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COVER SHEET FOR THE SAFETY DATA SHEET

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Item number: G388

Trade name: Nitro Thinner (Universal Thinner UO M)

Supplier:
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Tel. +41 31 932 11 66

Emergency number:
24-hour emergency number: 145
Help with poisoning. Tox Info Suisse provides free medical advice round the clock in cases of poisoning or suspected poisoning.

Tox Info Suisse
Freiestrasse 16
8032 Zürich
Tel. +41 (0) 44 251 51 51
www.toxinfo.ch

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006, as amended

ALL PURPOSE THINNER U OM

Version 1.0 Print Date 26.11.2026

Revision date / valid from 12.07.2024

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

1.1. Product identifier

Trade name	:	ALL PURPOSE THINNER U OM
UFI	:	HPMK-91W4-4007-8M9M
UFI code notified in	:	Austria, Germany

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

Use of the Substance/Mixture	:	thinner
Uses advised against	:	At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company	:	Brenntag Schweizerhall AG Elsässerstrasse 231 CH 4002 Basel
Telephone	:	+41 (0)58 344 80 00
Telefax	:	+41 (0)58 344 82 08
E-mail address	:	doku@brenntag.ch
Responsible/issuing person	:	Abteilung Produktsicherheit

1.4. Emergency telephone number

Emergency telephone number	:	Swiss Toxicological Information Centre CH-8032 ZÜRICH Tel.: +41 (0) 44 251 51 51 National emergency call: 145

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008

Hazard class	Hazard category	Target Organs	Hazard statements
Flammable liquids	Category 2	---	H225
Skin irritation	Category 2	---	H315
Serious eye damage	Category 1	---	H318
Reproductive toxicity	Category 2	---	H361d
Specific target organ toxicity - single exposure	Category 3	Central nervous system	H336
Specific target organ toxicity - single exposure	Category 3	Respiratory system	H335
Specific target organ toxicity - repeated exposure	Category 2	Auditory system, Liver, Kidney, Central nervous system	H373
Aspiration hazard	Category 1	---	H304
Long-term (chronic) aquatic hazard	Category 3	---	H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health :
Physical and chemical hazards : See section 9/10 for physicochemical information.
Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols :



Signal word : Danger

Hazard statements :

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs (Auditory

			system, Liver, Kidney, Central nervous system) through prolonged or repeated exposure.
		H412	Harmful to aquatic life with long lasting effects.
Precautionary statements			
Prevention	:	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
		P260	Do not breathe mist or vapours.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response	:	P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
		P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
		P331	Do NOT induce vomiting.
		P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

- toluene
- Reaction mass of ethylbenzene and xylene
- butanone
- 2-methylpropan-1-ol

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
toluene Index-No. : 601-021-00-3 CAS-No. : 108-88-3 EC-No. : 203-625-9 EU REACH-Reg. No. : 01-2119471310-51-xxxx	>= 30 - < 50	Flam. Liq.2 Repr.2 Asp. Tox.1 Skin Irrit.2 STOT SE3 STOT RE2 Aquatic Chronic3	H225 H361d H304 H315 H336 H373 H412
Reaction mass of ethylbenzene and xylene EC-No. : 905-588-0 EU REACH-Reg. No. : 01-2119486136-34-xxxx 01-2119488216-32-xxxx	>= 10 - < 20	Flam. Liq.3 Acute Tox.4 Inhalation Acute Tox.4 Dermal Skin Irrit.2 Eye Irrit.2 STOT SE3 STOT RE2 Inhalation Asp. Tox.1 Acute toxicity estimate Acute inhalation toxicity (vapour): 11 mg/l Acute dermal toxicity: 1100 mg/kg	H226 H332 H312 H315 H319 H335 H373 H304
butanone Index-No. : 606-002-00-3 CAS-No. : 78-93-3 EC-No. : 201-159-0 EU REACH-Reg. No. : 01-2119457290-43-xxxx	>= 10 - < 20	Flam. Liq.2 Eye Irrit.2 STOT SE3	H225 H319 H336 EUH066
methyl acetate Index-No. : 607-021-00-X CAS-No. : 79-20-9 EC-No. : 201-185-2 EU REACH-Reg. No. : 01-2119459211-47-xxxx	>= 10 - < 20	Flam. Liq.2 Eye Irrit.2 STOT SE3	H225 H319 H336 EUH066
ethyl acetate Index-No. : 607-022-00-5 CAS-No. : 141-78-6 EC-No. : 205-500-4 EU REACH-Reg. No. : 01-2119475103-46-xxxx	>= 10 - < 20	Flam. Liq.2 Eye Irrit.2 STOT SE3	H225 H319 H336 EUH066
isobutyl acetate Index-No. : 607-026-00-7 CAS-No. : 110-19-0 EC-No. : 203-745-1 EU REACH-Reg. No. : 01-2119488971-22-xxxx	>= 1 - < 10	Flam. Liq.2 STOT SE3 Note C	H225 H336 EUH066

2-methylpropan-1-ol			
Index-No. : 603-108-00-1 CAS-No. : 78-83-1 EC-No. : 201-148-0 EU REACH-Reg. No. : 01-2119484609-23-xxxx	>= 3 - < 10	Flam. Liq.3 Skin Irrit.2 Eye Dam.1 STOT SE3 STOT SE3	H226 H315 H318 H335 H336
propan-2-ol			
Index-No. : 603-117-00-0 CAS-No. : 67-63-0 EC-No. : 200-661-7 EU REACH-Reg. No. : 01-2119457558-25-xxxx	>= 1 - < 10	Flam. Liq.2 Eye Irrit.2 STOT SE3	H225 H319 H336
1-methoxy-2-propanol			
Index-No. : 603-064-00-3 CAS-No. : 107-98-2 EC-No. : 203-539-1 EU REACH-Reg. No. : 01-2119457435-35-xxxx	>= 1 - < 10	Flam. Liq.3 STOT SE3	H226 H336

For the full text of the H-Statements mentioned in this Section, see Section 16.
For the full text of the Notes mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position and seek medical advice. If symptoms call a physician.

In case of skin contact : After contact with skin, wash immediately with plenty of water. If symptoms call a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

If swallowed : Rinse mouth with water. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Call a physician immediately.

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

Symptoms : See Section 11 for more detailed information on health effects and symptoms.

Effects	: See Section 11 for more detailed information on health effects and symptoms. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

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

Treatment	: Treat symptomatically.For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Flash back possible over considerable distance.
Hazardous combustion products	:	Carbon monoxide, Carbon dioxide (CO2)

5.3. Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.Wear personal protective equipment.
Further advice	:	Cool closed containers exposed to fire with water spray.Heating will cause a pressure rise - with risk of bursting.Collect contaminated fire extinguishing water separately. This must not be discharged into drains.Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	: Keep away from heat and sources of ignition. Use personal protective equipment. Keep away unprotected persons. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

6.2. Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	:	Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
Hygiene measures	:	Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in original container. Keep in an area equipped with solvent resistant flooring.
Advice on protection against fire and explosion	:	Keep away from sources of ignition - No smoking. The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixtures with air. Take measures to prevent the build up of electrostatic charge. Use only in an area containing explosion proof equipment.
Further information on storage conditions	:	Keep tightly closed in a dry and cool place. Keep away from direct sunlight. Keep in a well-ventilated place.
Advice on common storage	:	Incompatible with oxidizing agents. Do not store together with oxidizing and self-igniting products. Keep away from food, drink and animal feedingstuffs.
German storage class	:	3 Flammable Liquids

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	toluene	CAS-No. 108-88-3

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Inhalation : 192 mg/m3

DNEL
Workers, Long-term - local effects, Inhalation : 192 mg/m3

DNEL
Workers, Acute - systemic effects, Inhalation : 384 mg/m3

DNEL
Workers, Acute - local effects, Inhalation : 384 mg/m3

DNEL
Workers, Long-term - systemic effects, Skin contact : 384 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 56,5 mg/m3

DNEL
Consumers, Long-term - local effects, Inhalation : 56,5 mg/m3

DNEL
Consumers, Acute - systemic effects, Inhalation : 226 mg/m3

DNEL
Consumers, Acute - local effects, Inhalation : 226 mg/m3

DNEL
Consumers, Long-term - systemic effects, Skin contact : 226 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Ingestion : 8,13 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water (AF = 1), extrapolated	:	0,68 mg/l
Marine water (AF = 1), extrapolated	:	0,68 mg/l
Intermittent releases (AF = 1), extrapolated	:	0,68 mg/l
Sewage treatment plant (STP) (AF = 1), extrapolated	:	13,61 mg/l
Fresh water sediment Partition coefficient	:	16,39 mg/kg dry weight (d.w.)
Marine sediment	:	16,39 mg/kg dry weight (d.w.)
Soil Partition coefficient	:	2,89 mg/kg dry weight (d.w.)

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
50 ppm, 192 mg/m3
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
100 ppm, 384 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
200 ppm, 760 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
50 ppm, 190 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Skin designation:
Can be absorbed through the skin.

Biological Exposure Indices

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, Hippuric acid, Creatinine in urine
2 g/g, Sampling time: c) Long term exposure after several (4-5) work shifts. b) End of exposure / end of shift.
Unspecified parameter, Environmental effects
Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, toluene, Blood
600 µg/l, Sampling time: End of exposure / end of shift.
Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, o-Cresol, Urine
0,5 mg/l, Sampling time: b) End of exposure / end of shift. c) Long term exposure after several (4-5) work shifts.
Quantitative Interpretation difficult

Component: Reaction mass of ethylbenzene and xylene

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Inhalation : 77 mg/m3

DNEL
Workers, Long-term - local effects, Inhalation : 221 mg/m3

DNEL
Workers, Acute - systemic effects, Inhalation : 289 mg/m3

DNEL
Workers, Acute - local effects, Inhalation : 289 mg/m3

DNEL
Workers, Long-term - systemic effects, Skin contact : 180 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 14,8 mg/m3

DNEL
Consumers, Long-term - local effects, Inhalation : 174 mg/m3

DNEL
Consumers, Acute - systemic effects, Inhalation : 174 mg/m3

DNEL
Consumers, Long-term - systemic effects, Skin contact : 108 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Ingestion : 1,6 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water : 0,327 mg/l

Marine water	:	0,327 mg/l
Sewage treatment plant (STP)	:	6,58 mg/l
Fresh water sediment	:	12,64 mg/kg dry weight (d.w.)
Marine sediment	:	12,64 mg/kg dry weight (d.w.)
Soil	:	2,31 mg/kg dry weight (d.w.)

Component:	**butanone**	**CAS-No. 78-93-3**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL Workers, Long-term - systemic effects, Skin contact	:	1161 mg/kg bw/day
DNEL Workers, Long-term - systemic effects, Inhalation	:	600 mg/m3
DNEL Consumers, Long-term - systemic effects, Skin contact	:	412 mg/kg bw/day
DNEL Consumers, Long-term - systemic effects, Inhalation	:	106 mg/m3
DNEL Consumers, Long-term - systemic effects, Ingestion	:	31 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	55,8 mg/l
Marine water	:	55,8 mg/l
Intermittent releases	:	55,8 mg/l
Sewage treatment plant (STP)	:	709 mg/l
Sediment	:	284,7 mg/kg dry weight (d.w.)
Soil	:	22,5 mg/kg
Secondary poisoning	:	1000 mg/kg food

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
200 ppm, 600 mg/m3
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
300 ppm, 900 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
200 ppm, 590 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
200 ppm, 590 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Skin designation:
Can be absorbed through the skin.

Biological Exposure Indices

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, MEK, Urine
2 mg/l, Sampling time: End of exposure / end of shift.

Component:	**methyl acetate**	**CAS-No. 79-20-9**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Inhalation : 300 mg/m3

DNEL
Workers, Acute - systemic effects, Inhalation : 3777 mg/m3

DNEL
Workers, Long-term - local effects, Inhalation : 620 mg/m3

DNEL
Workers, Long-term - systemic effects, Skin contact : 43 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 64 mg/m3

DNEL Consumers, Acute - systemic effects, Inhalation	:	3777 mg/m3
DNEL Consumers, Long-term - systemic effects, Skin contact	:	21,5 mg/kg bw/day
DNEL Consumers, Acute - systemic effects, Skin contact	:	203 mg/kg bw/day
DNEL Consumers, Long-term - systemic effects, Ingestion	:	203 mg/kg bw/day
DNEL Consumers, Acute - systemic effects, Ingestion	:	203 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	0,12 mg/l
Marine water	:	0,012 mg/l
Intermittent releases	:	1,2 mg/l
Sewage treatment plant (STP)	:	600 mg/l
Fresh water sediment	:	0,128 mg/kg d.w.
Marine sediment	:	0,0128 mg/kg d.w.
Soil	:	0,0416 mg/kg d.w.
Secondary poisoning	:	20,4 mg/kg food

Other Occupational Exposure Limit Values

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
400 ppm, 1.240 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
100 ppm, 310 mg/m3

Component:	**ethyl acetate**	**CAS-No. 141-78-6**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)		
DNEL Workers, Long-term - systemic effects, Inhalation	:	734 mg/m3, 200 ppm
DNEL Workers, Acute - systemic effects, Inhalation	:	1468 mg/m3, 400 ppm
DNEL Workers, Long-term - local effects, Inhalation	:	734 mg/m3, 200 ppm
DNEL Workers, Acute - local effects, Inhalation	:	1468 mg/m3, 400 ppm
DNEL Workers, Long-term - systemic effects, Skin contact	:	63 mg/kg bw/day
DNEL Consumers, Long-term - systemic effects, Inhalation	:	367 mg/m3
DNEL Consumers, Acute - systemic effects, Inhalation	:	734 mg/m3, 200 ppm
DNEL Consumers, Long-term - local effects, Inhalation	:	367 mg/m3
DNEL Consumers, Acute - local effects, Inhalation	:	734 mg/m3, 200 ppm
DNEL Consumers, Long-term - systemic effects, Skin contact	:	37 mg/kg bw/day
DNEL Consumers, long-term, Ingestion	:	4,5 mg/kg bw/day

Predicted No Effect Concentration (PNEC)		
Fresh water	:	0,24 mg/l
Marine water	:	0,024 mg/l
Intermittent releases	:	1,65 mg/l
Sewage treatment plant (STP)	:	650 mg/l
Fresh water sediment	:	1,15 mg/kg
Marine sediment	:	0,115 mg/kg
Soil	:	0,148 mg/kg

Secondary poisoning	:	200 mg/kg food

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
200 ppm, 734 mg/m3
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
400 ppm, 1.468 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
200 ppm, 730 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
400 ppm, 1.460 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Component:	**isobutyl acetate**	**CAS-No. 110-19-0**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL Workers, Long-term - systemic effects, Inhalation	:	300 mg/m3
DNEL Workers, Acute - systemic effects, Inhalation	:	600 mg/m3
DNEL Workers, Long-term - local effects, Inhalation	:	300 mg/m3
DNEL Workers, Acute - local effects, Inhalation	:	600 mg/m3
DNEL Workers, Long-term - systemic effects, Skin contact	:	10 mg/kg bw/day
DNEL Workers, Acute - systemic effects, Skin contact	:	10 mg/kg bw/day
DNEL		

Consumers, Long-term - systemic effects, Inhalation	:	35,7 mg/m3
DNEL Consumers, Acute - systemic effects, Inhalation	:	300 mg/m3
DNEL Consumers, Long-term - local effects, Inhalation	:	35,7 mg/m3
DNEL Consumers, Acute - local effects, Inhalation	:	300 mg/m3
DNEL Consumers, Long-term - systemic effects, Skin contact	:	5 mg/kg bw/day
DNEL Consumers, Acute - systemic effects, Skin contact	:	5 mg/kg bw/day
DNEL Consumers, Long-term - systemic effects, Ingestion	:	5 mg/kg bw/day
DNEL Consumers, Acute - systemic effects, Ingestion	:	5 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	0,17 mg/l
Marine water	:	0,017 mg/l
Intermittent releases	:	0,34 mg/l
Sewage treatment plant (STP)	:	200 mg/l
Fresh water sediment	:	0,877 mg/kg d.w.
Marine sediment	:	0,0877 mg/kg d.w.
Soil	:	0,0755 mg/kg d.w.

Other Occupational Exposure Limit Values

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
200 ppm, 960 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
100 ppm, 480 mg/m3

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
150 ppm, 723 mg/m3
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
50 ppm, 241 mg/m3
Indicative

Component:	**2-methylpropan-1-ol**	**CAS-No. 78-83-1**

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - local effects, Inhalation : 310 mg/m3

DNEL
Consumers, Long-term - local effects, Inhalation : 55 mg/m3

Predicted No Effect Concentration (PNEC)

Fresh water	:	0,4 mg/l
Marine water	:	0,04 mg/l
Intermittent releases	:	11 mg/l
Sewage treatment plant (STP)	:	10 mg/l
Fresh water sediment	:	1,56 mg/kg
Marine sediment	:	0,156 mg/kg
Soil	:	0,0756 mg/kg

Other Occupational Exposure Limit Values

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
50 ppm, 150 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
50 ppm, 150 mg/m3

Component:	propan-2-ol	CAS-No. 67-63-0

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Skin contact : 888 mg/kg bw/day

DNEL
Workers, Long-term - systemic effects, Inhalation : 500 mg/m3

DNEL
Consumers, Long-term - systemic effects, Skin contact : 319 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 89 mg/m3

DNEL
Consumers, Long-term - systemic effects, Ingestion : 26 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	140,9 mg/l
Marine water	:	140,9 mg/l
Intermittent releases	:	140,9 mg/l
Sewage treatment plant (STP)	:	2251 mg/l
Sediment	:	552 mg/kg d.w.
Soil	:	28 mg/kg
Secondary poisoning	:	160 mg/kg food

Other Occupational Exposure Limit Values

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
200 ppm, 500 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
400 ppm, 1.000 mg/m3

Biological Exposure Indices

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, acetone, Urine
25 mg/l, Sampling time: End of exposure / end of shift.
Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, acetone, Blood
25 mg/l, Sampling time: End of exposure / end of shift.

Component: 1-methoxy-2-propanol CAS-No. 107-98-2

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Acute - local effects, Inhalation : 553,5 mg/m3

DNEL
Workers, Long-term - systemic effects, Skin contact : 50,6 mg/kg bw/day

DNEL
Workers, Long-term - systemic effects, Inhalation : 369 mg/m3

DNEL
Consumers, Long-term - systemic effects, Skin contact : 18,1 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 43,9 mg/m3

DNEL
Consumers, Long-term - systemic effects, Ingestion : 3,3 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	10 mg/l
Marine water	:	1 mg/l
Intermittent releases	:	100 mg/l
Sewage treatment plant (STP)	:	100 mg/l
Fresh water sediment	:	52,3 mg/kg d.w.
Marine sediment	:	5,2 mg/kg d.w.
Soil	:	4,59 mg/kg d.w.

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL):
150 ppm, 568 mg/m3
Indicative

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
100 ppm, 375 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
100 ppm, 360 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended
If in compliance with the OEL and BEL values, then there should be no risk of reproductive damage.

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
200 ppm, 720 mg/m3

Biological Exposure Indices

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, 1-Methoxy-2-Propanol, Urine
20 mg/l, Sampling time: End of exposure / end of shift.

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice	:	In case of insufficient ventilation, wear suitable respiratory equipment. When aerosol or mist is formed use suitable respiratory protection. Combination filter: A-P2 Equipment should conform to EN 14387

Hand protection

Advice	:	Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.

Eye protection

Advice : Safety goggles

Skin and body protection

Protecting Clothes : Wear personal protective equipment.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform respective authorities.
If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	:	clear
Physical state	:	liquid
Colour	:	colourless
Odour	:	solvent-like
Odour Threshold	:	No data available
Freezing point	:	No data available
Initial boiling point and boiling range	:	ca. 77 °C
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	< 0 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	substance/mixture is non-soluble (in water) Not applicable

Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Dispersion Stability	:	No data available
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	0,86 g/cm3 (20 °C)
Bulk density	:	No data available
Relative vapour density	:	No data available

Particle characteristics
No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : No information available.

10.4. Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products : Under fire conditions: Carbon oxides

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Data for the product		
Acute toxicity		
Oral		
No data available		
Inhalation		
Acute toxicity estimate	:	> 20 mg/l (4 h; vapour) (Calculation method)
Dermal		
Acute toxicity estimate	:	> 2000 mg/kg) (Calculation method)
Irritation		
Skin		
No data available		
Eyes		
No data available		
Sensitisation		
No data available		
CMR effects		
CMR Properties		
Carcinogenicity	:	No data available
Mutagenicity	:	No data available
Reproductive toxicity	:	No data available
Specific Target Organ Toxicity		

Single exposure
No data available

Repeated exposure
No data available

Other toxic properties

Repeated dose toxicity
No data available

Aspiration hazard
No data available

Component:	toluene	CAS-No. 108-88-3

Acute toxicity		
Oral		
LD50	:	5580 mg/kg (Rat, male) (OECD Test Guideline 401)
Inhalation		
LC50	:	28,1 mg/l (Rat, male and female; 4 h; vapour) (OECD Test Guideline 403)
LC50	:	25,7 mg/l (Rat, male; 4 h; vapour) (OECD Test Guideline 403)
LC50	:	30 mg/l (Rat, female; 4 h; vapour) (OECD Test Guideline 403)
Dermal		
LD50	:	> 5000 mg/kg (Rabbit, male)

Irritation		
Skin		
Result	:	Irritating to skin. (Rabbit) (OECD Test Guideline 404)Danger by skin absorption.
Eyes		
Result	:	No eye irritation (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result	:	not sensitizing (Maximisation Test; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	Animal experiments showed teratogenic effects. Suspected of damaging the unborn child.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.

Specific Target Organ Toxicity

Single exposure

Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.

Repeated exposure

Inhalation	:	May cause damage to organs through prolonged or repeated exposure.

Other toxic properties

Aspiration hazard

May be fatal if swallowed and enters airways.,

Component: Reaction mass of ethylbenzene and xylene

Acute toxicity

Oral

No valid data available.

Inhalation

No valid data available.

Dermal

No valid data available.

Irritation

Skin

Result	:	(Irritating to skin.) Prolonged skin contact may defat the skin and produce dermatitis.

Eyes

Result	:	Causes serious eye irritation.

Sensitisation

Result	:	No sensitizing effect known.

CMR effects

CMR Properties

Carcinogenicity	:	Based on available data, the classification criteria are not met.
Mutagenicity	:	Based on available data, the classification criteria are not met.
Reproductive toxicity	:	Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity

Single exposure

Remarks	:	May cause respiratory irritation.

Repeated exposure

Remarks	:	Target Organs: Auditory system, Liver, Kidney, Central nervous systemMay cause damage to organs through prolonged or repeated exposure.

Other toxic properties

Aspiration hazard

May be fatal if swallowed and enters airways.,

Further information

Other relevant toxicity information	:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Component:	**butanone**	**CAS-No. 78-93-3**

Acute toxicity

Oral		
LD50	:	> 2193 mg/kg (Rat) (OECD Test Guideline 423)

Inhalation		
LC50	:	34 mg/l (Rat; 4 h)

Dermal		
LD50	:	> 5000 mg/kg (Rabbit) (OECD Test Guideline 402)

Irritation

Skin

Result	:	No skin irritation (Rabbit; 4 h) (OECD Test Guideline 404)Repeated exposure may cause skin dryness or cracking.

Eyes

Result	:	Eye irritation (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result	:	not sensitizing (Buehler Test; Dermal; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

Carcinogenicity	:	Not expected to be carcinogenic.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	Animal testing did not show any effects on foetal development.
Reproductive toxicity	:	Not expected to impair fertility. Read-across (Analogy)

Genotoxicity in vitro

Result	:	negative (rat hepatocytes) (OECD Test Guideline 473) negative (Mouse Lymphoma Cells) (OECD Test Guideline 476) negative (Salmonella typhimurium) (OECD Test Guideline 471)

Genotoxicity in vivo

Result	:	negative (Mouse, male and female) (OECD Test Guideline 474)

Teratogenicity

NOAEC Develop.	:	1.002 ppm (Rat)(18 d; 7 hours/day)(OECD Test Guideline 414)Based on available data, the classification criteria are not met.
LOAEC Develop.	:	3.000 ppm (Rat)(18 d; 7 hours/day)(OECD Test Guideline 414)Body weight loss

Specific Target Organ Toxicity

Single exposure

Remarks	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.

Repeated exposure

Remarks	:	No known significant effects or critical hazards.

Other toxic properties

Repeated dose toxicity

NOAEC	:	5041 ppm (Rat, male and female)(Inhalation; vapour; 4 month; 6 hours/day) (OECD Test Guideline 413); No adverse effect has been observed with repeated intake in toxicity tests.

Aspiration hazard

No aspiration toxicity classification,

Further information

Experience with human exposure	:	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Chronic exposure may cause dermatitis.,

Component:	**methyl acetate**	**CAS-No. 79-20-9**

Acute toxicity

Oral

LD50	:	6482 mg/kg (Rat, male) (OECD Test Guideline 401)

Inhalation

LC50	:	> 49 mg/l (Rabbit, male and female; 4 h; vapour) (No guideline followed)

Dermal

LD50	:	> 2000 mg/kg (Rat, male and female) (OECD Test Guideline 402)

Irritation

Skin

Result	:	No skin irritation (Rabbit) (OECD Test Guideline 404)Repeated exposure may cause skin dryness or cracking.

Eyes

Result	:	Irritating to eyes. (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result	:	not sensitizing

CMR effects

CMR Properties

Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	It is not considered teratogenic.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.

Genotoxicity in vitro

Result	:	negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471)

Genotoxicity in vivo

Result	:	negative (Micronucleus test; Rat, male and female) (by inhalation;) (OECD Test Guideline 474)

Teratogenicity		
NOAEC Maternal	:	5.000 ppm
NOAEC Embryo-Fetal	:	1.000 ppm (Prenatal Developmental Toxicity Study; Mouse)(inhalation (vapour))(OECD Test Guideline 414)

Specific Target Organ Toxicity		
Single exposure		
Remarks	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.
Repeated exposure		
Remarks	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties		
Repeated dose toxicity		
NOAEC	:	1,057 mg/l (Rat, Sprague-Dawley, male and female)(Inhalation; Aerosol; 28-day; 5 days/week) (OECD Test Guideline 412)
Aspiration hazard		
		No aspiration toxicity classification,
Further information		
Other relevant toxicity information	:	Inhalation of high vapour concentrations can cause CNS-depression and narcosis. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

Component:	**ethyl acetate**	**CAS-No. 141-78-6**
Acute toxicity		
Oral		
LD50	:	4934 mg/kg (Rabbit, male and female) (OECD Test Guideline 401)

Inhalation

LC0	:	29,3 mg/l (Rat; 4 h; vapour)
LCLo	:	> 6000 ppm (Rat, male and female; 6 h; vapour)

Dermal

LD50	:	> 20000 mg/kg (Rabbit, male)

Irritation

Skin

Result	:	No skin irritation (Rabbit) Degreases the skin which may cause dry and rough. Prolonged or repeated skin contact may result in dermatitis.

Eyes

Result	:	Moderate eye irritation (Rabbit)

Sensitisation

Result	:	not sensitizing (Maximisation Test; Dermal; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Reproductive toxicity	:	No toxicity to reproduction

Genotoxicity in vitro

Result	:	negative (Chromosome aberration test in vitro; CHO (Chinese Hamster Ovary) cells; with and without metabolic activation) (OECD Test Guideline 473) negative (Bacterial Reverse Mutation Test; Salmonella typhimurium) (OECD Test Guideline 471)

Genotoxicity in vivo

Result	:	negative (Chromosome aberration test in vivo; Chinese hamster, male and female) (Oral;) (OECD Test Guideline 474)

Specific Target Organ Toxicity		
Single exposure		
Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.
Repeated exposure		
Remarks	:	No data available
Other toxic properties		
Repeated dose toxicity		
NOAEL	:	900 mg/kg
LOAEL	:	3.600 mg/kg (Rat)(Oral; 90 - 92 d)
NOEC	:	350 ppm (Rat)(Inhalation; 94 d; 5 days/week)
LOEC	:	350 ppm (Rat)(Inhalation; 94 d; 5 days/week)
Aspiration hazard		
No aspiration toxicity classification,		

Component:	isobutyl acetate	CAS-No. 110-19-0
Acute toxicity		
Oral		
LD50	:	13413 mg/kg (Rat, male) (OECD Test Guideline 401)
Inhalation		
LC50	:	> 23,4 mg/l (Rat, male and female; 4 h; dust/mist) (OECD Test Guideline 403)Read-across (Analogy)
Dermal		
LD50	:	> 17400 mg/kg (Rabbit, male) (OECD Test Guideline 402)
Irritation		
Skin		

Result	:	No skin irritation (Rabbit) (OECD Test Guideline 404)Degreases the skin. Read-across (Analogy)

Eyes

Result	:	No eye irritation (Rabbit) (OECD Test Guideline 405)Read-across (Analogy)

Sensitisation

Result	:	not sensitizing (Maximisation Test; Dermal; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

Carcinogenicity	:	No data available
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	Did not show teratogenic effects in animal experiments.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.

Genotoxicity in vitro

Result	:	negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471) negative (Chromosome aberration test in vitro; Chinese hamster lung cells; with and without metabolic activation) (OECD Test Guideline 473) negative (In vitro gene mutation study in mammalian cells; Chinese hamster lung cells; with and without metabolic activation) (OECD Test Guideline 476)

Genotoxicity in vivo

Result	:	negative (In vivo micronucleus test; Mouse, NMRI, male and female) (Oral;) (OECD Test Guideline 474)

Teratogenicity

NOAEC Maternal	:	10 mg/L
NOAEC Teratog.	:	10 mg/L
NOAEC Embryo-Fetal	:	10 mg/L

		(Prenatal Developmental Toxicity Study; Rat, wistar)(by inhalation)(OECD Test Guideline 414)No adverse effectsRead-across (Analogy)
NOAEC Maternal	:	2,5 mg/L
NOAEC Teratog.	:	10 mg/L
NOAEC Embryo-Fetal	:	10 mg/L
		(Prenatal Developmental Toxicity Study; Rabbit)(by inhalation)(OECD Test Guideline 414)Read-across (Analogy)

Reproductive toxicity

NOAEL Parent	:	2.500 ppm
NOAEL F1	:	2.500 ppm
		(Rat, male and female)(inhalation (vapour))(OPPTS 870.3800)No adverse effectsRead-across (Analogy)

Specific Target Organ Toxicity

Single exposure

Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.

Repeated exposure

Remarks	:	Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Other toxic properties

Repeated dose toxicity

NOAEL	:	316 mg/kg bw/day
		(Rat, male and female)(Oral) (OECD Test Guideline 408); Read-across (Analogy)
NOAEC	:	2500 ppm
		(Rat, Sprague-Dawley, male and female)(Inhalation; vapour) (OECD Test Guideline 413); Read-across (Analogy)

Aspiration hazard

No aspiration toxicity classification,

Further information		
Experience with human exposure	:	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Chronic exposure causes drying effect on the skin and eczema.,

Component:	2-methylpropan-1-ol	CAS-No. 78-83-1

Acute toxicity

Oral

LD50	:	3350 mg/kg (Rat, female) (OECD Test Guideline 401)
LD50	:	> 2830 mg/kg (Rat, male) (OECD Test Guideline 401)

Inhalation

LC50	:	> 18,18 mg/l (Rat, male and female; 6 h; vapour) (US-EPA method)

Dermal

LD50	:	2460 mg/kg (Rabbit, female) (OECD Test Guideline 402)
LD50	:	> 2000 mg/kg (Rabbit, male) (OECD Test Guideline 402)

Irritation

Skin

Result	:	Irritating to skin. (Rabbit) (OECD Test Guideline 404)

Eyes

Result	:	Causes serious eye damage. (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result	:	not sensitizing (Guinea pig) (OECD Test Guideline 406)Read-across (Analogy)

CMR effects

CMR Properties

Carcinogenicity	:	It is not considered carcinogenic. QSAR deduced data.
Mutagenicity	:	Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.

Teratogenicity	:	Did not show teratogenic effects in animal experiments.
Reproductive toxicity	:	Animal testing did not show any effects on fertility.

Genotoxicity in vitro

Result	:	negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471) negative (HPRT test; V79 cells; with and without metabolic activation) negative (Chromosome aberration test in vitro; V79 cells; no)

Genotoxicity in vivo

Result	:	negative (Micronucleus test; Mouse, male and female) (Oral;) (OECD Test Guideline 474)

Teratogenicity

NOAEL Maternal	:	10 mg/L
NOAEL Teratog.	:	10 mg/L
NOAEL Embryo-Fetal	:	10 mg/L (Rat)(inhalation (vapour))(OECD Test Guideline 414)
NOAEL Maternal	:	2,5 mg/L
NOAEL Teratog.	:	>= 10 mg/L
NOAEL Embryo-Fetal	:	>= 10 mg/L (Rabbit)(inhalation (vapour))(OECD Test Guideline 414)

Reproductive toxicity

NOAEL Parent	:	>= 7,5 mg/l
NOAEL F1	:	>= 7,5 mg/l (Rat, Sprague-Dawley, male and female)(inhalation (vapour))(OPPTS 870.3800)

Specific Target Organ Toxicity

Single exposure

Inhalation	:	Target Organs: Respiratory systemMay cause respiratory irritation.
Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.

Repeated exposure		
Remarks	:	No known significant effects or critical hazards.

Other toxic properties		
Repeated dose toxicity		
NOAEL	:	>1450 mg/kg bw/day (Rat, male and female)(Oral) (OECD Test Guideline 408)
Aspiration hazard		
		Not expected,

Component:	propan-2-ol	CAS-No. 67-63-0
Acute toxicity		
Oral		
LD50	:	5840 mg/kg (Rat) (OECD Test Guideline 401)
Inhalation		
LC50	:	> 25 mg/l (Rat; 6 h; vapour) (OECD Test Guideline 403)
Dermal		
LD50	:	13900 mg/kg (Rabbit) (OECD Test Guideline 402)
Irritation		
Skin		
Result	:	No skin irritation (OECD Test Guideline 404)Degreases the skin which may cause dry and rough. Prolonged or repeated skin contact may result in dermatitis.
Eyes		
Result	:	Eye irritation (OECD Test Guideline 405)Splashes in eyes may cause strong pain. Vapour acts irritant.
Sensitisation		

Result	:	not sensitizing (Buehler Test; Dermal; Guinea pig) (OECD Test Guideline 406)

CMR effects

Carcinogenicity

NOEL	:	5.000 ppm (negative, Mouse, male and female)(Inhalation; 0, 500, 2500, 5000 ppm; 78 weeks; Frequency of treatment: 5 days/week)(OECD Test Guideline 451)

CMR Properties

Carcinogenicity	:	Based on available data, the classification criteria are not met.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	No effects on or via lactation
Reproductive toxicity	:	Based on available data, the classification criteria are not met.

Genotoxicity in vitro

Result	:	negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471) negative (In vitro gene mutation study in mammalian cells; CHO (Chinese Hamster Ovary) cells; with and without metabolic activation) (OECD Test Guideline 476)

Genotoxicity in vivo

Result	:	negative (In vivo micronucleus test; Mouse, male and female) (intraperitoneal;) (OECD Test Guideline 474)

Teratogenicity

NOAEL Maternal	:	400 mg/kg bw/day
NOAEL Develop.	:	400 mg/kg bw/day (Rat, Sprague-Dawley)(Oral)(OECD Test Guideline 414)No adverse effects

Reproductive toxicity

NOAEL Parent	:	853 mg/kg bw/day (One-Generation Reproduction Toxicity Study; Rat, wistar, male and female)(Oral)(OECD Test Guideline 415)No negative effects.

NOAEL Parent	:	500 mg/kg bw/day (Two-generation reproductive toxicity; Rat, Sprague-Dawley, male and female)(Oral)(OECD Test Guideline 416)No negative effects.

Specific Target Organ Toxicity

Single exposure

Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.

Repeated exposure

Remarks	:	Oral and inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) and male and female mice (thyroid) by mechanisms of action that are not relevant to humans

Other toxic properties

Aspiration hazard

Aspiration hazard if swallowed - can enter lungs and cause damage.
Aspiration may cause pulmonary oedema and pneumonitis.
Based on available data, the classification criteria are not met.,

Component:	**1-methoxy-2-propanol**	**CAS-No. 107-98-2**

Acute toxicity

Oral

LD50	:	4016 mg/kg (Rat, male and female) (Directive 67/548/EEC, Annex V, B.1.)Ingestion may cause central nervous system depression.

Inhalation

LC50	:	> 25,8 mg/l (Rat; 6 h; vapour)

Dermal

LD50	:	> 2000 mg/kg (Rabbit)

Irritation

Skin

Result	:	No skin irritation (Rabbit; 4 h) (Directive 67/548/EEC, Annex V, B.4.)

Eyes		
Result	:	No eye irritation (Rabbit) (Directive 67/548/EEC, Annex V, B.5.)

Sensitisation		
Result	:	not sensitizing (Guinea pig) (Directive 67/548/EEC, Annex V, B.6.)

CMR effects

CMR Properties

Carcinogenicity	:	Did not show carcinogenic effects in animal experiments.
Mutagenicity	:	In vitro tests did not show mutagenic effects Did not show mutagenic effects in animal experiments.
Teratogenicity	:	Did not show teratogenic effects in animal experiments. Causes developmental effects in animals at high, maternally toxic doses.
Reproductive toxicity	:	In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance.

Specific Target Organ Toxicity

Single exposure

Inhalation	:	Target Organs: Central nervous systemMay cause drowsiness or dizziness.

Repeated exposure

Remarks	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification,

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	**toluene**	**CAS-No. 108-88-3**
	Endocrine disrupting properties	
Assessment	:	No information available about endocrine disruption properties for human health.

Component:	**Reaction mass of ethylbenzene and xylene**	
	Endocrine disrupting properties	
Assessment	:	No information available about endocrine disruption properties for human health.

Component:	**butanone**	**CAS-No. 78-93-3**
	Endocrine disrupting properties	
Assessment	:	No information available about endocrine disruption properties for human health.

Component:	**methyl acetate**	**CAS-No. 79-20-9**
	Endocrine disrupting properties	
Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	**ethyl acetate**	**CAS-No. 141-78-6**
	Endocrine disrupting properties	
Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	**isobutyl acetate**	**CAS-No. 110-19-0**
	Endocrine disrupting properties	
Assessment	:	No information available about endocrine disruption properties for human health.

Component:	2-methylpropan-1-ol	CAS-No. 78-83-1
Endocrine disrupting properties		
Assessment	:	No information available about endocrine disruption properties for human health.

Component:	propan-2-ol	CAS-No. 67-63-0
Endocrine disrupting properties		
Assessment	:	No information available about endocrine disruption properties for human health.

Component:	1-methoxy-2-propanol	CAS-No. 107-98-2
Endocrine disrupting properties		
Assessment	:	No information available about endocrine disruption properties for human health.

SECTION 12: Ecological information

12.1. Toxicity

Component:	toluene	CAS-No. 108-88-3
Acute toxicity		
Fish		
LC50	:	5,5 mg/l (Oncorhynchus kisutch (coho salmon); 96 h) (flow-through test)
Toxicity to daphnia and other aquatic invertebrates		
LC50	:	3,78 mg/l (Ceriodaphnia dubia (water flea); 48 h) (US-EPA)
algae		
EC50	:	134 mg/l (Chlamydomonas angulosa; 3 h)

Bacteria		
EC50	:	84 mg/l (Nitrosomonas sp; 24 h)

Chronic toxicity		
Fish		
NOEC	:	1,39 mg/l (Oncorhynchus kisutch (Coho salmon); 40 d)
Aquatic invertebrates		
NOEC		0,74 mg/l (Ceriodaphnia dubia (water flea); 7 d)

Component:	Reaction mass of ethylbenzene and xylene	
Acute toxicity		
Fish		
LC50	:	2,6 mg/l (Oncorhynchus mykiss (rainbow trout); 96 h) (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates		
EC50	:	> 3,4 mg/l (Ceriodaphnia dubia (water flea); 48 h) (US-EPA)
algae		
EC50	:	2,2 mg/l (algae; 73 h) (OECD Test Guideline 201)
ErC50		4,9 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (OECD Test Guideline 201)
Chronic toxicity		
Fish		
NOEC	:	> 1,3 mg/l (Oncorhynchus mykiss (rainbow trout); 56 d)
Aquatic invertebrates		
NOEC		1,57 mg/l (Daphnia magna (Water flea); 21 d) (OECD Test

Guideline 211)

Component:	butanone	CAS-No. 78-93-3

Acute toxicity

Fish

LC50 : 2.993 mg/l (Pimephales promelas; 96 h) (static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 308 mg/l (Daphnia magna; 48 h) (static test; OECD Test Guideline 202)

algae

EC50 : 1972 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)

Bacteria

EC0 : 1150 mg/l (Pseudomonas putida; 16 h) (static test; DIN 38412)

Component:	methyl acetate	CAS-No. 79-20-9

Acute toxicity

Fish

LC50 : 250 - 350 mg/l (Danio rerio (zebra fish); 96 h) (static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 1.026,7 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202)

algae

EC50 : > 120 mg/l (Desmodesmus subspicatus (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)

NOEC 120 mg/l (Desmodesmus subspicatus (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)

Bacteria		
EC10	:	1830 mg/l (Pseudomonas putida; 16 h) (static test; DIN 38412)
EC50		6000 mg/l (Pseudomonas putida; 16 h) (static test; DIN 38412)

Component:	**ethyl acetate**	**CAS-No. 141-78-6**

Acute toxicity		

Fish		
LC50	:	230 mg/l (Pimephales promelas; 96 h) (flow-through test; US-EPA)

Toxicity to daphnia and other aquatic invertebrates		
EC50	:	610 mg/l (Daphnia magna; 48 h)
EC50		165 mg/l (Daphnia cucullata (water flea); 48 h)

algae		
EC50	:	5600 mg/l (Desmodesmus subspicatus (green algae); 48 h) (static test; End point: Growth rate; DIN 38412)
NOEC		> 100 mg/l (Desmodesmus subspicatus (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)

Bacteria		
EC10	:	1650 mg/l (Photobacterium phosphoreum; 15 min) (static test; End point: Growth rate)
EC50		5870 mg/l (Photobacterium phosphoreum; 15 min) (static test; End point: Growth rate)

Chronic toxicity		

Fish		
NOEC	:	> 9,65 mg/l (Pimephales promelas (fathead minnow); 32 d)

Aquatic invertebrates		
NOEC		2,4 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; OECD Test Guideline 211)

Component:	**isobutyl acetate**	**CAS-No. 110-19-0**

Acute toxicity		
Fish		
LC50	:	16,6 mg/l (Oryzias latipes (Orange-red killifish); 96 h) (semi-static test; OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates		
EC50	:	24,6 mg/l (Daphnia magna (Water flea); 48 h) (OECD Test Guideline 202)
algae		
EC50	:	397 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)
NOEC		196 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)

Chronic toxicity	
Aquatic invertebrates	
EC50	34,2 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; End point: Reproduction; OECD Test Guideline 211)
NOEC	23,2 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; End point: Reproduction; OECD Test Guideline 211)

Component:	**2-methylpropan-1-ol**	**CAS-No. 78-83-1**
Acute toxicity		
Fish		
LC50	:	1.430 mg/l (Pimephales promelas (fathead minnow), mortality; 96 h) (flow-through test)
Toxicity to daphnia and other aquatic invertebrates		
EC50	:	1.100 mg/l (Daphnia pulex (Water flea), Immobilization; 48 h) (static test; ASTM D4229)
algae		
NOEC	:	53 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (static test; End point: Biomass; OECD Test Guideline 201)

EC50	632 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (static test; End point: Biomass; OECD Test Guideline 201)
EC50	1799 mg/l (Pseudokirchneriella subcapitata (green algae); 72 h) (static test; End point: Growth rate; OECD Test Guideline 201)

Chronic toxicity

Aquatic invertebrates

NOEC	20 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; End point: Reproduction)

Component:	**propan-2-ol**	**CAS-No. 67-63-0**

Acute toxicity

Fish

LC50	:	9.640 mg/l (Pimephales promelas, mortality; 96 h) (flow-through test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

LC50	:	9.714 mg/l (Daphnia magna, mortality; 24 h) (static test; OECD Test Guideline 202)

algae

EC50	:	> 100 mg/l (Scenedesmus subspicatus; 72 h)
LOEC		1000 mg/l (algae; 8 d)

Bacteria

EC50	:	> 100 mg/l (Bacteria) no harming action

Component:	**1-methoxy-2-propanol**	**CAS-No. 107-98-2**

Acute toxicity

Fish

LC50	:	6.812 mg/l (Leuciscus idus (Golden orfe); 96 h) (static test; DIN 38412)
LC50		20.800 mg/l (Pimephales promelas (fathead minnow); 96 h) (static test; ASTM)
LC50		>= 1.000 mg/l (Oncorhynchus mykiss (rainbow trout); 96 h) (semi-static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates		
LC50	:	21.100 - 25.900 mg/l (Daphnia magna (Water flea); 48 h) (static test)

algae		
ErC50	:	> 1000 mg/l (Pseudokirchneriella subcapitata (microalgae); 7 d) (static test; End point: Growth rate)

Bacteria		
IC50	:	1000 mg/l (activated sludge; 3 h) (static test; OECD Test Guideline 209)

12.2. Persistence and degradability

Component:	toluene	CAS-No. 108-88-3
Persistence and degradability		
Persistence		
Result	:	Oxidises rapidly by photo-chemical reactions in air.
Biodegradability		
Result	:	86 % (Exposure Time: 20 d)Readily biodegradable.

Component:	Reaction mass of ethylbenzene and xylene
Persistence and degradability	
Persistence	
Result	: Oxidises rapidly by photo-chemical reactions in air.
Biodegradability	
Result	: 90 % (aerobic; Related to: O2 consumption; Exposure Time: 28 d)(OECD Test Guideline 301F)Readily biodegradable.

Component:	butanone	CAS-No. 78-93-3
Persistence and degradability		

Persistence

Result : Transformation due to hydrolysis not expected to be significant.
Transformation due to photolysis not expected to be significant.

Biodegradability

Result : 98 % (Exposure Time: 28 d)(OECD Test Guideline 301D)Readily biodegradable.

Component:	**methyl acetate**	**CAS-No. 79-20-9**

Persistence and degradability

Persistence

Result : No data available

Biodegradability

Result : 70 % (aerobic; activated sludge; Related to: O2 consumption; Exposure Time: 28 d)(OECD Test Guideline 301D)Readily biodegradable.

Component:	**ethyl acetate**	**CAS-No. 141-78-6**

Persistence and degradability

Persistence

Result : The product evaporates easily from water surface.

Biodegradability

Result : 79 % (Related to: Biochemical oxygen demand; Exposure Time: 20 d)(OECD Test Guideline 301D)Readily biodegradable.

Component:	**isobutyl acetate**	**CAS-No. 110-19-0**

Persistence and degradability

Persistence

Result : No data available

Biodegradability

Result	:	81 % (aerobic; domestic sewage; Related to: O2 consumption; Exposure Time: 20 d)(OECD Test Guideline 301D)Readily biodegradable.The 10 day time window criterion is fulfilled.

Component:	**2-methylpropan-1-ol**	**CAS-No. 78-83-1**

Persistence and degradability

Persistence

Result	:	The hydrolysis of the substance is not expected due to its structure.

Biodegradability

Result	:	70 - 80 % (aerobic; activated sludge; Related to: Theoretical oxygen demand; Exposure Time: 28 d)(OECD Test Guideline 301D)Readily biodegradable.

Component:	**propan-2-ol**	**CAS-No. 67-63-0**

Persistence and degradability

Persistence

Result	:	Transformation due to hydrolysis not expected to be significant. Transformation due to photolysis not expected to be significant.

Biodegradability

Result	:	53 % (aerobic; domestic sewage; Related to: O2 consumption; Exposure Time: 5 d)(Directive 67/548/EEC, Annex V, C.5)Readily biodegradable.

Component:	**1-methoxy-2-propanol**	**CAS-No. 107-98-2**

Persistence and degradability

Persistence

Result	:	No data available

Biodegradability

Result	:	96 % (Related to: Dissolved organic carbon (DOC); Exposure Time: 28 d)(OECD Test Guideline 301E)Readily biodegradable.The 10 day time window criterion is fulfilled.

12.3. Bioaccumulative potential

Component:	toluene	CAS-No. 108-88-3
Bioaccumulation		

Result : log Kow 2,73 (20 °C; pH 7)
: BCF: 90; The product has low potential bioaccumulation.

Component:	Reaction mass of ethylbenzene and xylene
Bioaccumulation	

Result : log Kow 3,12 - 3,2
: Low bioaccumulative potential

Component:	butanone	CAS-No. 78-93-3
Bioaccumulation		

Result : log Kow 0,3 (40 °C)
: Does not bioaccumulate.

Component:	methyl acetate	CAS-No. 79-20-9
Bioaccumulation		

Result : log Kow 0,18
: Bioaccumulation is not expected.

Component:	ethyl acetate	CAS-No. 141-78-6
Bioaccumulation		

Result : log Kow 0,68 (25 °C)
: BCF: 30; (3 d) Bioaccumulation is not expected.

Component:	isobutyl acetate	CAS-No. 110-19-0
Bioaccumulation		

Result : log Kow 2,3 (25 °C; pH 7) (OECD Test Guideline 117)
: Bioaccumulation is not expected.

Component:	2-methylpropan-1-ol	CAS-No. 78-83-1
Bioaccumulation		

Result : log Kow 1 (25 °C) (OECD Test Guideline 117)
: Bioaccumulation is not expected.

Component:	propan-2-ol	CAS-No. 67-63-0
Bioaccumulation		

Result	:	log Kow 0,05 (25 °C)
	:	Bioaccumulation is not expected.

Component:	1-methoxy-2-propanol	CAS-No. 107-98-2
	Bioaccumulation	

Result	:	Kow 0,37, log Kow -0,437
	:	BCF: < 100; The product has low potential bioaccumulation.

12.4. Mobility in soil

Component:	toluene	CAS-No. 108-88-3
	Mobility	

Water	:	Floats on water.
Soil	:	Mobile in soils

Component:	Reaction mass of ethylbenzene and xylene
	Mobility

Water	:	Floats on water.
Air	:	Evaporates quickly.
Soil	:	Adsorbs slowly into soil.

Component:	butanone	CAS-No. 78-93-3
	Mobility	

Water	:	Expected to remain in water or migrate through soil., The product is partly soluble in water.

Component:	methyl acetate	CAS-No. 79-20-9
	Mobility	

Water	:	The product is water soluble.
Air	:	Highly volatile, will partition rapidly to air.

Component:	ethyl acetate	CAS-No. 141-78-6
	Mobility	

Water	:	moderately soluble
Air	:	Highly volatile, will partition rapidly to air.

Component:	isobutyl acetate	CAS-No. 110-19-0
	Mobility	

Water	:	The product is water soluble.

Component:	2-methylpropan-1-ol	CAS-No. 78-83-1

Mobility		
Water	:	The product is water soluble.
Air	:	Moderately volatile.
Soil	:	Not expected to adsorb on soil.

Distribution among environmental compartments		
Adsorption/Soil,	:	log Koc: 0,47, ((calculated))

Component:	propan-2-ol	CAS-No. 67-63-0

Mobility		
Water	:	The product is water soluble.
Soil	:	Mobile in soils

Component:	1-methoxy-2-propanol	CAS-No. 107-98-2

Mobility		
Soil	:	Highly mobile in soils
Water	:	The product is insoluble in water.

Distribution among environmental compartments		
Adsorption/Soil,	:	Koc: 0,2 - 1,0, (estimated)

12.5. Results of PBT and vPvB assessment

Data for the product		

Results of PBT and vPvB assessment		
Result	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Component:	toluene	CAS-No. 108-88-3

Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	Reaction mass of ethylbenzene and xylene

Results of PBT and vPvB assessment

Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	butanone	CAS-No. 78-93-3
Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	methyl acetate	CAS-No. 79-20-9
Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	ethyl acetate	CAS-No. 141-78-6
Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	isobutyl acetate	CAS-No. 110-19-0
Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	2-methylpropan-1-ol	CAS-No. 78-83-1
Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

Component:	propan-2-ol	CAS-No. 67-63-0
Results of PBT and vPvB assessment		
Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT).,

Substance is not very persistent and very bioaccumulative (vPvB).

Component:	1-methoxy-2-propanol	CAS-No. 107-98-2

Results of PBT and vPvB assessment

Result	:	Substance is not persistent, bioaccumulative, and toxic (PBT)., Substance is not very persistent and very bioaccumulative (vPvB).

12.6. Endocrine disrupting properties

Data for the product

Endocrine disrupting potential	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	toluene	CAS-No. 108-88-3

Endocrine disrupting potential	:	No information available about endocrine disruption properties for environment.

Component:	Reaction mass of ethylbenzene and xylene

Endocrine disrupting potential	:	No information available about endocrine disruption properties for environment.

Component:	butanone	CAS-No. 78-93-3

Endocrine disrupting potential	:	No information available about endocrine disruption properties for environment.

Component:	methyl acetate	CAS-No. 79-20-9

Endocrine disrupting potential	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	ethyl acetate	CAS-No. 141-78-6

Endocrine disrupting potential	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	isobutyl acetate	CAS-No. 110-19-0

Endocrine disrupting	:	No information available about endocrine disruption properties for

potential environment.

Component:	2-methylpropan-1-ol	CAS-No. 78-83-1
Endocrine disrupting potential	: No information available about endocrine disruption properties for environment.	

Component:	propan-2-ol	CAS-No. 67-63-0
Endocrine disrupting potential	: No information available about endocrine disruption properties for environment.	

Component:	1-methoxy-2-propanol	CAS-No. 107-98-2
Endocrine disrupting potential	: No information available about endocrine disruption properties for environment.	

12.7. Other adverse effects

Data for the product	
Additional ecological information	
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.
Result	:

Component:	toluene	CAS-No. 108-88-3
Additional ecological information		
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.	

Component:	Reaction mass of ethylbenzene and xylene
Additional ecological information	
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	butanone	CAS-No. 78-93-3
Additional ecological information		
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.	

Component:	methyl acetate	CAS-No. 79-20-9
Additional ecological information		
Result	: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.	

Component:	ethyl acetate	CAS-No. 141-78-6
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	**isobutyl acetate**	**CAS-No. 110-19-0**
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	**2-methylpropan-1-ol**	**CAS-No. 78-83-1**
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	**propan-2-ol**	**CAS-No. 67-63-0**
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	**1-methoxy-2-propanol**	**CAS-No. 107-98-2**
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
Contaminated packaging	:	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations. Do not burn, or use a cutting torch on, the empty drum. Risk of explosion.
European Waste Catalogue Number	:	No waste code can be defined for this product in accordance with the Ordinance on the Movement of Waste (VeVA), as the intended use dictates the assignment. The waste code is established in consultation with a regional waste disposer, such as: Brenntag Schweizerhall AG Lohnmatte 1 4573 Lohn-Ammannsegg Switzerland Phone: +41 58 344 84 00

SECTION 14: Transport information

14.1. UN number or ID number

1993

14.2. UN proper shipping name

ADR : FLAMMABLE LIQUID, N.O.S. (Toluene, Ethyl acetate) Special Provision 640D

RID : FLAMMABLE LIQUID, N.O.S. (Toluene, Ethyl acetate) Special Provision 640D

IMDG : FLAMMABLE LIQUID, N.O.S. (Toluene, Ethyl acetate)

14.3. Transport hazard class(es)

ADR-Class	: 3
(Labels; Classification Code; Hazard Identification Number; Tunnel restriction code)	3; F1; 33; (D/E)
RID-Class	: 3
(Labels; Classification Code; Hazard Identification Number)	3; F1; 33
IMDG-Class	: 3
(Labels; EmS)	3; F-E, S-E

14.4. Packaging group

ADR	: II
RID	: II
IMDG	: II

14.5. Environmental hazards

Environmentally hazardous according to ADR	: no
Environmentally hazardous according to RID	: no
Marine Pollutant according to IMDG-Code	: no

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Data for the product

CPID	:	937969-64
Threshold quantity MAO	:	20.000 kg (2015 determined by law SR814.012 Ann. 1 ch. 4)
Ordinance on Chemical Risik Reduction:		
Annex	:	Annex 1.10: Carcinogenic, mutagenic and reproductive toxic substances Annex 1.11: Hazardous liquids
Specific labeling	:	Only for professional users
Other regulations	:	Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Articles 5 and 6 of the EAER regulation on hazardous work and young people (SR 822.115.2): Young people undergoing basic vocational training may only work with this product if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not completing any basic vocational training are not permitted to work with this product. Employees of either sex who are under 18 years old are classed as young people. Article 13 Maternity ordinance (SR 822.111.52): Expectant and nursing mothers are only permitted to come into contact with this product during the course of their work if, based on a risk assessment carried out in accordance with Article 63 of Ordinance 1 on the Employment Act (ArGV 1) (SR 822.111), the chemicals in question have been found not to cause any specific harm to mothers or children or if such harm can be ruled out by taking appropriate protective measures.

Component: toluene CAS-No. 108-88-3

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. Regulation 273/2004, Drug Precursors, Category 3	:	Scheduled substance Combined Nomenclature (CN) code: , 2902 30 00

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 40; Listed Point Nos.: , 3; Listed Point Nos.: , 48; Listed EC Number: , 203-625-9
EU. Regulation No. 1223/2009 on cosmetic products, Annex III: List of Restricted Substances in Cosmetic Products	:	Reference number: 185; Listed

Component: Reaction mass of ethylbenzene and xylene

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 3; Listed Point Nos.: , 40; Listed

Component: butanone CAS-No. 78-93-3

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. Regulation 273/2004, Drug Precursors, Category 3	:	Scheduled substance Combined Nomenclature (CN) code: , 2914 12 00; Combined Nomenclature designation
EU. REACH, Annex XVII,	:	Point Nos.: , 3; Listed

Marketing and Use Restrictions (Regulation 1907/2006/EC)		Point Nos.: , 40; Listed Point Nos.: , 75; Listed

Component:	**methyl acetate**	**CAS-No. 79-20-9**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 3; Listed Point Nos.: , 75; Listed Point Nos.: , 40; Listed

Component:	**ethyl acetate**	**CAS-No. 141-78-6**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 40; Listed Point Nos.: , 3; Listed Point Nos.: , 75; Listed

Component:	**isobutyl acetate**	**CAS-No. 110-19-0**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII,	:	Point Nos.: , 3; Listed

Marketing and Use Restrictions (Regulation 1907/2006/EC)		Point Nos.: , 40; Listed

Component:	**2-methylpropan-1-ol**	**CAS-No. 78-83-1**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 3; Listed Point Nos.: , 40; Listed Point Nos.: , 75; Listed

Component:	**propan-2-ol**	**CAS-No. 67-63-0**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 40; For professional users only.; Listed Point Nos.: , 75; Listed Point Nos.: , 3; Listed

Component:	**1-methoxy-2-propanol**	**CAS-No. 107-98-2**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; Not listed
EU. REACH, Annex XVII, Marketing and Use	:	, 3; Listed

Restrictions (Regulation 1907/2006/EC)

, 40; Listed

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Full text of the Notes referred to under section 3.

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

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances

ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SPM	Synthetic Polymer Microparticles
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory

Further information

Key literature references and sources for data	:	Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	:	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	:	The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.