC	OECD 211	23 mg/l	21 day(s)	Daphnia magna		Fresh water	Read-across

	Parameter	Method	Value	Duration	Species	Value determination
Toxicity terrestrial plants	EC50	Equivalent to OECD 208	> 1000 mg/kg soil dw	14 day(s)	Lactuca sativa	Experimental value

2-methoxy-1-methylethyl acetate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	100 mg/l - 180 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	EU Method C.2	> 500 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	NOEC	OECD 201	≥ 1000 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	EC50	OECD 201	> 1000 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish	NOEC	OECD 204	47.5 mg/l	14 day(s)	Oryzias latipes	Flow-through system	Fresh water	Experimental value; GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	≥ 100 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	EC10	Equivalent to OECD 209	> 1000 mg/l	30 minutes	Activated sludge	Static system	Fresh water	Experimental value

ethylbenzene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	4.2 mg/l	96 h	Salmo gairdneri	Semi-static system	Fresh water	Experimental value
Acute toxicity crustacea	EC50	US EPA	1.8 mg/l - 2.4 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50	OECD 201	4.6 mg/l	72 h	Selenastrum capricornutum			Experimental value; Growth rate
	NOEC	US EPA	4.5 mg/l	96 h	Skeletonema costatum	Static system	Marine water	Experimental value; GLP
Long-term toxicity fish	ChV	ECOSAR v1.00	1.13 mg/l	30 day(s)	Pisces			QSAR
Long-term toxicity aquatic crustacea	NOEC	US EPA	1 mg/l	7 day(s)	Ceriodaphnia dubia	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC50		96 mg/l	24 h	Nitrosomonas			Experimental value

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

ethyl acetate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	93.9 %	28 day(s)	Experimental value
OECD 301D: Closed Bottle Test	100 %	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	40 h	500000 /cm ³	QSAR

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acetone

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	90.9 %	28 day(s)	Experimental value

xylene

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	98 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	23.2 h	500000 /cm ³	Read-across

Biodegradation soil

Method	Value	Duration	Value determination
Equivalent or similar to OECD 304A	50 %	23 day(s)	Experimental value

ethanol

Biodegradation water

Method	Value	Duration	Value determination
	84 %; Oxygen consumption	20 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	40 h	500000 /cm ³	Calculated value

n-butyl acetate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D: Closed Bottle Test	83 %	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	3.3 day(s)	500000 /cm ³	Experimental value

2-methoxy-1-methylethyl acetate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	83 %; GLP	28 day(s)	Experimental value

Biodegradation soil

Method	Value	Duration	Value determination
Equivalent or similar to OECD 304A	> 57 %	1 day(s)	Experimental value

ethylbenzene

Biodegradation water

Method	Value	Duration	Value determination
ISO 14593	70 % - 80 %; GLP	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
	2.3 day(s)	500000 /cm ³	Literature study

Half-life soil (t1/2 soil)

Method	Value	Primary degradation/mineralisation	Value determination
	3 day(s) - 10 day(s)		Literature study

fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	0 %	28 day(s)	Experimental value

Conclusion

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

PUP-001

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

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PUP-001

ethyl acetate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		30	3 day(s)	Leuciscus idus	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
EPA OPPTS 830.7560		0.68	25 °C	Experimental value

acetone

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFWIN	3			Read-across

Log Kow

Method	Remark	Value	Temperature	Value determination
		-0.23		Test data

propan-2-ol

Log Kow

Method	Remark	Value	Temperature	Value determination
		0.05	25 °C	Weight of evidence approach

xylene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		25.9	56 day(s)	Oncorhynchus mykiss	Read-across

Log Kow

Method	Remark	Value	Temperature	Value determination
		3.12 - 3.2	20 °C	Read-across

ethanol

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		1 - 4.5	72 h	Cyprinus carpio	Read-across

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		-0.35	24 °C	Experimental value

n-butyl acetate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		15.3			Calculated value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		2.3	25 °C	Test data

nitrocellulose

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		3.162 l/kg; Fresh weight			Estimated value

Log Kow

Method	Remark	Value	Temperature	Value determination
		-4.56		Estimated value

2-methoxy-1-methylethyl acetate

Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 117		1.2	20 °C	Experimental value

ethylbenzene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		1	6 week(s)	Oncorhynchus kisutch	Literature study

Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		3.6	20 °C	Experimental value

fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		> 5.5	20 °C	Practical experience/observation

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

Publication date: 2020-01-10

PUP-001

ethyl acetate

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	51.3 %	0 %	0.27 %	13.3 %	35.3 %	Calculated value

propan-2-ol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.185 - 0.541	Calculated value

xylene

(log) Koc

Parameter	Method	Value	Value determination
log Koc	Equivalent to OECD 121	2.73	Read-across

ethanol

(log) Koc

Parameter	Method	Value	Value determination
log Koc		0	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	53.2 %		0.1 %	13.7 %	33.1 %	QSAR

n-butyl acetate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.268 - 1.844	QSAR

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
28.5 Pa.m ³ /mol		25 °C		Experimental value

nitrocellulose

(log) Koc

Parameter	Method	Value	Value determination
log Koc		1	Calculated value

2-methoxy-1-methylethyl acetate

(log) Koc

Parameter	Method	Value	Value determination
log Koc		0.264	QSAR

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
3.44E-6 atm m ³ /mol		25 °C		Estimated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	10.22 %	0 %	0.02 %	0.03 %	89.73 %	Calculated value

ethylbenzene

(log) Koc

Parameter	Method	Value	Value determination
log Koc	PCKOCWIN v1.66	2.71	QSAR

fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	> 1.3	Experimental value

Conclusion

Contains component(s) with potential for mobility in the soil

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

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Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

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ethyl acetate

Groundwater

Groundwater pollutant

propan-2-ol

Groundwater

Groundwater pollutant

ethanol

Groundwater

Groundwater pollutant

n-butyl acetate

Groundwater

Groundwater pollutant

2-methoxy-1-methylethyl acetate

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 01 11* (wastes from MFSU and removal of paint and varnish: waste paint and varnish containing organic solvents or other hazardous substances).

14 06 03* (waste organic solvents, refrigerants and foam/aerosol propellants: other solvents and solvent mixtures). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste.

Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number

UN number	1950
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14.2. UN proper shipping name

Proper shipping name	Aerosols
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14.3. Transport hazard class(es)

Hazard identification number	
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Class	2
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Classification code	5F
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14.4. Packing group

Packing group	
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Labels	2.1
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14.5. Environmental hazards

Environmentally hazardous substance mark	no
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14.6. Special precautions for user

Special provisions	190
--------------------	-----

Special provisions	327
--------------------	-----

Special provisions	344
--------------------	-----

Special provisions	625
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Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
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Rail (RID)

14.1. UN number

UN number	1950
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14.2. UN proper shipping name

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Proper shipping name	Aerosols
14.3. Transport hazard class(es)	
Hazard identification number	23
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Inland waterways (ADN)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols
14.3. Transport hazard class(es)	
Class	2
Classification code	5F
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

Sea (IMDG/IMSBC)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	aerosols
14.3. Transport hazard class(es)	
Class	2.1
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Marine pollutant	-
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	
Annex II of MARPOL 73/78	Not applicable

Air (ICAO-TI/IATA-DGR)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	

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Class	2.1
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	A145
Special provisions	A167
Special provisions	A802
Passenger and cargo transport	
Limited quantities: maximum net quantity per packaging	30 kg G

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
77.93 %	

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

xylene

Product name	Skin resorption
Xylene, mixed isomers, pure	Skin

2-methoxy-1-methylethyl acetate

Product name	Skin resorption
2-Methoxy-1-methylethylacetate	Skin

ethylbenzene

Product name	Skin resorption
Ethylbenzene	Skin

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
<ul style="list-style-type: none"> · ethyl acetate · acetone · propan-2-ol · xylene · ethanol · n-butyl acetate · 2-methoxy-1-methylethyl acetate · ethylbenzene · fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine 	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage"; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those

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<ul style="list-style-type: none"> · ethyl acetate · acetone · propan-2-ol · xylene · ethanol · n-butyl acetate · 2-methoxy-1-methylethyl acetate · ethylbenzene 	<p>Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.</p>	<p>data available to the Commission.'</p> <ol style="list-style-type: none"> 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: <ul style="list-style-type: none"> – metallic glitter intended mainly for decoration, – artificial snow and frost, – “whoopee” cushions, – silly string aerosols, – imitation excrement, – horns for parties, – decorative flakes and foams, – artificial cobwebs, – stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: <p>“For professional users only”.</p> 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.
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National legislation Belgium

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No data available

xylene

Résorption peau	Xylène, isomères mixtes, purs; D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.
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2-methoxy-1-methylethyl acetate

Résorption peau	Acétate de 2-(1-méthoxy)propyle; D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.
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ethylbenzene

Résorption peau	Ethylbenzène; D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.
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National legislation The Netherlands

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Waterbezwaarlijkheid	B (3); Algemene Beoordelingsmethodiek (ABM)
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xylene

Huidopname (wettelijk)	Xyleen (o-,m- en p-isomeren); H
SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	xyleen; 2; Suspected of damaging the unborn child.

ethanol

Huidopname (wettelijk)	Ethanol; H
SZW - Lijst van kankerverwekkende stoffen	Ethanol; Listed in SZW-list of carcinogenic substances
SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	Ethanol; 1A; May damage the unborn child.
SZW - Lijst van voor de voortplanting giftige stoffen (vruchtbaarheid)	Ethanol; 1A; May damage fertility.
SZW - Lijst van voor de voortplanting giftige stoffen (borstvoeding)	Ethanol; May cause harm to breastfed babies

ethylbenzene

Huidopname (wettelijk)	Ethylbenzeen; H
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National legislation France

PUP-001

No data available

xylene

Risque de pénétration percutanée	Xylènes, isomères mixtes, purs; PP
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2-methoxy-1-methylethyl acetate

Risque de pénétration percutanée	Acétate de 2-méthoxy-1-méthyléthyle; PP
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ethylbenzene

Risque de pénétration percutanée	Ethylbenzène; PP
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National legislation Germany

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WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
ethyl acetate	
TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Ethylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
acetone	
TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Aceton; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
propan-2-ol	
TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Propan-2-ol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
xylene	
TA-Luft	5.2.5/l
Hautresorptive Stoffe	Xylol (alle Isomeren); H; Hautresorptiv
ethanol	
TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Ethanol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
n-butyl acetate	
TA-Luft	5.2.5/l
TRGS900 - Risiko der Fruchtschädigung	n-Butylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
nitrocellulose	
TA-Luft	5.2.1
2-methoxy-1-methylethyl acetate	
TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	2-Methoxy-1-methylethylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
ethylbenzene	
TA-Luft	5.2.5/l
TRGS900 - Risiko der Fruchtschädigung	Ethylbenzol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Hautresorptive Stoffe	Ethylbenzol; H; Hautresorptiv
fatty acids, C18, unsaturated, dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	
TA-Luft	5.2.5/l

National legislation United Kingdom

PUP-001

No data available

xylene

Skin absorption	Xylene, o-,m-,p- or mixed isomers; Sk
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2-methoxy-1-methylethyl acetate

Skin absorption	1-Methoxypropyl acetate; Sk
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ethylbenzene

Skin absorption	Ethylbenzene; Sk
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Other relevant data

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No data available

acetone

TLV - Carcinogen	Acetone; A4
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propan-2-ol

IARC - classification	3; Isopropanol
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TLV - Carcinogen	2-propanol; A4
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xylene

IARC - classification	3; Xylenes
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TLV - Carcinogen	Xylene (all isomers); A4
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ethanol

IARC - classification	1; Alcohol beverages
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TLV - Carcinogen	Ethanol; A3
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ethylbenzene

IARC - classification	2B; Ethylbenzene
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TLV - Carcinogen	Ethyl benzene; A3
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15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

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SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

- H201 Explosive; mass explosion hazard.
- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H229 Pressurised container: May burst if heated.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- 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 (ears (hearing damage)) through prolonged or repeated exposure.
- H373 May cause damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure if swallowed.
- H373 May cause damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure if inhaled.
- H412 Harmful to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ERC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

Specific concentration limits CLP

ethanol	C ≥ 50 %	Eye Irrit. 2; H319	ECHA
reaction product: bisfenol-A-epichlorohydrins, epoxy-resins (average molecular weight 700-1100)	C ≥ 5 %	Skin Irrit. 2; H315	C&L
	C ≥ 5 %	Eye Irrit. 2; H319	C&L

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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