Dr. Grogg Chemie AG
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COVER SHEET FOR THE SAFETY DATA SHEET

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Item number: G11282

Trade name: Universal Thinner UD

Supplier:
Dr. Grogg Chemie AG
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CH-3066 Stettlen-Deisswil
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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

UNIVERSALVERDUENNER UD

Version 3.0 Print Date 25.11.2026

Revision date / valid from 28.02.2025

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

1.1. Product identifier

Trade name	:	UNIVERSALVERDUENNER UD
UFI	:	N6YD-S12Q-200P-5U6R
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
Eye irritation	Category 2	---	H319
Carcinogenicity	Category 2	---	H351
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	Central nervous system	H373
Specific target organ toxicity - repeated exposure (Inhalation)	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 : See section 11 for toxicological information.

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.
		H319	Causes serious eye irritation.
		H335	May cause respiratory irritation.
		H336	May cause drowsiness or dizziness.
		H351	Suspected of causing cancer.
		H361d	Suspected of damaging the unborn child.
		H373	May cause damage to organs (Central nervous system) through prolonged or repeated exposure.
		H373	May cause damage to organs (Auditory system, Liver, Kidney, Central nervous system) through prolonged or repeated exposure if inhaled.
		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.
Response	:	P301 + P310	IF SWALLOWED: 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
- acetone
- 4-methylpentan-2-one

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	>= 20 - < 30	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
acetone			
Index-No. : 606-001-00-8 CAS-No. : 67-64-1 EC-No. : 200-662-2 EU REACH-Reg. No. : 01-2119471330-49-xxxx	>= 10 - < 20	Flam. Liq.2 Eye Irrit.2 STOT SE3	H225 H319 H336 EUH066
propan-2-ol			
Index-No. : 603-117-00-0 CAS-No. : 67-63-0	>= 1 - < 10	Flam. Liq.2 Eye Irrit.2	H225 H319

EC-No. : 200-661-7 EU REACH-Reg. No. : 01-2119457558-25-xxxx			STOT SE3	H336
4-methylpentan-2-one				
Index-No. : 606-004-00-4 CAS-No. : 108-10-1 EC-No. : 203-550-1 EU REACH-Reg. No. : 01-2119473980-30-xxxx		>= 1 - < 10	Flam. Liq.2 Acute Tox.4 Inhalation Eye Irrit.2 Carc.2 STOT SE3 Acute toxicity estimate Acute oral toxicity: 2080 mg/kg Acute inhalation toxicity (vapour): 11 mg/l	H225 H332 H319 H351 H336 EUH066
2-methoxy-1-methylethyl acetate				
Index-No. : 607-195-00-7 CAS-No. : 108-65-6 EC-No. : 203-603-9 EU REACH-Reg. No. : 01-2119475791-29-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.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Remove from exposure, lie down. Take off all contaminated clothing immediately.

If inhaled : Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position. Consult a physician after significant exposure.

In case of skin contact : Wash off immediately with soap and plenty of water. If skin irritation persists, 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 the mouth and spit the fluids out. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Call a physician immediately.

Protection of First Aid Responders : First Aid responders should pay attention to self-protection and use the recommended protective clothing. If potential for exposure exists refer to Section 8 for specific personal protective equipment.

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

Symptoms	: Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. See Section 11 for more detailed information on health effects and symptoms.
Effects	: Aspiration hazard if swallowed - can enter lungs and cause damage. See Section 11 for more detailed information on health effects and symptoms.

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

Treatment	: Treat symptomatically.

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. The product is insoluble and floats on water.
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.

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.

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.
Fire-fighting class	:	Highly flammable and extremely fast burning down; Flp < 21°C
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

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:	acetone	CAS-No. 67-64-1

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):
500 ppm, 1.210 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
500 ppm, 1.200 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
1.000 ppm, 2.400 mg/m3

Biological Exposure Indices

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

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

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: 4-methylpentan-2-one CAS-No. 108-10-1

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):
20 ppm, 83 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):
50 ppm, 208 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
20 ppm, 82 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
40 ppm, 164 mg/m3

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

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.

Biological Exposure Indices

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA), as amended, 4-methylpentan-2-one, Urine
0,7 mg/l, Sampling time: End of exposure / end of shift.

Component: 2-methoxy-1-methylethyl acetate CAS-No. 108-65-6

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, 275 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, 550 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
50 ppm, 275 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
50 ppm, 275 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:	**xylene**	**CAS-No. 1330-20-7**

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):
100 ppm, 442 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, 221 mg/m3
Indicative

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
100 ppm, 435 mg/m3

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

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
200 ppm, 870 mg/m3

Component:	**ethylbenzene**	**CAS-No. 100-41-4**

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):
100 ppm, 442 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):
200 ppm, 884 mg/m3
Indicative

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

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Short Term Exposure Limit (STEL):
50 ppm, 220 mg/m3

Switzerland. OELs. Limit Values at the Workplace, as per SUVA, as amended, Time Weighted Average (TWA):
50 ppm, 220 mg/m3

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. Respiratory protection complying with EN 141.

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 glasses with side-shields

Skin and body protection

Protecting Clothes	:	Solvent resistant protective clothing

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	:	clear
Physical state	:	liquid
Colour	:	colourless
Odour	:	characteristic
Odour Threshold	:	No data available
Freezing point	:	No data available
Boiling point/boiling range	:	ca. 55 °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)
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	insoluble
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	:	No data available
Bulk density	:	No data available

Relative vapour density : No data available

Particle characteristics
No data available

9.2 Other information

Explosives : Formation of explosive air/vapour mixtures is possible.

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	
	For this mixture is no data available., Please find this information in the listing of the component/components below in this section.
Inhalation	
Acute toxicity estimate :	> 20 mg/l (4 h; vapour) (Calculation method)
Dermal	

Acute toxicity estimate	:	> 2000 mg/kg) (Calculation method)

Irritation

Skin

Result	:	Causes skin irritation.

Eyes

Result	:	Causes serious eye irritation.

Sensitisation

Result	:	No sensitizing effect known.

CMR effects

CMR Properties

Carcinogenicity	:	Suspected of causing cancer.
Mutagenicity	:	It is not considered mutagenic. Contains no ingredient listed as a mutagen
Reproductive toxicity	:	Suspected of damaging the unborn child.

Specific Target Organ Toxicity

Single exposure

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

Repeated exposure

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

Other toxic properties

Repeated dose toxicity

No data available

Aspiration hazard

May be fatal if swallowed and enters airways.,

Further information

Other relevant toxicity information	:	Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

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

Acute toxicity
Oral

LD50 : 5580 mg/kg (Rat, male) (OECD Test Guideline 401)

Component:	**Reaction mass of ethylbenzene and xylene**
Acute toxicity	
Oral	

No valid data available.

Component:	**acetone**	**CAS-No. 67-64-1**
Acute toxicity		
Oral		

LD50 : 5800 mg/kg (Rat) (OECD Test Guideline 401)Cause pain in mouth and throat, nausea, vomiting, dizziness, headache and risk of unconsciousness.

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

LD50 : 5840 mg/kg (Rat) (OECD Test Guideline 401)

Component:	**4-methylpentan-2-one**	**CAS-No. 108-10-1**
Acute toxicity		
Oral		

LD50 : 2080 mg/kg (Rat) (OECD Test Guideline 401)

Component:	**2-methoxy-1-methylethyl acetate**	**CAS-No. 108-65-6**
Acute toxicity		
Oral		

LD50 : > 5000 mg/kg (Rat)

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.

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)

Component:	toluene	CAS-No. 108-88-3
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: acetone CAS-No. 67-64-1

Acute toxicity

Fish

LC50	:	5.540 mg/l (Oncorhynchus mykiss; 96 h)
LC50		11.000 mg/l (Alburnus alburnus; 96 h)

Toxicity to daphnia and other aquatic invertebrates

LC50	:	8.800 mg/l (Daphnia pulex (Water flea); 48 h)

algae

NOEC	:	430 mg/l (Prorocentrum minimum; 96 h)

Bacteria

EC12	:	1000 mg/l (activated sludge; 0,5 h) (static test; End point: Respiration inhibition; OECD Test Guideline 209)

Component:	acetone	CAS-No. 67-64-1

Chronic toxicity

Aquatic invertebrates

NOEC		2212 mg/l (Daphnia pulex (Water flea); 28 d) (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:	4-methylpentan-2-one	CAS-No. 108-10-1

Acute toxicity

Fish

LC50	:	> 179 mg/l (Danio rerio (zebra fish); 96 h) (static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50	:	> 200 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202)

algae		
ErC50	:	> 146 mg/l (Lemna gibba (gibbous duckweed); 7 d) (semi-static test; End point: Growth rate; OECD Test Guideline 221)
Bacteria		
EC50	:	275 mg/l (Pseudomonas putida; 16 h) (DIN 38412)

Component:	**4-methylpentan-2-one**	**CAS-No. 108-10-1**

Chronic toxicity		
Aquatic invertebrates		
NOEC		30 - 35 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; End point: Reproduction; OECD Test Guideline 211)

Component:	**2-methoxy-1-methylethyl acetate**	**CAS-No. 108-65-6**

Chronic toxicity		
Fish		
NOEC	:	47,5 mg/l (Oryzias latipes (Orange-red killifish); 14 d) (flow-through test; OECD Test Guideline 204)
Aquatic invertebrates		
NOEC		>= 100 mg/l (Daphnia magna (Water flea); 21 d) (semi-static test; End point: Reproduction; OECD Test Guideline 211)

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: acetone CAS-No. 67-64-1

Persistence and degradability

Persistence

Result : decomposition by hydrolysis.

Biodegradability

Result : 91 % (Exposure Time: 28 d)(OECD Test Guideline 301B)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: 4-methylpentan-2-one CAS-No. 108-10-1

Persistence and degradability

Persistence

Result : No data available

Biodegradability

Result	:	83 % (Exposure Time: 28 d)(OECD Test Guideline 301F)Readily biodegradable.

Component:	**2-methoxy-1-methylethyl acetate**	**CAS-No. 108-65-6**

Persistence and degradability

Persistence

Result	:	No data available

Biodegradability

Result	:	83 % (aerobic; activated sludge; 76,4 mg/l; Related to: Biochemical oxygen demand; Exposure Time: 28 d)(OECD Test Guideline 301F)Readily biodegradable.
Result	:	100 % (Exposure Time: 28 d)(OECD Test Guideline 302B)Readily biodegradable.

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:	**acetone**	**CAS-No. 67-64-1**

Bioaccumulation

Result	:	log Kow -0,24
	:	BCF: 3; (BCFWIN-software)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:	4-methylpentan-2-one	CAS-No. 108-10-1

Bioaccumulation

Result	:	log Kow 1,9 (pH 6,7) (OECD Test Guideline 117)
	:	Bioaccumulation is not expected.

Component:	2-methoxy-1-methylethyl acetate	CAS-No. 108-65-6

Bioaccumulation

Result	:	log Kow 1,2 (20 °C; pH 6,8) (OECD Test Guideline 117)
	:	BCF: < 100; Low bioaccumulative potential

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:	acetone	CAS-No. 67-64-1

Mobility

Air	:	The product evaporates readily.
Water	:	The product is water soluble.
Soil	:	Mobile in soils

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

Mobility

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

Component:	4-methylpentan-2-one	CAS-No. 108-10-1

Mobility

Air	:	Moderately volatile.
Water	:	The product is water soluble.
Soil	:	Slight adsorption

Component:	4-methylpentan-2-one	CAS-No. 108-10-1

Distribution among environmental compartments

Adsorption/Soil, : log Koc: 2,008, ((calculated))

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.

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.

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.

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.

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
infolohn@brenntag.ch

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, Acetone)
Special Provision 640D

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

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

14.3. Transport hazard class(es)

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

EU. Restricted (Annex I) & Reportable (Annex II) Explosives Precursors, Regulation 2019/1148/EU on Explosives Precursors	:	; Regulated explosives precursors that are not restricted: This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see: https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: 3 Point Nos.: 48 Point Nos.: 40 Point Nos.: 75
CPID	:	267852-90
Threshold quantity MAO	:	20.000 kg (2015 determined by law SR814.012 Ann. 1 ch. 4)
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.

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

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.: , 3; Listed Point Nos.: , 40; Listed Point Nos.: , 48; Listed EC Number: , 203-625-9 Point Nos.: , 75; 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:	**acetone**	**CAS-No. 67-64-1**

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU	:	; The substance/mixture does not fall under this legislation.

on export and import of dangerous chemicals, as amended

Component:	acetone	CAS-No. 67-64-1

EU. Regulation 273/2004, Drug Precursors, Category 3	:	Scheduled substance Combined Nomenclature (CN) code: , 2914 11 00
EU. Restricted (Annex I) & Reportable (Annex II) Explosives Precursors, Regulation 2019/1148/EU on Explosives Precursors	:	; ANNEX II: REPORTABLE EXPLOSIVES PRECURSORS: List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.
EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 3; Listed Point Nos.: , 40 Point Nos.: , 75

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.

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

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:	4-methylpentan-2-one	CAS-No. 108-10-1

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.

Component:	4-methylpentan-2-one	CAS-No. 108-10-1

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC)	:	Point Nos.: , 3; Listed Point Nos.: 0, %, 40; For professional users only.; Listed Point Nos.: 0,1, %, 75; Listed

Component:	2-methoxy-1-methylethyl acetate	CAS-No. 108-65-6

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.

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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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.

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.