SAFETY DATA SHEET

AC EMAILLACK FM 3021-80 - All variants

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

1.1 Product identifier

Product name : AC EMAILLACK FM 3021-80 - All variants

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

Product use : Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person responsible for this SDS : Prod-safe@teknos.com

National contact

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : In an emergency, call 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 2, H225
Skin Irrit. 2, H315
Eye Dam. 1, H318
Carc. 2, H351
STOT SE 3, H336
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : 24.4 percent of the mixture consists of component(s) of unknown acute oral toxicity
24.4 percent of the mixture consists of component(s) of unknown acute dermal toxicity
24.4 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Ingredients of unknown ecotoxicity : Contains 24.4% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

Hazard pictograms :

Signal word : Danger

SECTION 2: Hazards identification

Hazard statements : H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H336 - May cause drowsiness or dizziness.
H351 - Suspected of causing cancer.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : 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 or doctor.

Storage : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Contains: n-Butyl acetate; Methylisobutylketone; Butan-1-ol and iso-butanol

Supplemental label elements :

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles :

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
n-Butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
Methylisobutylketone	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≥10 - ≤25	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066	ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≤8.6	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 790 mg/kg	[1]

SECTION 3: Composition/information on ingredients

acetone	REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	≤10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	EUH066: C ≥ 25%	[1] [2]
iso-butanol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≤4.8	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	-	[1]
1-Methoxy 2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤5	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤2.7	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (oral, inhalation) Asp. Tox. 1, H304	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
Solvent naphtha (petroleum), light arom.	EC: 265-199-0 CAS: 64742-95-6	≤1.9	Flam. Liq. 3, H226 Acute Tox. 4, H332 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	ATE [Inhalation (vapours)] = 11 mg/l	[1]
2-Methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
1,2,4-trimethylbenzene	EC: 202-436-9 CAS: 95-63-6 Index: 601-043-00-3	≤1.8	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411	ATE [Inhalation (vapours)] = 18 mg/l	[1] [2]
Toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	<3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 **See Section 16 for the full text of the H statements declared above.**	-	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

SECTION 3: Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 4: First aid measures

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonnes	50000 tonnes

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
n-Butyl acetate	**Regulation on Limit Values - MAC (Austria, 4/2021) [Butylacetat alle Isomeren außer tert-Butylacet]** CEIL: 480 mg/m³. CEIL: 100 ppm. TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**Regulation on Limit Values - MAC (Austria, 4/2021)** Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. PEAK 15 minutes: 50 ppm 4 times per shift. PEAK 15 minutes: 208 mg/m³ 4 times per shift.
Butan-1-ol	**Regulation on Limit Values - MAC (Austria, 4/2021) [Butanol (alle Isomeren außer 2-Methyl-2-propanol)]** PEAK 15 minutes: 200 ppm 4 times per shift. TWA 8 hours: 150 mg/m³. TWA 8 hours: 50 ppm. PEAK 15 minutes: 600 mg/m³ 4 times per shift.
acetone	**Regulation on Limit Values - MAC (Austria, 4/2021)** TWA 8 hours: 500 ppm. TWA 8 hours: 1200 mg/m³. PEAK 15 minutes: 2000 ppm 4 times per shift. PEAK 15 minutes: 4800 mg/m³ 4 times per shift.
iso-butanol	**Regulation on Limit Values - MAC (Austria, 4/2021) [Butanol (alle Isomeren außer 2-Methyl-2-propanol)]** PEAK 15 minutes: 200 ppm 4 times per shift. TWA 8 hours: 150 mg/m³. TWA 8 hours: 50 ppm. PEAK 15 minutes: 600 mg/m³ 4 times per shift.
1-Methoxy 2-propanol	**Regulation on Limit Values - MAC (Austria, 4/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 187 mg/m³. CEIL: 50 ppm. CEIL: 187 mg/m³.
Xylene	**Regulation on Limit Values - MAC (Austria, 4/2021) [Xylol (alle Isomeren, rein)]** PEAK 15 minutes: 442 mg/m³ 4 times per shift. TWA 8 hours: 50 ppm. PEAK 15 minutes: 100 ppm 4 times per shift. TWA 8 hours: 221 mg/m³.
2-Methoxy-1-methylethyl acetate	**Regulation on Limit Values - MAC (Austria, 4/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. CEIL 5 minutes: 100 ppm 8 times per shift. CEIL 5 minutes: 550 mg/m³ 8 times per shift.
1,2,4-trimethylbenzene	**Regulation on Limit Values - MAC (Austria, 4/2021) [Trimethylbenzol (alle Isomeren)]** PEAK 15 minutes: 30 ppm 4 times per shift. TWA 8 hours: 100 mg/m³. PEAK 15 minutes: 150 mg/m³ 4 times per shift. TWA 8 hours: 20 ppm.
Toluene	**Regulation on Limit Values - MAC (Austria, 4/2021)** d. Absorbed through skin.

SECTION 8: Exposure controls/personal protection

	TWA 8 hours: 50 ppm. TWA 8 hours: 190 mg/m³. PEAK 15 minutes: 100 ppm 4 times per shift. PEAK 15 minutes: 380 mg/m³ 4 times per shift.
n-Butyl acetate	**Limit values (Belgium, 12/2023) [butylacetaat]** STEL 15 minutes: 712 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 238 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**Limit values (Belgium, 12/2023)** TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.
Butan-1-ol	**Limit values (Belgium, 12/2023)** Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 62 mg/m³.
acetone	**Limit values (Belgium, 12/2023)** TWA 8 hours: 246 ppm. TWA 8 hours: 594 mg/m³. STEL 15 minutes: 492 ppm. STEL 15 minutes: 1187 mg/m³.
iso-butanol	**Limit values (Belgium, 12/2023)** TWA 8 hours: 50 ppm. TWA 8 hours: 154 mg/m³.
1-Methoxy 2-propanol	**Limit values (Belgium, 12/2023)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 184 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 369 mg/m³.
Xylene	**Limit values (Belgium, 12/2023) [Xyleen]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**Limit values (Belgium, 12/2023)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Limit values (Belgium, 12/2023) [Trimethylbenzeen]** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**Limit values (Belgium, 12/2023)** Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 77 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 384 mg/m³.
n-Butyl acetate	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Limit value 8 hours: 241 mg/m³. Limit value 15 minutes: 723 mg/m³. Limit value 15 minutes: 150 ppm. Limit value 8 hours: 50 ppm.
Methylisobutylketone	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Limit value 8 hours: 50 mg/m³. Limit value 15 minutes: 200 mg/m³.
Butan-1-ol	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Limit value 8 hours: 100 mg/m³. Limit value 15 minutes: 150 mg/m³.

SECTION 8: Exposure controls/personal protection

acetone	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Limit value 8 hours: 600 mg/m³. Limit value 15 minutes: 1400 mg/m³.
1-Methoxy 2-propanol	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Absorbed through skin. Limit value 8 hours: 375 mg/m³. Limit value 15 minutes: 568 mg/m³. Limit value 15 minutes: 150 ppm. Limit value 8 hours: 100 ppm.
Xylene	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024) [Xylene]** Absorbed through skin. Limit value 8 hours: 221 mg/m³. Limit value 15 minutes: 442 mg/m³. Limit value 15 minutes: 100 ppm. Limit value 8 hours: 50 ppm.
2-Methoxy-1-methylethyl acetate	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Absorbed through skin. Limit value 8 hours: 275 mg/m³. Limit value 15 minutes: 550 mg/m³. Limit value 15 minutes: 100 ppm. Limit value 8 hours: 50 ppm.
1,2,4-trimethylbenzene	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Limit value 8 hours: 100 mg/m³. Limit value 8 hours: 20 ppm.
Toluene	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** Absorbed through skin. Limit value 15 minutes: 384 mg/m³. Limit value 8 hours: 192 mg/m³. Limit value 15 minutes: 100 ppm. Limit value 8 hours: 50 ppm.
n-Butyl acetate	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** STELV 15 minutes: 723 mg/m³. STELV 15 minutes: 150 ppm. ELV 8 hours: 241 mg/m³. ELV 8 hours: 50 ppm.
Methylisobutylketone	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** STELV 15 minutes: 208 mg/m³. STELV 15 minutes: 50 ppm. ELV 8 hours: 83 mg/m³. ELV 8 hours: 20 ppm.
Butan-1-ol	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** Absorbed through skin. STELV 15 minutes: 154 mg/m³. STELV 15 minutes: 50 ppm.
acetone	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** ELV 8 hours: 1210 mg/m³. ELV 8 hours: 500 ppm.
iso-butanol	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** Absorbed through skin.

SECTION 8: Exposure controls/personal protection

	STELV 15 minutes: 231 mg/m³. STELV 15 minutes: 75 ppm. ELV 8 hours: 154 mg/m³. ELV 8 hours: 50 ppm.
1-Methoxy 2-propanol	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** STELV 15 minutes: 568 mg/m³. STELV 15 minutes: 150 ppm. ELV 8 hours: 375 mg/m³. ELV 8 hours: 100 ppm.
Xylene	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023) [ksilen]** Absorbed through skin. STELV 15 minutes: 442 mg/m³. STELV 15 minutes: 100 ppm. ELV 8 hours: 221 mg/m³. ELV 8 hours: 50 ppm.
2-Methoxy-1-methylethyl acetate	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** Absorbed through skin. STELV 15 minutes: 550 mg/m³. STELV 15 minutes: 100 ppm. ELV 8 hours: 275 mg/m³. ELV 8 hours: 50 ppm.
1,2,4-trimethylbenzene	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** ELV 8 hours: 100 mg/m³. ELV 8 hours: 20 ppm.
Toluene	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, exposure limit values (Annex I) (Croatia, 12/2023)** Absorbed through skin. STELV 15 minutes: 384 mg/m³. STELV 15 minutes: 100 ppm. ELV 8 hours: 192 mg/m³. ELV 8 hours: 50 ppm.
n-Butyl acetate	**Department of labour inspection (Cyprus, 7/2021)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³.
Methylisobutylketone	**Department of labour inspection (Cyprus, 7/2021)** STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³. TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³.
acetone	**Department of labour inspection (Cyprus, 7/2021)** Absorbed through skin. TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
1-Methoxy 2-propanol	**Department of labour inspection (Cyprus, 7/2021)** Absorbed through skin. STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m³. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m³.
Xylene	**Department of labour inspection (Cyprus, 7/2021) [Ξυλένιο, μικτά ισομερή, καθαρά]** Absorbed through skin. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³.

2-Methoxy-1-methylethyl acetate	**Department of labour inspection (Cyprus, 7/2021)** Absorbed through skin. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³.
1,2,4-trimethylbenzene	**Department of labour inspection (Cyprus, 7/2021)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**Department of labour inspection (Cyprus, 7/2021)** Absorbed through skin. STEL 15 minutes: 100 ppm. STEL 15 minutes: 384 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 192 mg/m³.
n-Butyl acetate	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** TWA 8 hours: 241 mg/m³. STEL 15 minutes: 723 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 50 ppm.
Methylisobutylketone	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** Absorbed through skin. TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 208 mg/m³. STEL 15 minutes: 50 ppm.
Butan-1-ol	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023) [butanol]** TWA 8 hours: 300 mg/m³. TWA 8 hours: 97 ppm. STEL 15 minutes: 600 mg/m³. STEL 15 minutes: 194 ppm.
acetone	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** TWA 8 hours: 800 mg/m³. STEL 15 minutes: 1500 mg/m³. STEL 15 minutes: 621.4 ppm. TWA 8 hours: 331.4 ppm.
iso-butanol	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023) [butanol]** TWA 8 hours: 300 mg/m³. TWA 8 hours: 97 ppm. STEL 15 minutes: 600 mg/m³. STEL 15 minutes: 194 ppm.
1-Methoxy 2-propanol	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** Absorbed through skin. TWA 8 hours: 270 mg/m³. TWA 8 hours: 72.09 ppm. STEL 15 minutes: 550 mg/m³. STEL 15 minutes: 146.84 ppm.
Xylene	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023) [xylen]** Absorbed through skin. TWA 8 hours: 200 mg/m³. TWA 8 hours: 45.33 ppm. STEL 15 minutes: 400 mg/m³. STEL 15 minutes: 90.66 ppm.
Solvent naphtha (petroleum), light arom.	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023) [nafta solventní]** TWA 8 hours: 200 mg/m³. STEL 15 minutes: 1000 mg/m³.
2-Methoxy-1-methylethyl acetate	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** Absorbed through skin.

	TWA 8 hours: 275 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 550 mg/m³. STEL 15 minutes: 100 ppm.
1,2,4-trimethylbenzene	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** TWA 8 hours: 100 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 250 mg/m³. STEL 15 minutes: 50 ppm.
Toluene	**Government regulation of Czech Republic PEL/NPK-P (Czech Republic, 12/2023)** Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.
n-Butyl acetate	**Working Environment Authority (Denmark, 3/2024) [butylacetat, alle isomerer]** TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³. STEL 15 minutes: 723 mg/m³. STEL 15 minutes: 150 ppm.
Methylisobutylketone	**Working Environment Authority (Denmark, 3/2024)** Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 208 mg/m³. STEL 15 minutes: 50 ppm.
Butan-1-ol	**Working Environment Authority (Denmark, 3/2024) [butanol, alle isomere]** Absorbed through skin. CEIL: 50 ppm. CEIL: 150 mg/m³.
acetone	**Working Environment Authority (Denmark, 3/2024)** TWA 8 hours: 250 ppm. TWA 8 hours: 600 mg/m³. STEL 15 minutes: 1200 mg/m³. STEL 15 minutes: 500 ppm.
iso-butanol	**Working Environment Authority (Denmark, 3/2024) [butanol, alle isomere]** Absorbed through skin. CEIL: 50 ppm. CEIL: 150 mg/m³.
1-Methoxy 2-propanol	**Working Environment Authority (Denmark, 3/2024) [1-methoxy-2-propanol]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 185 mg/m³. STEL 15 minutes: 568 mg/m³. STEL 15 minutes: 150 ppm.
Xylene	**Working Environment Authority (Denmark, 3/2024) [xylen, alle isomere]** Absorbed through skin. TWA 8 hours: 25 ppm. TWA 8 hours: 109 mg/m³. STEL 15 minutes: 442 mg/m³. STEL 15 minutes: 100 ppm.
2-Methoxy-1-methylethyl acetate	**Working Environment Authority (Denmark, 3/2024) [2-methoxy-1-methylethylacetat]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 550 mg/m³. STEL 15 minutes: 100 ppm.
1,2,4-trimethylbenzene	**Working Environment Authority (Denmark, 3/2024) [trimethylbenzen]** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.

	STEL 15 minutes: 200 mg/m³. STEL 15 minutes: 40 ppm.
Toluene	**Working Environment Authority (Denmark, 3/2024)** Absorbed through skin. TWA 8 hours: 25 ppm. TWA 8 hours: 94 mg/m³. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.
n-Butyl acetate	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³.
Methylisobutylketone	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 208 mg/m³. STEL 15 minutes: 50 ppm.
Butan-1-ol	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** Absorbed through skin. TWA 8 hours: 45 mg/m³. TWA 8 hours: 15 ppm. STEL 5 minutes: 90 mg/m³. STEL 5 minutes: 30 ppm.
acetone	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm.
iso-butanol	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** TWA 8 hours: 150 mg/m³. TWA 8 hours: 50 ppm.
1-Methoxy 2-propanol	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** Absorbed through skin , Sensitiser. TWA 8 hours: 375 mg/m³. TWA 8 hours: 100 ppm. STEL 15 minutes: 568 mg/m³. STEL 15 minutes: 150 ppm.
Xylene	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024) [ksüleen]** Absorbed through skin. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm. STEL 15 minutes: 450 mg/m³. TWA 8 hours: 200 mg/m³.
2-Methoxy-1-methylethyl acetate	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** Absorbed through skin , Sensitiser. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³. TWA 8 hours: 275 mg/m³. TWA 8 hours: 50 ppm.
1,2,4-trimethylbenzene	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**Occupational exposure limits, Regulation No. 293 (Estonia, 4/2024)** Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.

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n-Butyl acetate	**EU OEL (Europe, 1/2022)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**EU OEL (Europe, 1/2022)** TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.
acetone	**EU OEL (Europe, 1/2022)** TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
1-Methoxy 2-propanol	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m³.
Xylene	**EU OEL (Europe, 1/2022) [xylene, mixed isomers]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**EU OEL (Europe, 1/2022)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.
n-Butyl acetate	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** TWA 8 hours: 150 ppm. TWA 8 hours: 720 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 960 mg/m³.
Methylisobutylketone	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** TWA 8 hours: 20 ppm. TWA 8 hours: 80 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 210 mg/m³.
Butan-1-ol	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 150 mg/m³. STEL 15 minutes: 75 ppm. STEL 15 minutes: 230 mg/m³.
acetone	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** TWA 8 hours: 500 ppm. TWA 8 hours: 1200 mg/m³. STEL 15 minutes: 630 ppm. STEL 15 minutes: 1500 mg/m³.
iso-butanol	**Institute of Occupational Health, Ministry of Social Affairs**

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	(Finland, 10/2021) [Butanoli] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 150 mg/m³. STEL 15 minutes: 75 ppm. STEL 15 minutes: 230 mg/m³.
1-Methoxy 2-propanol	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 370 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 560 mg/m³.
Xylene	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021) [Ksyleeni]** Absorbed through skin. STEL 15 minutes: 440 mg/m³. TWA 8 hours: 220 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm.
2-Methoxy-1-methylethyl acetate	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 270 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 10/2021)** Absorbed through skin , Ototoxicant. TWA 8 hours: 25 ppm. TWA 8 hours: 81 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 380 mg/m³.
n-Butyl acetate	**Ministry of Labor (France, 6/2024)** TWA 8 hours: 50 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 241 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 150 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 723 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
Methylisobutylketone	**Ministry of Labor (France, 6/2024)** Carc 2. TWA 8 hours: 20 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 83 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 208 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 50 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
Butan-1-ol	**Ministry of Labor (France, 6/2024)** STEL 15 minutes: 50 ppm. Notes: Permissible limit values (circulars) STEL 15 minutes: 150 mg/m³. Notes: Permissible limit values (circulars)
acetone	**Ministry of Labor (France, 6/2024)** TWA 8 hours: 500 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 1210 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 2420 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)

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	STEL 15 minutes: 1000 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
iso-butanol	**Ministry of Labor (France, 6/2024)** TWA 8 hours: 50 ppm. Notes: Permissible limit values (circulars) TWA 8 hours: 150 mg/m³. Notes: Permissible limit values (circulars)
1-Methoxy 2-propanol	**Ministry of Labor (France, 6/2024)** Absorbed through skin. TWA 8 hours: 50 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 188 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 375 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 100 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
Xylene	**Ministry of Labor (France, 6/2024) [xylènes, isomères mixtes, purs]** Absorbed through skin. STEL 15 minutes: 442 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 100 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 221 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 50 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
Solvent naphtha (petroleum), light arom.	**Ministry of Labor (France, 6/2024) [hydrocarbures en C6-C12]** TWA 8 hours: 1000 mg/m³. Form: Vapour. Notes: Permissible limit values (circulars) STEL 15 minutes: 1500 mg/m³. Form: Vapour. Notes: Permissible limit values (circulars)
2-Methoxy-1-methylethyl acetate	**Ministry of Labor (France, 6/2024)** Absorbed through skin. STEL 15 minutes: 550 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 100 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 275 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 50 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
1,2,4-trimethylbenzene	**Ministry of Labor (France, 6/2024)** TWA 8 hours: 20 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 100 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 250 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 50 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)
Toluene	**Ministry of Labor (France, 6/2024)** Repr 2. Absorbed through skin , Ototoxicant. TWA 8 hours: 20 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) TWA 8 hours: 76.8 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 100 ppm. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code) STEL 15 minutes: 384 mg/m³. Notes: Binding regulatory limit values (article R. 4412-149 of the Labor Code)

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n-Butyl acetate	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 300 mg/m³. TWA 8 hours: 62 ppm. PEAK 15 minutes: 600 mg/m³. PEAK 15 minutes: 124 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. TWA 8 hours: 100 ppm. PEAK 15 minutes: 200 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 480 mg/m³. PEAK 15 minutes: 960 mg/m³ 4 times per shift [Interval: 1 hour].
Methylisobutylketone	**TRGS 900 OEL (Germany, 6/2024)** Absorbed through skin. TWA 8 hours: 83 mg/m³. PEAK 15 minutes: 166 mg/m³. TWA 8 hours: 20 ppm. PEAK 15 minutes: 40 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. Absorbed through skin. TWA 8 hours: 20 ppm. PEAK 15 minutes: 40 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 83 mg/m³. PEAK 15 minutes: 166 mg/m³ 4 times per shift [Interval: 1 hour].
Butan-1-ol	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 310 mg/m³. PEAK 15 minutes: 310 mg/m³. TWA 8 hours: 100 ppm. PEAK 15 minutes: 100 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. TWA 8 hours: 100 ppm. PEAK 15 minutes: 100 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 310 mg/m³. PEAK 15 minutes: 310 mg/m³ 4 times per shift [Interval: 1 hour].
acetone	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 1200 mg/m³. PEAK 15 minutes: 2400 mg/m³. TWA 8 hours: 500 ppm. PEAK 15 minutes: 1000 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop B. TWA 8 hours: 500 ppm. PEAK 15 minutes: 1000 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 1200 mg/m³. PEAK 15 minutes: 2400 mg/m³ 4 times per shift [Interval: 1 hour].
iso-butanol	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 310 mg/m³. PEAK 15 minutes: 310 mg/m³. TWA 8 hours: 100 ppm. PEAK 15 minutes: 100 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. TWA 8 hours: 100 ppm. PEAK 15 minutes: 100 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 310 mg/m³. PEAK 15 minutes: 310 mg/m³ 4 times per shift [Interval: 1 hour].
1-Methoxy 2-propanol	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 370 mg/m³. PEAK 15 minutes: 740 mg/m³. TWA 8 hours: 100 ppm. PEAK 15 minutes: 200 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. TWA 8 hours: 100 ppm. PEAK 15 minutes: 200 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 370 mg/m³. PEAK 15 minutes: 740 mg/m³ 4 times per shift [Interval: 1 hour].
Xylene	**TRGS 900 OEL (Germany, 6/2024) [Xylol]** Absorbed through skin. TWA 8 hours: 220 mg/m³.

	PEAK 15 minutes: 440 mg/m³. TWA 8 hours: 50 ppm. PEAK 15 minutes: 100 ppm. **DFG MAC-values list (Germany, 7/2023) [Xylene]** Develop D. Absorbed through skin. TWA 8 hours: 50 ppm. PEAK 15 minutes: 100 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 220 mg/m³. PEAK 15 minutes: 440 mg/m³ 4 times per shift [Interval: 1 hour].
2-Methoxy-1-methylethyl acetate	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 270 mg/m³. PEAK 15 minutes: 270 mg/m³. TWA 8 hours: 50 ppm. PEAK 15 minutes: 50 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. TWA 8 hours: 50 ppm. PEAK 15 minutes: 50 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 270 mg/m³. PEAK 15 minutes: 270 mg/m³ 4 times per shift [Interval: 1 hour].
1,2,4-trimethylbenzene	**TRGS 900 OEL (Germany, 6/2024)** TWA 8 hours: 100 mg/m³. PEAK 15 minutes: 200 mg/m³. TWA 8 hours: 20 ppm. PEAK 15 minutes: 40 ppm. **DFG MAC-values list (Germany, 7/2023) [Trimethylbenzene]** Develop C. TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³. PEAK 15 minutes: 200 mg/m³ 4 times per shift [Interval: 1 hour]. PEAK 15 minutes: 40 ppm 4 times per shift [Interval: 1 hour].
Toluene	**TRGS 900 OEL (Germany, 6/2024)** Absorbed through skin. TWA 8 hours: 190 mg/m³. PEAK 15 minutes: 380 mg/m³. TWA 8 hours: 50 ppm. PEAK 15 minutes: 100 ppm. **DFG MAC-values list (Germany, 7/2023)** Develop C. Absorbed through skin. TWA 8 hours: 50 ppm. PEAK 15 minutes: 100 ppm 4 times per shift [Interval: 1 hour]. TWA 8 hours: 190 mg/m³. PEAK 15 minutes: 380 mg/m³ 4 times per shift [Interval: 1 hour].
n-Butyl acetate	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³.
Methylisobutylketone	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 410 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 410 mg/m³.
Butan-1-ol	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 300 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 300 mg/m³.
acetone	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** TWA 8 hours: 1780 mg/m³. STEL 15 minutes: 3560 mg/m³.

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iso-butanol	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** TWA 8 hours: 100 ppm. TWA 8 hours: 300 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 300 mg/m³.
1-Methoxy 2-propanol	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 360 mg/m³. STEL 15 minutes: 300 ppm. STEL 15 minutes: 1080 mg/m³.
Xylene	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021) [ξυλόλια (όλα τα ισομερή)]** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 650 mg/m³.
2-Methoxy-1-methylethyl acetate	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** TWA 8 hours: 25 ppm. TWA 8 hours: 125 mg/m³.
Toluene	**Presidential Decree 307/1986: Occupational exposure limit values (Greece, 9/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 192 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 384 mg/m³.
n-Butyl acetate	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** Sensitiser. TWA 8 hours: 241 mg/m³. PEAK 15 minutes: 723 mg/m³. PEAK 15 minutes: 150 ppm. TWA 8 hours: 50 ppm.
Methylisobutylketone	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** TWA 8 hours: 83 mg/m³. PEAK 15 minutes: 208 mg/m³. PEAK 15 minutes: 50 ppm. TWA 8 hours: 20 ppm.
Butan-1-ol	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** Absorbed through skin. TWA 8 hours: 45 mg/m³. PEAK 15 minutes: 90 mg/m³.
acetone	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm.
1-Methoxy 2-propanol	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** Absorbed through skin. TWA 8 hours: 375 mg/m³. PEAK 15 minutes: 568 mg/m³. PEAK 15 minutes: 150 ppm. TWA 8 hours: 100 ppm.
Xylene	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023) [xilol izomerek keveréke]** Absorbed through skin. TWA 8 hours: 221 mg/m³. PEAK 15 minutes: 442 mg/m³. PEAK 15 minutes: 100 ppm.

	TWA 8 hours: 50 ppm.
2-Methoxy-1-methylethyl acetate	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** TWA 8 hours: 275 mg/m³. PEAK 15 minutes: 550 mg/m³. PEAK 15 minutes: 100 ppm. TWA 8 hours: 50 ppm.
1,2,4-trimethylbenzene	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** TWA 8 hours: 100 mg/m³. TWA 8 hours: 20 ppm.
Toluene	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** Absorbed through skin. TWA 8 hours: 192 mg/m³. PEAK 15 minutes: 384 mg/m³. PEAK 15 minutes: 100 ppm. TWA 8 hours: 50 ppm.
n-Butyl acetate	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023) [bútýlasetat, allir ísómerar]** TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 723 mg/m³. STEL 15 minutes: 150 ppm.
Methylisobutylketone	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** Absorbed through skin. STEL 15 minutes: 208 mg/m³. STEL 15 minutes: 50 ppm. TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm.
Butan-1-ol	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** Absorbed through skin. STEL 15 minutes: 150 mg/m³. STEL 15 minutes: 50 ppm. TWA 8 hours: 80 mg/m³. TWA 8 hours: 25 ppm.
acetone	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** TWA 8 hours: 600 mg/m³. TWA 8 hours: 250 ppm.
iso-butanol	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023) [Bútanól, allir ísomerar nema n-bútanól]** Absorbed through skin. STEL 15 minutes: 150 mg/m³. STEL 15 minutes: 50 ppm.
1-Methoxy 2-propanol	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** Absorbed through skin. STEL 15 minutes: 568 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 185 mg/m³. TWA 8 hours: 50 ppm.
Xylene	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023) [Xýlen, allir ísómerar]** Absorbed through skin. STEL 15 minutes: 442 mg/m³. STEL 15 minutes: 100 ppm. TWA 8 hours: 109 mg/m³. TWA 8 hours: 25 ppm.
2-Methoxy-1-methylethyl acetate	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** Absorbed through skin. STEL 15 minutes: 550 mg/m³. STEL 15 minutes: 100 ppm. TWA 8 hours: 275 mg/m³. TWA 8 hours: 50 ppm.
1,2,4-trimethylbenzene	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023) [Trímetýlbensen]** Notes: The same exposure limits in mg/m³ shall be used for other polyalkyl benzenes. TWA 8 hours: 100 mg/m³.

	TWA 8 hours: 20 ppm.
Toluene	**Ministry of Welfare, List of Exposure Limits (Iceland, 11/2023)** Absorbed through skin. STEL 15 minutes: 188 mg/m³. STEL 15 minutes: 50 ppm. TWA 8 hours: 94 mg/m³. TWA 8 hours: 25 ppm.
n-Butyl acetate	**NAOSH (Ireland, 4/2024)** Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 50 ppm. OELV 8 hours: 241 mg/m³. OELV 15 minutes: 150 ppm. OELV 15 minutes: 723 mg/m³.
Methylisobutylketone	**NAOSH (Ireland, 4/2024)** Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 20 ppm. OELV 8 hours: 83 mg/m³. OELV 15 minutes: 50 ppm. OELV 15 minutes: 208 mg/m³.
Butan-1-ol	**NAOSH (Ireland, 4/2024)** Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV 8 hours: 20 ppm.
acetone	**NAOSH (Ireland, 4/2024)** Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 500 ppm. OELV 8 hours: 1210 mg/m³.
iso-butanol	**NAOSH (Ireland, 4/2024)** Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV 8 hours: 150 ppm. OELV 8 hours: 700 mg/m³.
1-Methoxy 2-propanol	**NAOSH (Ireland, 4/2024)** Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 100 ppm. OELV 8 hours: 375 mg/m³. OELV 15 minutes: 150 ppm. OELV 15 minutes: 568 mg/m³.
Xylene	**NAOSH (Ireland, 4/2024) [xylene]** Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 50 ppm. OELV 8 hours: 221 mg/m³. OELV 15 minutes: 100 ppm. OELV 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**NAOSH (Ireland, 4/2024)** Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 50 ppm. OELV 8 hours: 275 mg/m³. OELV 15 minutes: 100 ppm. OELV 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**NAOSH (Ireland, 4/2024)** Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 100 mg/m³. OELV 8 hours: 20 ppm.
Toluene	**NAOSH (Ireland, 4/2024)** Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 50 ppm. OELV 8 hours: 192 mg/m³. OELV 15 minutes: 100 ppm. OELV 15 minutes: 384 mg/m³.

n-Butyl acetate	**EU OEL (Europe, 1/2022)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Limit value 8 hours: 20 ppm. Limit value 8 hours: 83 mg/m³. Short Term 15 minutes: 50 ppm. Short Term 15 minutes: 208 mg/m³.
acetone	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Limit value 8 hours: 500 ppm. Limit value 8 hours: 1210 mg/m³.
1-Methoxy 2-propanol	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Absorbed through skin. Limit value 8 hours: 100 ppm. Limit value 8 hours: 375 mg/m³. Short Term 15 minutes: 150 ppm. Short Term 15 minutes: 568 mg/m³.
Xylene	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** **[Xilene, isomeri misti, puro]** Absorbed through skin. Limit value 8 hours: 50 ppm. Limit value 8 hours: 221 mg/m³. Short Term 15 minutes: 100 ppm. Short Term 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Absorbed through skin. Limit value 8 hours: 50 ppm. Limit value 8 hours: 275 mg/m³. Short Term 15 minutes: 100 ppm. Short Term 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Limit value 8 hours: 20 ppm. Limit value 8 hours: 100 mg/m³.
Toluene	**Legislative Decree No. 81/2008. Title IX. Protection from chemical agents, carcinogens and mutagens (Italy, 6/2020)** Absorbed through skin. Limit value 8 hours: 50 ppm. Limit value 8 hours: 192 mg/m³.
n-Butyl acetate	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** TWA 8 hours: 241 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.
Butan-1-ol	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** **[Butilspirti]** TWA 8 hours: 10 mg/m³.
acetone	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm.
iso-butanol	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)**

	[Butilspirti] TWA 8 hours: 10 mg/m³.
1-Methoxy 2-propanol	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** Absorbed through skin. TWA 8 hours: 100 ppm. STEL 15 minutes: 568 mg/m³. TWA 8 hours: 375 mg/m³. STEL 15 minutes: 150 ppm.
Xylene	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** **[Ksilols]** Absorbed through skin. TWA 8 hours: 221 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**Ministers Cabinet Regulations Nr.325 - AER (Latvia, 3/2024)** Absorbed through skin. TWA 8 hours: 50 mg/m³. STEL 15 minutes: 150 mg/m³. TWA 8 hours: 14 ppm. STEL 15 minutes: 40 ppm.
n-Butyl acetate	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 723 mg/m³. STEL 15 minutes: 150 ppm.
Methylisobutylketone	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 208 mg/m³. STEL 15 minutes: 50 ppm.
Butan-1-ol	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** Absorbed through skin. TWA 8 hours: 45 mg/m³. TWA 8 hours: 15 ppm. CEIL: 90 mg/m³. CEIL: 30 ppm.
acetone	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm. STEL 15 minutes: 2420 mg/m³. STEL 15 minutes: 1000 ppm.
iso-butanol	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** Absorbed through skin. TWA 8 hours: 10 mg/m³.
1-Methoxy 2-propanol	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** Absorbed through skin. TWA 8 hours: 190 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 300 mg/m³. STEL 15 minutes: 75 ppm.
Xylene	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** **[ksilenas, mišrūs izomerai, grynas]** Absorbed through skin. STEL 15 minutes: 442 mg/m³. TWA 8 hours: 50 ppm.

	STEL 15 minutes: 100 ppm. TWA 8 hours: 221 mg/m³.
2-Methoxy-1-methylethyl acetate	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** Absorbed through skin. TWA 8 hours: 250 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 400 mg/m³. STEL 15 minutes: 75 ppm.
1,2,4-trimethylbenzene	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024) [trimetilbenzenas ir jo izomerai]** Carc, Muta. TWA 8 hours: 100 mg/m³. TWA 8 hours: 20 ppm.
Toluene	**Lithuanian Hygiene Standard HN 23 (Lithuania, 1/2024)** Repr. Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.
n-Butyl acetate	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³.
Methylisobutylketone	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.
acetone	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
1-Methoxy 2-propanol	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m³.
Xylene	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021) [xylène Isomères mixtes, purs]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**Grand-Duchy Regulation 2016. Chemical agents. Annex I (Luxembourg, 3/2021)** Absorbed through skin. STEL 15 minutes: 100 ppm. STEL 15 minutes: 384 mg/m³. TWA 8 hours: 50 ppm.

	TWA 8 hours: 192 mg/m³.
n-Butyl acetate	**EU OEL (Europe, 1/2022)** STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³. TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**EU OEL (Europe, 1/2022)** TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.
acetone	**EU OEL (Europe, 1/2022)** TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
1-Methoxy 2-propanol	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m³.
Xylene	**EU OEL (Europe, 1/2022) [xylene, mixed isomers]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**EU OEL (Europe, 1/2022)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.
n-Butyl acetate	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** TWA 8 hours: 241 mg/m³. STEL 15 minutes: 723 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 50 ppm.
Methylisobutylketone	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** TWA 8 hours: 104 mg/m³. STEL 15 minutes: 208 mg/m³. TWA 8 hours: 25 ppm. STEL 15 minutes: 50 ppm.
acetone	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** STEL 15 minutes: 2420 mg/m³. TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm. STEL 15 minutes: 1000 ppm.
1-Methoxy 2-propanol	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** Absorbed through skin. TWA 8 hours: 375 mg/m³. STEL 15 minutes: 563 mg/m³. TWA 8 hours: 100 ppm.

	STEL 15 minutes: 150 ppm.
Xylene	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024) [xyleen, o-, m-, p-isomeren]** Absorbed through skin. TWA 8 hours: 210 mg/m³. STEL 15 minutes: 442 mg/m³. STEL 15 minutes: 100 ppm. TWA 8 hours: 47.5 ppm.
2-Methoxy-1-methylethyl acetate	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** TWA 8 hours: 550 mg/m³. TWA 8 hours: 100 ppm.
1,2,4-trimethylbenzene	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** TWA 8 hours: 100 mg/m³. STEL 15 minutes: 200 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 40 ppm.
Toluene	**Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024)** TWA 8 hours: 150 mg/m³. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm. TWA 8 hours: 39 ppm.
n-Butyl acetate	**FOR-2011-12-06-1358 (Norway, 12/2022)** STEL 15 minutes: 723 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm.
Methylisobutylketone	**FOR-2011-12-06-1358 (Norway, 12/2022)** Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.
Butan-1-ol	**FOR-2011-12-06-1358 (Norway, 12/2022)** Absorbed through skin. CEIL: 75 mg/m³. CEIL: 25 ppm.
acetone	**FOR-2011-12-06-1358 (Norway, 12/2022)** TWA 8 hours: 125 ppm. TWA 8 hours: 295 mg/m³.
iso-butanol	**FOR-2011-12-06-1358 (Norway, 12/2022)** Absorbed through skin. CEIL: 75 mg/m³. CEIL: 25 ppm.
1-Methoxy 2-propanol	**FOR-2011-12-06-1358 (Norway, 12/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 180 mg/m³.
Xylene	**FOR-2011-12-06-1358 (Norway, 12/2022) [xylen]** Absorbed through skin. TWA 8 hours: 25 ppm. TWA 8 hours: 108 mg/m³.
2-Methoxy-1-methylethyl acetate	**FOR-2011-12-06-1358 (Norway, 12/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 270 mg/m³.
1,2,4-trimethylbenzene	**FOR-2011-12-06-1358 (Norway, 12/2022)** TWA 8 hours: 100 mg/m³. TWA 8 hours: 20 ppm.
Toluene	**FOR-2011-12-06-1358 (Norway, 12/2022)** Absorbed through skin. TWA 8 hours: 25 ppm. TWA 8 hours: 94 mg/m³.

SECTION 8: Exposure controls/personal protection

n-Butyl acetate	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** TWA 8 hours: 240 mg/m³. STEL 15 minutes: 720 mg/m³.
Methylisobutylketone	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** TWA 8 hours: 83 mg/m³. STEL 15 minutes: 200 mg/m³.
Butan-1-ol	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** Absorbed through skin. TWA 8 hours: 50 mg/m³. STEL 15 minutes: 150 mg/m³.
acetone	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** TWA 8 hours: 600 mg/m³. STEL 15 minutes: 1800 mg/m³.
iso-butanol	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** Absorbed through skin. TWA 8 hours: 100 mg/m³. STEL 15 minutes: 200 mg/m³.
1-Methoxy 2-propanol	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** Absorbed through skin. TWA 8 hours: 180 mg/m³. STEL 15 minutes: 360 mg/m³.
Xylene	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023) [xylene – mixed isomers (1,2-, 1,3-, 1,4-)]** Absorbed through skin. TWA 8 hours: 100 mg/m³. STEL 15 minutes: 200 mg/m³.
2-Methoxy-1-methylethyl acetate	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** Absorbed through skin. TWA 8 hours: 260 mg/m³. STEL 15 minutes: 520 mg/m³.
1,2,4-trimethylbenzene	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023) [trimethyl benzene – mixed isomers (1,2,3-, 1,2,4- and 1,3,5-)]** Absorbed through skin.

	TWA 8 hours: 100 mg/m³. STEL 15 minutes: 170 mg/m³.
Toluene	**Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286) (Poland, 8/2023)** Absorbed through skin. TWA 8 hours: 100 mg/m³. STEL 15 minutes: 200 mg/m³.
n-Butyl acetate	**Portuguese Institute of Quality (Portugal, 11/2014)** TWA 8 hours: 150 ppm. STEL 15 minutes: 200 ppm.
Methylisobutylketone	**Portuguese Institute of Quality (Portugal, 11/2014)** A3. TWA 8 hours: 20 ppm. STEL 15 minutes: 75 ppm.
Butan-1-ol	**Portuguese Institute of Quality (Portugal, 11/2014)** TWA 8 hours: 20 ppm.
acetone	**Portuguese Institute of Quality (Portugal, 11/2014)** A4. TWA 8 hours: 500 ppm. STEL 15 minutes: 750 ppm.
iso-butanol	**Portuguese Institute of Quality (Portugal, 11/2014)** TWA 8 hours: 50 ppm.
1-Methoxy 2-propanol	**Portuguese Institute of Quality (Portugal, 11/2014)** A4. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm.
Xylene	**Portuguese Institute of Quality (Portugal, 11/2014) [xileno (isómeros o, m & p)]** A4. TWA 8 hours: 100 ppm. STEL 15 minutes: 150 ppm.
2-Methoxy-1-methylethyl acetate	**EU OEL (Europe, 1/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Portuguese Institute of Quality (Portugal, 11/2014) [trimetilbenzeno (mistura de isómeros)]** TWA 8 hours: 25 ppm.
Toluene	**Portuguese Institute of Quality (Portugal, 11/2014)** A4. TWA 8 hours: 20 ppm.
n-Butyl acetate	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** VLA 8 hours: 241 mg/m³. VLA 8 hours: 50 ppm. Short term 15 minutes: 723 mg/m³. Short term 15 minutes: 150 ppm.
Methylisobutylketone	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** VLA 8 hours: 83 mg/m³. VLA 8 hours: 20 ppm. Short term 15 minutes: 208 mg/m³. Short term 15 minutes: 50 ppm.
Butan-1-ol	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** VLA 8 hours: 100 mg/m³. VLA 8 hours: 33 ppm. Short term 15 minutes: 200 mg/m³. Short term 15 minutes: 66 ppm.
acetone	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** VLA 8 hours: 1210 mg/m³. VLA 8 hours: 500 ppm.
iso-butanol	**HG 1218/2006, Annex 1, with subsequent modifications and**

	additions (Romania, 3/2024) VLA 8 hours: 100 mg/m³. VLA 8 hours: 33 ppm. Short term 15 minutes: 200 mg/m³. Short term 15 minutes: 66 ppm.
1-Methoxy 2-propanol	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** Absorbed through skin. VLA 8 hours: 375 mg/m³. VLA 8 hours: 100 ppm. Short term 15 minutes: 568 mg/m³. Short term 15 minutes: 150 ppm.
Xylene	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024) [xilen]** Absorbed through skin. VLA 8 hours: 221 mg/m³. VLA 8 hours: 50 ppm. Short term 15 minutes: 442 mg/m³. Short term 15 minutes: 100 ppm.
Solvent naphtha (petroleum), light arom.	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024) [Solvent nafta]** Absorbed through skin. VLA 8 hours: 100 mg/m³. Short term 15 minutes: 200 mg/m³.
2-Methoxy-1-methylethyl acetate	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** Absorbed through skin. VLA 8 hours: 275 mg/m³. VLA 8 hours: 50 ppm. Short term 15 minutes: 550 mg/m³. Short term 15 minutes: 100 ppm.
1,2,4-trimethylbenzene	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** VLA 8 hours: 100 mg/m³. VLA 8 hours: 20 ppm.
Toluene	**HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2024)** R2. Absorbed through skin. VLA 8 hours: 192 mg/m³. VLA 8 hours: 50 ppm. Short term 15 minutes: 384 mg/m³. Short term 15 minutes: 100 ppm.
n-Butyl acetate	**Government regulation SR c. 355/2006 (Slovakia, 7/2024) [butylacetáty]** Inhalation sensitiser. TWA 8 hours: 241 mg/m³ (Butyl acetates). TWA 8 hours: 50 ppm (Butyl acetates). STEL 15 minutes: 723 mg/m³ (Butyl acetates). STEL 15 minutes: 150 ppm (Butyl acetates).
Methylisobutylketone	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** Absorbed through skin , Inhalation sensitiser. TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm. STEL 15 minutes: 166 mg/m³. STEL 15 minutes: 40 ppm.
Butan-1-ol	**Government regulation SR c. 355/2006 (Slovakia, 7/2024) [butylalkoholy]** Inhalation sensitiser. TWA 8 hours: 310 mg/m³ (Butyl alkohols). TWA 8 hours: 100 ppm (Butyl alkohols).
acetone	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** Inhalation sensitiser. TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm.
iso-butanol	**Government regulation SR c. 355/2006 (Slovakia, 7/2024) [butylalkoholy]** Inhalation sensitiser. TWA 8 hours: 310 mg/m³ (Butyl alkohols). TWA 8 hours: 100 ppm (Butyl alkohols).
1-Methoxy 2-propanol	

	Government regulation SR c. 355/2006 (Slovakia, 7/2024) Absorbed through skin , Inhalation sensitiser. TWA 8 hours: 375 mg/m³. TWA 8 hours: 100 ppm. STEL 15 minutes: 568 mg/m³. STEL 15 minutes: 150 ppm.
Xylene	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** **[xylén, zmiešané izoméry]** Absorbed through skin , Inhalation sensitiser. TWA 8 hours: 221 mg/m³ (xylene, mixed isomers). TWA 8 hours: 50 ppm (xylene, mixed isomers). STEL 15 minutes: 442 mg/m³ (xylene, mixed isomers). STEL 15 minutes: 100 ppm (xylene, mixed isomers).
2-Methoxy-1-methylethyl acetate	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** Absorbed through skin , Inhalation sensitiser. TWA 8 hours: 275 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 550 mg/m³. STEL 15 minutes: 100 ppm.
1,2,4-trimethylbenzene	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** **[trimetylbenzén, všetky izoméry]** Inhalation sensitiser. TWA 8 hours: 100 mg/m³ (Trimethylbenzene, all isomers). TWA 8 hours: 20 ppm (Trimethylbenzene, all isomers).
Toluene	**Government regulation SR c. 355/2006 (Slovakia, 7/2024)** Absorbed through skin , Inhalation sensitiser. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m³. STEL 15 minutes: 100 ppm.
n-Butyl acetate	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** TWA 8 hours: 241 mg/m³. TWA 8 hours: 50 ppm. KTV 15 minutes: 723 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 150 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
Methylisobutylketone	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** Absorbed through skin. TWA 8 hours: 83 mg/m³. TWA 8 hours: 20 ppm. KTV 15 minutes: 208 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 50 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
Butan-1-ol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** TWA 8 hours: 310 mg/m³. TWA 8 hours: 100 ppm. KTV 15 minutes: 310 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 100 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
acetone	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** TWA 8 hours: 1210 mg/m³. TWA 8 hours: 500 ppm. KTV 15 minutes: 1000 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 2420 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
iso-butanol	

	Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024) TWA 8 hours: 310 mg/m³. TWA 8 hours: 100 ppm. KTV 15 minutes: 310 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 100 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
1-Methoxy 2-propanol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** Absorbed through skin. TWA 8 hours: 375 mg/m³. TWA 8 hours: 100 ppm. KTV 15 minutes: 568 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 150 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
Xylene	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** **[ksilen]** Absorbed through skin. TWA 8 hours: 221 mg/m³. TWA 8 hours: 50 ppm. KTV 15 minutes: 442 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 100 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
2-Methoxy-1-methylethyl acetate	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** Absorbed through skin. TWA 8 hours: 275 mg/m³. TWA 8 hours: 50 ppm. KTV 15 minutes: 550 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 100 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
1,2,4-trimethylbenzene	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** TWA 8 hours: 100 mg/m³. TWA 8 hours: 20 ppm. KTV 15 minutes: 40 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 200 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
Toluene	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** Repr Dev 2. Absorbed through skin. TWA 8 hours: 192 mg/m³. TWA 8 hours: 50 ppm. KTV 15 minutes: 384 mg/m³ 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes]. KTV 15 minutes: 100 ppm 4 times per shift [time between two exposure events at this concentration must be at least 60 minutes].
n-Butyl acetate	**National institute of occupational safety and health (Spain, 1/2024)** TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³.
Methylisobutylketone	**National institute of occupational safety and health (Spain, 1/2024)** TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 208 mg/m³.

Butan-1-ol	**National institute of occupational safety and health (Spain, 1/2024)** STEL 15 minutes: 50 ppm. STEL 15 minutes: 154 mg/m³. TWA 8 hours: 20 ppm. TWA 8 hours: 61 mg/m³.
acetone	**National institute of occupational safety and health (Spain, 1/2024)** TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
iso-butanol	**National institute of occupational safety and health (Spain, 1/2024)** TWA 8 hours: 50 ppm. TWA 8 hours: 154 mg/m³.
1-Methoxy 2-propanol	**National institute of occupational safety and health (Spain, 1/2024)** Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 375 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m³.
Xylene	**National institute of occupational safety and health (Spain, 1/2024) [xileno, mezcla isómeros]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**National institute of occupational safety and health (Spain, 1/2024)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**National institute of occupational safety and health (Spain, 1/2024)** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³.
Toluene	**National institute of occupational safety and health (Spain, 1/2024)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 192 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 384 mg/m³.
n-Butyl acetate	**Work environment authority Regulation 2018:1 (Sweden, 11/2022) [butyl acetate]** TWA 8 hours: 50 ppm. TWA 8 hours: 241 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m³.
Methylisobutylketone	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** TWA 8 hours: 20 ppm. TWA 8 hours: 83 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 200 mg/m³.
Butan-1-ol	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** Absorbed through skin. TWA 8 hours: 15 ppm. TWA 8 hours: 45 mg/m³. STEL 15 minutes: 30 ppm. STEL 15 minutes: 90 mg/m³.
acetone	**Work environment authority Regulation 2018:1 (Sweden,**

	11/2022) TWA 8 hours: 250 ppm. TWA 8 hours: 600 mg/m³. STEL 15 minutes: 500 ppm. STEL 15 minutes: 1200 mg/m³.
iso-butanol	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 150 mg/m³. STEL 15 minutes: 75 ppm. STEL 15 minutes: 250 mg/m³.
1-Methoxy 2-propanol	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** Absorbed through skin. STEL 15 minutes: 150 ppm. STEL 15 minutes: 568 mg/m³. TWA 8 hours: 190 mg/m³. TWA 8 hours: 50 ppm.
Xylene	**Work environment authority Regulation 2018:1 (Sweden, 11/2022) [xylene]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m³.
2-Methoxy-1-methylethyl acetate	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 550 mg/m³.
1,2,4-trimethylbenzene	**Work environment authority Regulation 2018:1 (Sweden, 11/2022) [trimethyl benzene]** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³. STEL 15 minutes: 35 ppm. STEL 15 minutes: 170 mg/m³.
Toluene	**Work environment authority Regulation 2018:1 (Sweden, 11/2022)** Absorbed through skin , Ototoxicant. TWA 8 hours: 50 ppm. TWA 8 hours: 192 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 384 mg/m³.
n-Butyl acetate	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 50 ppm. TWA 8 hours: 240 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 720 mg/m³.
Methylisobutylketone	**SUVA (Switzerland, 1/2024)** Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 82 mg/m³. STEL 15 minutes: 40 ppm. STEL 15 minutes: 164 mg/m³.
Butan-1-ol	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 100 ppm. TWA 8 hours: 310 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 310 mg/m³.
acetone	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 500 ppm. TWA 8 hours: 1200 mg/m³. STEL 15 minutes: 1000 ppm. STEL 15 minutes: 2400 mg/m³.
iso-butanol	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 50 ppm. TWA 8 hours: 150 mg/m³.

	STEL 15 minutes: 50 ppm. STEL 15 minutes: 150 mg/m³.
1-Methoxy 2-propanol	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 100 ppm. TWA 8 hours: 360 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 720 mg/m³.
Xylene	**SUVA (Switzerland, 1/2024) [Xylol]** Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 220 mg/m³. STEL 15 minutes: 100 ppm. STEL 15 minutes: 440 mg/m³.
2-Methoxy-1-methylethyl acetate	**SUVA (Switzerland, 1/2024)** TWA 8 hours: 50 ppm. TWA 8 hours: 275 mg/m³. STEL 15 minutes: 50 ppm. STEL 15 minutes: 275 mg/m³.
1,2,4-trimethylbenzene	**SUVA (Switzerland, 1/2024) [Trimethylbenzol]** TWA 8 hours: 20 ppm. TWA 8 hours: 100 mg/m³. STEL 15 minutes: 40 ppm. STEL 15 minutes: 200 mg/m³.
Toluene	**SUVA (Switzerland, 1/2024)** Develop 2. Absorbed through skin , Ototoxicant. TWA 8 hours: 50 ppm. TWA 8 hours: 190 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 760 mg/m³.
n-Butyl acetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 966 mg/m³. STEL 15 minutes: 200 ppm. TWA 8 hours: 724 mg/m³. TWA 8 hours: 150 ppm.
Methylisobutylketone	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 416 mg/m³. STEL 15 minutes: 100 ppm. TWA 8 hours: 208 mg/m³. TWA 8 hours: 50 ppm.
Butan-1-ol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 154 mg/m³. STEL 15 minutes: 50 ppm.
acetone	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 3620 mg/m³. STEL 15 minutes: 1500 ppm. TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
iso-butanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 231 mg/m³. STEL 15 minutes: 75 ppm. TWA 8 hours: 154 mg/m³. TWA 8 hours: 50 ppm.
1-Methoxy 2-propanol	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 560 mg/m³. STEL 15 minutes: 150 ppm. TWA 8 hours: 375 mg/m³. TWA 8 hours: 100 ppm.
Xylene	**EH40/2005 WELs (United Kingdom (UK), 1/2020) [xylene, o-,m-, p- or mixed isomers]** Absorbed through skin.

	STEL 15 minutes: 441 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 220 mg/m³. STEL 15 minutes: 100 ppm.
2-Methoxy-1-methylethyl acetate	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 548 mg/m³. TWA 8 hours: 50 ppm. TWA 8 hours: 274 mg/m³. STEL 15 minutes: 100 ppm.
1,2,4-trimethylbenzene	**EH40/2005 WELs (United Kingdom (UK), 1/2020) [trimethylbenzenes, all isomers or mixtures]** TWA 8 hours: 25 ppm. TWA 8 hours: 125 mg/m³.
Toluene	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** Absorbed through skin. STEL 15 minutes: 384 mg/m³. TWA 8 hours: 191 mg/m³. TWA 8 hours: 50 ppm. STEL 15 minutes: 100 ppm.

Biological exposure indices

Product/ingredient name	Exposure indices
Xylene	**VGU BEI (Austria, 9/2020) [xylenes]** BEI Fitness: 1000 µg/l, xylene [in blood]. Sampling time: one year. BEI Fitness: 1.5 g/l, methylhippuricacid [in urine]. Sampling time: one year.
Toluene	**VGU BEI (Austria, 9/2020)** BEI Fitness: 250 µg/l, toluene [in blood]. Sampling time: one year. BEI Fitness: 0.8 mg/l, o-cresol [in urine]. Sampling time: one year. BEI Fitness: 130000 /µl, platelets (non-pathological differential blood count) [in blood]. Sampling time: one year. BEI Fitness: 150000 /µl, platelets [in blood]. Sampling time: one year. BEI Fitness: 3700 to 13000 /µl, leukocytes (non-pathological differential blood count) [in blood]. Sampling time: one year. BEI Fitness: 4000 to 13000 /µl, leukocytes [in blood]. Sampling time: one year. BEI Fitness - men: 3.8 million/µl, erythrocytes [in blood]. Sampling time: one year. BEI Fitness - women: 3.2 million/µl, erythrocytes [in blood]. Sampling time: one year. BEI Fitness - men: 12 g/dl, hemoglobin [in blood]. Sampling time: one year. BEI Fitness - women: 10 g/dl, hemoglobin [in blood]. Sampling time: one year.
No exposure indices known.	
acetone	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** BLV: 80 mg/l, acetone [in urine]. Sampling time: at the end of the exposure or at the end of the work shift.
Toluene	**Ministry of Labour and Social Policy and the Ministry of Health - Ordinance No 13/2003. (Bulgaria, 4/2024)** BLV: 1.6 mmol/mmol creatinine, hippuric acid [in urine]. Sampling time: at the end of the exposure or at the end of the work shift.

Methylisobutylketone	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, biological limit values (Annex IV) (Croatia, 12/2023)** BEI: 3.5 mg/l, 4-methylpentan-2-one [in urine]. Sampling time: not critical. BEI: 35 nmol/l, 4-methylpentan-2-one [in urine]. Sampling time: not critical.
acetone	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, biological limit values (Annex IV) (Croatia, 12/2023)** BEI: 20 mg/g creatinine, acetone [in urine]. Sampling time: at the end of the work shift. BEI: 39 mmol/mol creatinine, acetone [in urine]. Sampling time: at the end of the work shift. BEI: 20 mg/l, acetone [in blood]. Sampling time: at the end of the work shift. BEI: 0.34 mmol/l, acetone [in blood]. Sampling time: at the end of the work shift.
Xylene	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, biological limit values (Annex IV) (Croatia, 12/2023) [xylene]** BEI: 1.5 mg/l, xylene [in blood]. Sampling time: at the end of the work shift. BEI: 14.13 µmol/l, xylene [in blood]. Sampling time: at the end of the work shift. BEI: 0.88 mol/mol creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the work shift. BEI: 1.5 g/g creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the work shift.
1,2,4-trimethylbenzene	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, biological limit values (Annex IV) (Croatia, 12/2023) [trimethylbenzene (all isomers including mesitylene)]** BEI: 400 mg/g creatinine, dimethylbenzoic acid [in urine]. Sampling time: at the end of the work shift (in case of chronic exposure in the middle of the working week).
Toluene	**Ordinance on the protection of workers from exposure to hazardous chemicals at work, biological limit values (Annex IV) (Croatia, 12/2023)** BEI: 20 ppm, toluene [in end exhaled air]. Sampling time: during exposure. BEI: 0.83 µmol/l, toluene [in end exhaled air]. Sampling time: during exposure. BEI: 1 mg/l, toluene [in blood]. Sampling time: at the end of the work shift. BEI: 10.85 µmol/l, toluene [in blood]. Sampling time: at the end of the work shift. BEI: 1.05 mmol/mol creatinine, o-cresol [in urine]. Sampling time: at the end of the work shift. BEI: 1 mg/g creatinine, o-cresol [in urine]. Sampling time: at the end of the work shift. BEI: 1.58 mol/mol creatinine, hippuric acid [in urine]. Sampling time: at the end of the work shift. BEI: 2.5 g/g creatinine, hippuric acid [in urine]. Sampling time: at the end of the work shift.
No exposure indices known.	

Xylene	**Government regulation of Czech Republic Limit Values of Biological Exposure Tests (Czech Republic, 9/2015) [Xylene]** Biological limit values: 820 µmol/mmol creatinine, methylhippuric acid [in urine]. Sampling time: end of the shift. Biological limit values: 1400 mg/g creatinine, methylhippuric acid [in urine]. Sampling time: end of the shift.
Toluene	**Government regulation of Czech Republic Limit Values of Biological Exposure Tests (Czech Republic, 9/2015)** Biological limit values: 1000 µmol/mmol creatinine, hippuric acid [in urine]. Sampling time: end of the shift. Biological limit values: 1600 mg/g, hippuric acid [in urine]. Sampling time: end of the shift. Biological limit values: 1.6 µmol/mmol creatinine, o-kresol (after hydrolysis) [in urine]. Sampling time: end of the shift. Biological limit values: 1.5 mg/g creatinine, o-kresol (after hydrolysis) [in urine]. Sampling time: end of the shift.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
Xylene	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 9/2020) [Xylene]** BEI: 5 mmol/l, methylhippuricacid [in urine]. Sampling time: at the end of the work shift.
Toluene	**Institute of Occupational Health, Ministry of Social Affairs (Finland, 9/2020)** BEI: 500 nmol/l, toluene [in blood]. Sampling time: the morning after the working day.
Toluene	**Biological limit values (BLV) - Labour Code / ANSES (France, 4/2023)** BLV: 30 µg/l, toluene [in urine]. Sampling time: at the end of the shift. BLV: 20 µg/l, toluene [in blood]. Sampling time: at the beginning of the shift and at the end of the week. BLV: 300 µg/g Cr, ortho-cresol [in urine]. Sampling time: end of shift and weekend.
Methylisobutylketone	**DFG BEI-values list (Germany, 7/2023)** Notes: danger from percutaneous absorption (see p. 211 and p. 228). BEI: 0.7 mg/l, hexone [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 2/2024)** BEI: 0.7 mg/l, 4-methylpentan-2-one [in urine]. Sampling time: end of exposure or end of shift.
Butan-1-ol	**DFG BEI-values list (Germany, 7/2023)** BEI: 2 mg/g creatinine, 1-butanol [in urine]. Sampling time: at the beginning of the next shift. BEI: 10 mg/g creatinine, 1-butanol [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 2/2024)** BEI: 2 mg/g creatinine, butan-1-ol (butanol-1) (after hydrolysis) [in urine]. Sampling time: at the beginning of the next shift. BEI: 10 mg/g creatinine, butan-1-ol (butanol-1) (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift.
acetone	**DFG BEI-values list (Germany, 7/2023)** BEI: 50 mg/l, acetone [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 2/2024)** BEI: 50 mg/l, acetone [in urine]. Sampling time: end of exposure or end of shift.

1-Methoxy 2-propanol	**DFG BEI-values list (Germany, 7/2023)** BEI: 15 mg/l, propylene glycol 1-methyl ether [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 2/2024)** BEI: 15 mg/l, 1-methoxypropan-2-ol [in urine]. Sampling time: end of exposure or end of shift.
Xylene	**DFG BEI-values list (Germany, 7/2023) [Xylene (all isomers)]** Notes: danger from percutaneous absorption (see p. 211 and p. 228). BEI: 2000 mg/l, methylhippuric acid (toluric acid) (all isomers) [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 2/2024) [Xylene (all isomers)]** BEI: 2000 mg/l, methylhippuric acid [in urine]. Sampling time: end of exposure or end of shift.
1,2,4-trimethylbenzene	**DFG BEI-values list (Germany, 7/2023) [Trimethylbenzene (all isomers)]** BEI: 400 mg/g creatinine, dimethyl benzoic acids (sum of isomers after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift / for long-term exposures: at the end of the shift after several shifts. **TRGS 903 - BEI Values (Germany, 2/2024) [Trimethylbenzene]** BEI: 400 mg/g creatinine, dimethylbenzoic acids (sum of isomers after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift; for long-term exposures: at the end of shift after several shifts.
Toluene	**DFG BEI-values list (Germany, 7/2023)** Notes: danger from percutaneous absorption (see p. 211 and p. 228). BEI: 600 µg/l, toluene [in blood]. Sampling time: immediately after exposure. BEI: 1.5 mg/l, o-cresol (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift / for long-term exposures: at the end of the shift after several shifts. BEI: 75 µg/l, toluene [in urine]. Sampling time: end of exposure or end of shift. **TRGS 903 - BEI Values (Germany, 2/2024)** BEI: 600 µg/l, toluene [in whole blood]. Sampling time: immediately after exposure. BEI: 1.5 mg/l, o-cresol (after hydrolysis) [in urine]. Sampling time: end of exposure or end of shift; for long-term exposures: at the end of shift after several shifts. BEI: 75 µg/l, toluene [in urine]. Sampling time: end of exposure or end of shift.
No exposure indices known.	
Methylisobutylketone	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** BEI: 35 µmol/l, methyl-iso-butyl-ketone [in urine]. Sampling time: at the end of the shift. BEI: 3.5 mg/l, methyl-iso-butyl-ketone [in urine]. Sampling time: at the end of the shift.
Butan-1-ol	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** BEI: 15 µmol/mmol creatinine, n-butyl-alcohol (after hydrolysis) [in urine]. Sampling time: at the end of the shift. BEI: 10 mg/g creatinine, n-butyl-alcohol (after hydrolysis) [in urine]. Sampling time: at the end of the shift. BEI: 3 µmol/mmol creatinine, n-butyl-alcohol (after hydrolysis) [in urine]. Sampling time: before the next shift. BEI: 2 mg/g creatinine, n-butyl-alcohol (after hydrolysis) [in urine]. Sampling time: before the next shift.

acetone	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** BEI: 1380 µmol/l, acetone [in urine]. Sampling time: at the end of the shift. BEI: 80 mg/l, acetone [in urine]. Sampling time: at the end of the shift.
Xylene	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023) [xylene]** BEI: 1500 mg/g creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the shift. BEI: 860 µmol/mmol creatinine, methylhippuric acid [in urine]. Sampling time: at the end of the shift.
Toluene	**5/2020. (II. 6.) ITM Decree (Hungary, 12/2023)** BEI: 1 mg/g creatinine, o-cresol [in urine]. Sampling time: at the end of the shift. BEI: 1 µmol/mmol creatinine, o-cresol [in urine]. Sampling time: at the end of the shift.
No exposure indices known.	
Methylisobutylketone	**NAOSH (Ireland, 1/2011)** BMGV: 1 mg/l, MIBK [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
acetone	**NAOSH (Ireland, 1/2011)** BMGV: 50 mg/l, acetone [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
Xylene	**NAOSH (Ireland, 1/2011) [Xylene]** BMGV: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases.
Toluene	**NAOSH (Ireland, 1/2011)** BMGV: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases. BMGV: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift - As soon as possible after exposure ceases. BMGV: 0.02 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek.
No exposure indices known.	
acetone	**Minister Cabinet Regulations No.325 - BEI (Latvia, 3/2024)** BEI: 80 mg/l, acetone [in urine]. Sampling time: at the end of the exposure or at the end of the shift.
Xylene	**Minister Cabinet Regulations No.325 - BEI (Latvia, 3/2024) [xylenes (all isomers)]** BEI: 2000 mg/l, methylhippuric (toluric) acid (all isomers) [in urine]. Sampling time: at the end of the exposure or at the end of the shift.
Toluene	**Minister Cabinet Regulations No.325 - BEI (Latvia, 3/2024)** BEI: 600 µg/l, toluene [in blood]. Sampling time: at the end of the exposure. BEI: 75 µg/l, toluene [in urine]. Sampling time: end of the shift. BEI: 1.5 mg/l, o-cresol (after hydrolysis) [in urine]. Sampling time: at the end of the exposure or at the end of the shift.
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	
No exposure indices known.	

Methylisobutylketone	**Portuguese Institute of Quality (Portugal, 11/2014)** BEI: 1 mg/l, methylisobutylketone (MIBK) [in urine]. Sampling time: end of shift.
acetone	**Portuguese Institute of Quality (Portugal, 11/2014)** BEI: 50 mg/l, acetone [in urine]. Sampling time: end of shift.
Xylene	**Portuguese Institute of Quality (Portugal, 11/2014) [Xylenes]** BEI: 1.5 g/g creatinine, (o, m, p) -methyl-boronic acids [in urine]. Sampling time: end of shift.
Toluene	**Portuguese Institute of Quality (Portugal, 11/2014)** BEI: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift. BEI: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift. BEI: 0.02 mg/l, toluene [in blood]. Sampling time: end of shift at the end of the workweek.
acetone	**HG 1218/2006, Annex 2, with subsequent modifications and additions (Romania, 3/2024)** OBLV: 50 mg/l, acetone [in urine]. Sampling time: end of shift.
Xylene	**HG 1218/2006, Annex 2, with subsequent modifications and additions (Romania, 3/2024) [Xylene]** OBLV: 3 g/l, methylhippuric acid [in urine]. Sampling time: end of shift.
Toluene	**HG 1218/2006, Annex 2, with subsequent modifications and additions (Romania, 3/2024)** OBLV: 3 mg/l, o-cresol [in urine]. Sampling time: end of shift. OBLV: 2 g/l, hippuric acid [in urine]. Sampling time: end of shift.
Methylisobutylketone	**Government regulation SR c. 355/2006 (Slovakia, 5/2024)** BLV: 2.67 µmol/mmol creatinine, as hexon [in urine]. Sampling time: at the end of exposure or work shift. BLV: 2.36 mg/g creatinine, as hexon [in urine]. Sampling time: at the end of exposure or work shift. BLV: 35.4 µmol/l, as hexon [in urine]. Sampling time: at the end of exposure or work shift. BLV: 3.5 mg/l, as hexon [in urine]. Sampling time: at the end of exposure or work shift.
Butan-1-ol	**Government regulation SR c. 355/2006 (Slovakia, 5/2024)** BLV: 15.34 µmol/mmol creatinine, as n-butyl alcohol [in urine]. Sampling time: at the end of exposure or work shift. BLV: 10 mg/g creatinine, as n-butyl alcohol [in urine]. Sampling time: at the end of exposure or work shift. BLV: 3.13 µmol/mmol creatinine, as n-butyl alcohol [in urine]. Sampling time: before the next work shift. BLV: 2 mg/g creatinine, as n-butyl alcohol [in urine]. Sampling time: before the next work shift.
acetone	**Government regulation SR c. 355/2006 (Slovakia, 5/2024)** BLV: 103.9 µmol/mmol creatinine, as acetone [in urine]. Sampling time: at the end of exposure or work shift. BLV: 53.36 mg/g creatinine, as acetone [in urine]. Sampling time: at the end of exposure or work shift. BLV: 1378 µmol/l, as acetone [in urine]. Sampling time: at the end of exposure or work shift. BLV: 80 mg/l, as acetone [in urine]. Sampling time: at the end of exposure or work shift.
Xylene	**Government regulation SR c. 355/2006 (Slovakia, 5/2024) [xylene, all isomers]** BLV: 781 µmol/mmol creatinine, as sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift.

	BLV: 1334 mg/g creatinine, as sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift. BLV: 10355 µmol/l, as sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift. BLV: 14.6 µmol/l, as xylene [in blood]. Sampling time: at the end of exposure or work shift. BLV: 2000 mg/l, as sum of 2,3,4-methylhippuroic acids [in urine]. Sampling time: at the end of exposure or work shift. BLV: 1.5 mg/l, as xylene [in blood]. Sampling time: at the end of exposure or work shift.
Toluene	**Government regulation SR c. 355/2006 (Slovakia, 5/2024)** BLV: 1010 µmol/mmol creatinine, as hippuric acid [in urine]. Sampling time: at the end of exposure or work shift. BLV: 1.08 µmol/mmol creatinine, as o-cresol [in urine]. Sampling time: at the end of exposure or work shift; long-term exposure: after several work shifts. BLV: 1600 mg/g creatinine, as hippuric acid [in urine]. Sampling time: at the end of exposure or work shift. BLV: 1.03 mg/g creatinine, as o-cresol [in urine]. Sampling time: at the end of exposure or work shift; long-term exposure: after several work shifts. BLV: 13399 µmol/l, as hippuric acid [in urine]. Sampling time: at the end of exposure or work shift. BLV: 14.3 µmol/l, as o-cresol [in urine]. Sampling time: at the end of exposure or work shift; long-term exposure: after several work shifts. BLV: 6517 nmol/l, as toluene [in blood]. Sampling time: at the end of exposure or work shift. BLV: 2401 mg/l, as hippuric acid [in urine]. Sampling time: at the end of exposure or work shift. BLV: 1.5 mg/l, as o-cresol [in urine]. Sampling time: at the end of exposure or work shift; long-term exposure: after several work shifts. BLV: 600 µg/l, as toluene [in blood]. Sampling time: at the end of exposure or work shift.
Methylisobutylketone	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** BAT: 0.7 mg/l, 4-methylpentan-2-one [in urine]. Sampling time: at the end of the work shift.
Butan-1-ol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** BAT: 10 mg/g creatinine, 1-butanol (after hydrolysis) [in urine]. Sampling time: at the end of the work shift. BAT: 2 mg/g creatinine, 1-butanol (after hydrolysis) [in urine]. Sampling time: before the work shift.
acetone	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** BAT: 80 mg/l, acetone [in urine]. Sampling time: at the end of the work shift.
1-Methoxy 2-propanol	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** BAT: 15 mg/l, 1-methoxypropan-2-ol [in urine]. Sampling time: at the end of the work shift.
Xylene	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024) [xylene (all isomers)]** BAT: 2 g/l, methylhippuric acid (all isomers) [in urine]. Sampling

	time: at the end of the work shift.
1,2,4-trimethylbenzene	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024) [trimethylbenzene (all isomers)]** BAT: 400 mg/g creatinine, dimethylbenzoic acid (all isomers after hydrolysis) [in urine]. Sampling time: at the end of the work shift, at long-term exposure: at the end of the work shift after several consecutive workdays.
Toluene	**Regulation on protection of workers from the risks related to exposure to chemical substances at work (Slovenia, 4/2024)** BAT: 1.5 mg/l, o-cresol (after hydrolysis) [in urine]. Sampling time: at the end of the work shift, at long-term exposure: at the end of the work shift after several consecutive workdays. BAT: 600 µg/l, toluene [in blood]. Sampling time: immediately after exposure. BAT: 75 µg/l, toluene [in urine]. Sampling time: at the end of the work shift.
Methylisobutylketone	**National institute of occupational safety and health (Spain, 1/2024)** VLB: 1 mg/l, methyl isobutyl ketone [in urine]. Sampling time: end of shift.
acetone	**National institute of occupational safety and health (Spain, 1/2024)** VLB: 50 mg/l, acetone [in urine]. Sampling time: end of shift.
Xylene	**National institute of occupational safety and health (Spain, 1/2024) [Xylenes]** VLB: 1 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.
Toluene	**National institute of occupational safety and health (Spain, 1/2024)** VLB: 0.05 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek. VLB: 0.6 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift. VLB: 0.08 mg/l, toluene [in urine]. Sampling time: end of shift.
No exposure indices known.	
Methylisobutylketone	**SUVA (Switzerland, 1/2024)** BEI: 0.7 mg/l, 4-methylpentan-2-one [in urine]. Sampling time: immediately after exposure or after working hours.
Butan-1-ol	**SUVA (Switzerland, 1/2024)** BEI: 2 mg/g creatinine, n-butanol [in urine]. Sampling time: before the next shift or 4pm.
acetone	**SUVA (Switzerland, 1/2024)** BEI: 50 mg/l, acetone [in urine]. Sampling time: immediately after exposure or after working hours. BEI: 0.86 mmol/l, acetone [in urine]. Sampling time: immediately after exposure or after working hours.
1-Methoxy 2-propanol	**SUVA (Switzerland, 1/2024)** BEI: 20 mg/l, 1-methoxypropanol-2 [in urine]. Sampling time: immediately after exposure or after working hours. BEI: 221.9 µmol/l, 1-methoxypropanol-2 [in urine]. Sampling time: immediately after exposure or after working hours.
Xylene	**SUVA (Switzerland, 1/2024) [Xylene, all isomers]** BEI: 2 g/l, methyl hippuric acid [in urine]. Sampling time:

	immediately after exposure or after working hours.
Toluene	**SUVA (Switzerland, 1/2024)** BEI: 2 g/g creatinine, hippuric acid [in urine]. Sampling time: immediately after exposure or after working hours. In case of long-term exposure: after more than one shift. BEI: 1.26 mmol/mmol creatinine, hippuric acid [in urine]. Sampling time: immediately after exposure or after working hours. In case of long-term exposure: after more than one shift. BEI: 0.5 mg/l, o-cresol [in urine]. Sampling time: immediately after exposure or after working hours. In case of long-term exposure: after more than one shift. BEI: 4.62 µmol/l, o-cresol [in urine]. Sampling time: immediately after exposure or after working hours. In case of long-term exposure: after more than one shift. BEI: 600 µg/l, toluene [in blood]. Sampling time: immediately after exposure or after working hours. BEI: 6.48 µmol/l, toluene [in blood]. Sampling time: immediately after exposure or after working hours. BEI: 75 µg/l, toluene [in urine]. Sampling time: immediately after exposure or after working hours.
Methylisobutylketone	**EH40/2005 BMGVs (United Kingdom (UK), 1/2020)** BGV: 20 µmol/l, 4-methylpentan-2-one [in urine]. Sampling time: post shift.
Xylene	**EH40/2005 BMGVs (United Kingdom (UK), 1/2020) [Xylene, o-, m-, p- or mixed isomers]** BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Result
n-Butyl acetate	**DNEL - General population - Long term - Oral** 2 mg/kg bw/day Effects: Systemic **DNEL - General population - Short term - Oral** 2 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Dermal** 3.4 mg/kg bw/day Effects: Systemic **DNEL - General population - Short term - Dermal** 6 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Dermal** 7 mg/kg bw/day Effects: Systemic **DNEL - Workers - Short term - Dermal** 11 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation
12 mg/m³
Effects: Systemic

DNEL - General population - Long term - Inhalation
35.7 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
48 mg/m³
Effects: Systemic

DNEL - General population - Short term - Inhalation
300 mg/m³
Effects: Local

DNEL - General population - Short term - Inhalation
300 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
300 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
600 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
600 mg/m³
Effects: Systemic

Methylisobutylketone

DNEL - General population - Long term - Dermal
4.2 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Long term - Dermal
11.8 mg/kg bw/day
Effects: Systemic

DNEL - General population - Long term - Inhalation
14.7 mg/m³
Effects: Local

DNEL - General population - Long term - Inhalation
14.7 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Inhalation
83 mg/m³
Effects: Local

DNEL - Workers - Long term - Inhalation
83 mg/m³
Effects: Systemic

DNEL - General population - Short term - Inhalation
155.2 mg/m³
Effects: Local

DNEL - General population - Short term - Inhalation
155.2 mg/m³
Effects: Systemic

	DNEL - Workers - Short term - Inhalation 208 mg/m³ Effects: Local **DNEL - Workers - Short term - Inhalation** 208 mg/m³ Effects: Systemic **DNEL - General population - Long term - Oral** 4.2 mg/kg bw/day Effects: Systemic
Butan-1-ol	**DNEL - General population - Long term - Oral** 1.5625 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Dermal** 3.125 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 55.357 mg/m³ Effects: Systemic **DNEL - General population - Long term - Inhalation** 155 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 310 mg/m³ Effects: Local
acetone	**DNEL - General population - Long term - Oral** 62 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Dermal** 62 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Dermal** 186 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 200 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 1210 mg/m³ Effects: Systemic **DNEL - Workers - Short term - Inhalation** 2420 mg/m³ Effects: Local
iso-butanol	**DNEL - General population - Long term - Inhalation** 55 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 310 mg/m³ Effects: Local
1-Methoxy 2-propanol	**DNEL - General population - Long term - Oral** 33 mg/kg bw/day

	Effects: Systemic **DNEL - General population - Long term - Inhalation** 43.9 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 78 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Dermal** 183 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Inhalation** 369 mg/m³ Effects: Systemic **DNEL - Workers - Short term - Inhalation** 553.5 mg/m³ Effects: Local **DNEL - Workers - Short term - Inhalation** 553.5 mg/m³ Effects: Systemic
Xylene	**DNEL - General population - Long term - Oral** 5 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 65.3 mg/m³ Effects: Local **DNEL - General population - Long term - Inhalation** 65.3 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 125 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Dermal** 212 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Inhalation** 221 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 221 mg/m³ Effects: Systemic **DNEL - General population - Short term - Inhalation** 260 mg/m³ Effects: Local **DNEL - General population - Short term - Inhalation** 260 mg/m³ Effects: Systemic **DNEL - Workers - Short term - Inhalation** 442 mg/m³ Effects: Local

	DNEL - Workers - Short term - Inhalation 442 mg/m³ Effects: Systemic
Solvent naphtha (petroleum), light arom.	**DNEL - General population - Long term - Inhalation** 0.41 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 1.9 mg/m³ Effects: Systemic **DNEL - General population - Long term - Inhalation** 178.57 mg/m³ Effects: Local **DNEL - General population - Short term - Inhalation** 640 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 837.5 mg/m³ Effects: Local **DNEL - Workers - Short term - Inhalation** 1066.67 mg/m³ Effects: Local **DNEL - General population - Short term - Inhalation** 1152 mg/m³ Effects: Systemic **DNEL - Workers - Short term - Inhalation** 1286.4 mg/m³ Effects: Systemic
2-Methoxy-1-methylethyl acetate	**DNEL - General population - Long term - Inhalation** 33 mg/m³ Effects: Local **DNEL - General population - Long term - Inhalation** 33 mg/m³ Effects: Systemic **DNEL - General population - Long term - Oral** 36 mg/kg bw/day Effects: Systemic **DNEL - Workers - Long term - Inhalation** 275 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 320 mg/kg bw/day Effects: Systemic **DNEL - Workers - Short term - Inhalation** 550 mg/m³ Effects: Local **DNEL - Workers - Long term - Dermal** 796 mg/kg bw/day Effects: Systemic
1,2,4-trimethylbenzene	**DNEL - General population - Long term - Oral** 15 mg/kg bw/day

	Effects: Systemic **DNEL - General population - Short term - Inhalation** 29.4 mg/m³ Effects: Local **DNEL - General population - Short term - Inhalation** 29.4 mg/m³ Effects: Systemic **DNEL - Workers - Short term - Inhalation** 100 mg/m³ Effects: Local **DNEL - Workers - Short term - Inhalation** 100 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Dermal** 16171 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 29.4 mg/m³ Effects: Local **DNEL - General population - Long term - Inhalation** 29.4 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 100 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 100 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 9512 mg/kg bw/day Effects: Systemic
Toluene	**DNEL - General population - Long term - Oral** 8.13 mg/kg bw/day Effects: Systemic **DNEL - General population - Long term - Inhalation** 56.5 mg/m³ Effects: Local **DNEL - General population - Long term - Inhalation** 56.5 mg/m³ Effects: Systemic **DNEL - Workers - Long term - Inhalation** 192 mg/m³ Effects: Local **DNEL - Workers - Long term - Inhalation** 192 mg/m³ Effects: Systemic **DNEL - General population - Long term - Dermal** 226 mg/kg bw/day Effects: Systemic

DNEL - General population - Short term - Inhalation
226 mg/m³
Effects: Local

DNEL - General population - Short term - Inhalation
226 mg/m³
Effects: Systemic

DNEL - Workers - Long term - Dermal
384 mg/kg bw/day
Effects: Systemic

DNEL - Workers - Short term - Inhalation
384 mg/m³
Effects: Local

DNEL - Workers - Short term - Inhalation
384 mg/m³
Effects: Systemic

PNECs

Not available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations : Wear suitable gloves tested to EN374.

< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm

1 - 4 hours (breakthrough time): 4H / Silver Shield® gloves.

SECTION 8: Exposure controls/personal protection

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type: A X

Filter type (spray application): A X P

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Various

Odour : Slight

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling range :

Ingredient name	°C	°F	Method
acetone	56.05	132.9	
iso-butanol	108	226.4	OECD 103

Flammability : Not available.

Lower and upper explosion limit : Lower: 0.8% (xylene)
Upper: 13% (acetone)

Flash point : Closed cup: -19°C (-2.2°F)

Auto-ignition temperature :

Ingredient name	°C	°F	Method
1-Methoxy 2-propanol	270	518	
Solvent naphtha (petroleum), light arom.	280 to 470	536 to 878	

Decomposition temperature : Not available.

pH : Not available.

Viscosity : Not available.

Solubility(ies) :

Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure :

SECTION 9: Physical and chemical properties

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
acetone	180.01463	24				
Toluene	23.17	3.1				

Relative density : Not available.

Density : 1 g/cm³

Vapour density : Not available.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties : Not available.

Oxidising properties : Not available.

9.2.2 Other safety characteristics

Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials : Reactive or incompatible with the following materials: oxidising materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result
n-Butyl acetate	**Rat - Oral - LD50** 10760 mg/kg EU **Rabbit - Dermal - LD50** 14112 mg/kg **Rat - Inhalation - LC50 Vapour** 0.74 mg/l [4 hours]
Methylisobutylketone	**Rat - Oral - LD50** 2080 mg/kg
Butan-1-ol	**Rat - Oral - LD50** 790 mg/kg Toxic effects: Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - Other changes Blood - Other changes

	Rabbit - Dermal - LD50 3400 mg/kg **Rat - Inhalation - LC50 Vapour** 24000 mg/m³ [4 hours]
acetone	**Rat - Oral - LD50** 5800 mg/kg Toxic effects: Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Tremor
iso-butanol	**Rat - Oral - LD50** 2460 mg/kg **Rabbit - Dermal - LD50** 3400 mg/kg **Rat - Inhalation - LC50 Vapour** 19200 mg/m³ [4 hours]
1-Methoxy 2-propanol	**Rabbit - Dermal - LD50** 13 g/kg **Rat - Oral - LD50** 6600 mg/kg Toxic effects: Brain and Coverings - Other degenerative changes Behavioral - General anesthetic Lung, Thorax, or Respiration - Dyspnea
Xylene	**Rat - Oral - LD50** 4300 mg/kg Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes **Rat - Inhalation - LC50 Vapour** 21.7 mg/l [4 hours]
Solvent naphtha (petroleum), light arom.	**Rat - Oral - LD50** 8400 mg/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Tremor Lung, Thorax, or Respiration - Other changes
2-Methoxy-1-methylethyl acetate	**Rat - Oral - LD50** 8532 mg/kg **Rabbit - Dermal - LD50** >5 g/kg
1,2,4-trimethylbenzene	**Rat - Oral - LD50** 5 g/kg **Rat - Inhalation - LC50 Vapour** 18000 mg/m³ [4 hours]
Toluene	**Rat - Oral - LD50** 636 mg/kg **Rat - Inhalation - LC50 Vapour** 49 g/m³ [4 hours]

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
AC EMAILLACK FM 3021-80	8276.4	36742.4	N/A	49.4	N/A
n-Butyl acetate	10760	14112	N/A	N/A	N/A
Methylisobutylketone	2080	N/A	N/A	11	N/A
Butan-1-ol	790	3400	N/A	24	N/A
acetone	5800	N/A	N/A	N/A	N/A
iso-butanol	2460	3400	N/A	N/A	N/A
1-Methoxy 2-propanol	6600	13000	N/A	N/A	N/A
Xylene	4300	1100	N/A	11	N/A
Solvent naphtha (petroleum), light arom.	8400	N/A	N/A	11	N/A
2-Methoxy-1-methylethyl acetate	8532	N/A	N/A	N/A	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	N/A
Toluene	N/A	N/A	N/A	49	N/A

Skin corrosion/irritation

Product/ingredient name	Result
n-Butyl acetate	**Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
Methylisobutylketone	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
Butan-1-ol	**Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 20 mg
acetone	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg **Rabbit - Skin - Mild irritant** Amount/concentration applied: 395 mg
1-Methoxy 2-propanol	**Rabbit - Skin - Mild irritant** Amount/concentration applied: 500 mg
Xylene	**Rat - Skin - Mild irritant** Duration of treatment/exposure: 8 hours Amount/concentration applied: 60 uL **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg **Rabbit - Skin - Moderate irritant** Amount/concentration applied: 100 %
Toluene	**Pig - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 250 uL **Rabbit - Skin - Mild irritant** Amount/concentration applied: 435 mg **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 20 mg **Rabbit - Skin - Moderate irritant**

Amount/concentration applied: 500 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
n-Butyl acetate	**Rabbit - Eyes - Moderate irritant** Amount/concentration applied: 100 mg
Methylisobutylketone	**Rabbit - Eyes - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 uL **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 40 mg
Butan-1-ol	**Rabbit - Eyes - Severe irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 2 mg **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 0.005 Ml **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 1.62 mg
acetone	**Human - Eyes - Mild irritant** Amount/concentration applied: 186300 ppm **Rabbit - Eyes - Mild irritant** Amount/concentration applied: 10 uL **Rabbit - Eyes - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 20 mg **Rabbit - Eyes - Severe irritant** Amount/concentration applied: 20 mg
1-Methoxy 2-propanol	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
Xylene	**Rabbit - Eyes - Mild irritant** Amount/concentration applied: 87 mg **Rabbit - Eyes - Severe irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 5 mg
Solvent naphtha (petroleum), light arom.	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 uL
Toluene	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 0.5 minutes Amount/concentration applied: 100 mg **Rabbit - Eyes - Mild irritant** Amount/concentration applied: 870 ug **Rabbit - Eyes - Severe irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 2 mg

Rabbit - Eyes - Severe irritant
Amount/concentration applied: 0.1 Ml

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation
Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization
Not available.

Skin
Conclusion/Summary [Product] : Not available.

Respiratory
Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity
Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity
Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity
Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
n-Butyl acetate	STOT SE 3, H336 (Narcotic effects)
Methylisobutylketone	STOT SE 3, H336 (Narcotic effects)
Butan-1-ol	STOT SE 3, H335 (Respiratory tract irritation) STOT SE 3, H336 (Narcotic effects)
acetone	STOT SE 3, H336 (Narcotic effects)
iso-butanol	STOT SE 3, H335 (Respiratory tract irritation) STOT SE 3, H336 (Narcotic effects)
1-Methoxy 2-propanol	STOT SE 3, H336 (Narcotic effects)
Xylene	STOT SE 3, H335 (Respiratory tract irritation)
Solvent naphtha (petroleum), light arom.	STOT SE 3, H335 (Respiratory tract irritation)
2-Methoxy-1-methylethyl acetate	STOT SE 3, H336 (Narcotic effects)
1,2,4-trimethylbenzene	STOT SE 3, H335 (Respiratory tract irritation)
Toluene	STOT SE 3, H336 (Narcotic effects)

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
Xylene	STOT RE 2, H373 (oral, inhalation)
Toluene	STOT RE 2, H373

SECTION 11: Toxicological information

Aspiration hazard

Product/ingredient name	Result
Xylene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
n-Butyl acetate	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 31 to 32 days; Size: 21.6 mm; Weight: 0.175 g 18000 µg/l [96 hours] Effect: Mortality **Acute - LC50 - Marine water** Crustaceans - Brine shrimp - *Artemia salina* 32 mg/l [48 hours] Effect: Mortality
Methylisobutylketone	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 29 days; Size: 21 mm; Weight: 0.141 g 505000 µg/l [96 hours] Effect: Mortality **Chronic - NOEC - Fresh water** Daphnia - Water flea - *Daphnia magna* 78 mg/l [21 days] Effect: Behavior **Chronic - NOEC - Fresh water** Fish - Fathead minnow - *Pimephales promelas* - Embryo Age: <24 hours 168 mg/l [33 days] Effect: Mortality
Butan-1-ol	**Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 33 days; Size: 20.6 mm; Weight: 0.119 g 1730000 µg/l [96 hours] Effect: Mortality **Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* Age: 6 to 24 hours 1983000 µg/l [48 hours] Effect: Intoxication
acetone	**Acute - LC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* 10000 µg/l [48 hours] Effect: Mortality **Acute - LC50 - Fresh water** Fish - Guppy - *Poecilia reticulata* Age: 4 to 12 months; Size: 2 to 10 cm 5600 ppm [96 hours] Effect: Mortality **Chronic - NOEC - Marine water** Algae - Green algae - *Ulva pertusa* 4.95 mg/l [96 hours] Effect: Reproduction **Acute - EC50 - Marine water** Algae - Green algae - *Ulva pertusa* 20.565 mg/l [96 hours] Effect: Reproduction **Chronic - NOEC - Fresh water**

	Crustaceans - Daphnia - *Daphniidae* 0.016 ml/l [21 days] Effect: Population **Chronic - NOEC - Marine water** Fish - Threespine stickleback - *Gasterosteus aculeatus* - Larvae Age: 7 days 5 µg/l [42 days] Effect: Growth
iso-butanol	**Acute - LC50 - Fresh water** Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* Weight: 1.67 g 1330000 µg/l [96 hours] Effect: Mortality **Acute - LC50 - Marine water** Crustaceans - Brine shrimp - *Artemia salina* 600 mg/l [48 hours] Effect: Mortality
1,2,4-trimethylbenzene	**Acute - LC50 - Marine water** Crustaceans - Scud - *Elasmopus pectenicrus* - Adult 4910 µg/l [48 hours] Effect: Mortality **Acute - LC50 - Fresh water** Fish - Fathead minnow - *Pimephales promelas* Age: 34 days 7720 µg/l [96 hours] Effect: Mortality
Toluene	**Acute - LC50 - Fresh water** Fish - Coho salmon,silver salmon - *Oncorhynchus kisutch* - Fry Weight: 1 g 5500 µg/l [96 hours] Effect: Mortality **Acute - EC50 - Fresh water** Algae - Green algae - *Pseudokirchneriella subcapitata* 12500 µg/l [72 hours] Effect: Growth **Chronic - NOEC - Fresh water** Daphnia - Water flea - *Daphnia magna* Age: ≤24 hours 1000 µg/l [21 days] Effect: Reproduction **Acute - EC50 - Fresh water** Daphnia - Water flea - *Daphnia magna* - Neonate Age: ≤24 hours 5.56 mg/l [48 hours] Effect: Intoxication

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Product/ingredient name	Result
iso-butanol	74% [28 days] - Readily

Conclusion/Summary [Product] : Not available.

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
iso-butanol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
n-Butyl acetate	2.3	-	Low
Methylisobutylketone	1.9	-	Low
Butan-1-ol	1	-	Low
acetone	-0.23	-	Low
iso-butanol	1	-	Low
1-Methoxy 2-propanol	<1	-	Low
Xylene	3.12	8.1 to 25.9	Low
Solvent naphtha (petroleum), light arom.	-	10 to 2500	High
2-Methoxy-1-methylethyl acetate	1.2	-	Low
1,2,4-trimethylbenzene	3.63	243	Low
Toluene	2.73	90	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
n-Butyl acetate	1.52	33.2139
Methylisobutylketone	1.61	40.9047
Butan-1-ol	0.51	3.22078
acetone	0.56	3.6548
iso-butanol	1.08	12.0246
1-Methoxy 2-propanol	1.02	10.447
2-Methoxy-1-methylethyl acetate	0.36	2.31363
1,2,4-trimethylbenzene	2.93	846.864
Toluene	2.07	117.115

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
n-Butyl acetate	No	No	No	No	No	No	No
Methylisobutylketone	No	No	No	No	No	No	No
Butan-1-ol	No	No	No	No	No	No	No
acetone	No	No	No	No	No	No	No
iso-butanol	No	No	No	No	No	No	No
1-Methoxy 2-propanol	No	No	No	No	No	No	No
Xylene	No	No	No	No	No	No	No
Solvent naphtha (petroleum), light arom.	No	No	No	No	No	No	No
2-Methoxy-1-methylethyl acetate	No	No	No	No	No	No	No
1,2,4-trimethylbenzene	No	No	No	No	No	No	No
Toluene	No	No	No	No	No	No	No

Mobility : Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

SECTION 12: Ecological information

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
n-Butyl acetate	No	No	No	No	No	No	No
Methylisobutylketone	No	No	No	No	No	No	No
Butan-1-ol	No	No	No	No	No	No	No
acetone	No	No	No	No	No	No	No
iso-butanol	No	No	No	No	No	No	No
1-Methoxy 2-propanol	No	No	No	No	No	No	No
Xylene	No	No	No	No	No	No	No
Solvent naphtha (petroleum), light arom.	No	No	No	No	No	No	No
2-Methoxy-1-methylethyl acetate	No	No	No	No	No	No	No
1,2,4-trimethylbenzene	No	No	No	No	No	No	No
Toluene	No	No	No	No	No	No	No

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
n-Butyl acetate	No	No	No	No	No	No	No
Methylisobutylketone	No	No	No	No	No	No	No
Butan-1-ol	No	No	No	No	No	No	No
acetone	No	No	No	No	No	No	No
iso-butanol	No	No	No	No	No	No	No
1-Methoxy 2-propanol	No	No	No	No	No	No	No
Xylene	No	No	No	No	No	No	No
Solvent naphtha (petroleum), light arom.	No	No	No	No	No	No	No
2-Methoxy-1-methylethyl acetate	No	No	No	No	No	No	No
1,2,4-trimethylbenzene	No	No	No	No	No	No	No
Toluene	No	No	No	No	No	No	No

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

European waste catalogue (EWC) : 08.01.11

Packaging

SECTION 13: Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3 	3 	3 	3 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information

ADR/RID : **Special provisions** 640 (C)
Tunnel code (D/E)

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.
Special provisions 640 (C)

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not relevant/applicable due to nature of the product.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

SECTION 15: Regulatory information

Product/ingredient name	%	Designation [Usage]
AC EMAILLACK FM 3021-80	≥90	3
Toluene	<3	48

Labelling :

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : 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.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c

National regulations

Austria

VbF class : Category 2

Limitation of the use of organic solvents : Permitted.

Belgium

Czech Republic

Storage code : I

Denmark

Fire class : I-1

Executive Order No. 1795/2015

Ingredient name	Annex I Section A	Annex I Section B
Methylisobutylketone	-	Carc. 2, H351

MAL-code : 4-3

Protection based on MAL : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, respiratory protection with air supply and arm protectors/apron/coveralls/protective clothing must be worn as

appropriate or as instructed.

MAL-code: 4-3
Application: When spraying in new* booths if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Air-supplied half mask and eye protection must be worn.

When using scraper or knife, brush, roller, etc, for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone.

- Air-supplied half mask, coveralls and eye protection must be worn.

During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and coveralls must be worn.

When spraying in existing* spray booths, if the operator is outside the spray zone.

- Air-supplied full mask, arm protectors and apron must be worn.

During non-atomising spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomisation occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, coveralls and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc, must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

Low-boiling liquids : This product contains low-boiling point liquids. Any respiratory protective equipment should be air-fed.

Restrictions on use : Not to be used by professional users below 18 years of age. See the National Working Environment Authorities Executive Order regarding Young People At Work.

List of undesirable substances : Listed

Finland

France

SECTION 15: Regulatory information

Social Security Code, Articles L 461-1 to L 461-7 :

n-Butyl acetate	RG 84
Methylisobutylketone	RG 84
Butan-1-ol	RG 84
acetone	RG 84
iso-butanol	RG 84
1-Methoxy 2-propanol	RG 84
Xylene	RG 4bis, RG 84
Solvent naphtha (petroleum), light arom.	RG 84
2-Methoxy-1-methylethyl acetate	RG 84
1,2,4-trimethylbenzene	RG 84
Toluene	RG 4bis, RG 84

Reinforced medical surveillance : Act of July 11, 1977 determining the list of activities which require reinforced medical surveillance: not applicable

Germany

Storage class (TRGS 510) : 3

Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

Danger criteria

Category	Reference number
P5c	1.2.5.3

Hazard class for water : 3

Technical instruction on air quality control (TA Luft)

Number [Class]	Description	%
5.2.5	Organic substances	100
5.2.5 [I]	Organic substances	57.1
5.2.7.1.1 [Formaldehyde]	Carcinogenic substances	0.016

Italy

D.Lgs. 152/06 : Not determined.

Netherlands

Ministry of Social Affairs and Employment (SZW) - Carcinogenic substances and processes, mutagenic or reprotoxic substances

Ingredient name	Carcinogen	Mutagen	Reproductive toxicity - Fertility	Reproductive toxicity - Development	Harmful via breastfeeding
xylene	-	-	-	Development 2	-
Solvent naphtha (petroleum), light arom.	Listed	Listed	-	-	-
tolueen	-	-	-	Development 2	-
Solvent naphtha (petroleum), light arom.	Listed	Listed	-	-	-

Water Discharge Policy (ABM) : Z(1) Non biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/ reprotoxicity/ bioacumulative potential/ toxicity or persistence). Decontamination effort: Z

Norway

Sweden

Flammable liquid class (SRVFS 2005:10) : 1

Switzerland

VOC content : VOC (w/w): 59.5%

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

SECTION 15: Regulatory information

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Carc. 2, H351	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]

SECTION 16: Other information

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of issue/ Date of revision : 14/01/2025

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Version : 1.01

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.