



2K Fast DTM Non Isocyanate Gloss Activator

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 11/23/2022 Revision date: 11/24/2023 Supersedes version of: 11/23/2022 Version: 1.1

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

1.1. Product identifier

Product form : Mixture
Product name : 2K Fast DTM Non Isocyanate Gloss Activator
Product code : DTM2067A
Type of product : Paint
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Jaytees Ltd
Lower Warehouse Tything Road
B49 6ET Alcester – Warwickshire
UK
T 01527 595165

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS 111/NHS 24/NHS Direct	Edinburgh	111 0845 4647	or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2 H225
Acute toxicity (inhalation:dust,mist) Category 4 H332
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Harmful if inhaled. Causes skin irritation. Causes serious eye damage.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP) : Danger
Contains : BUTAN-1-OL

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Hazard statements (CLP)	: H225 - Highly flammable liquid and vapour. H315 - Causes skin irritation. H318 - Causes serious eye damage. H332 - Harmful if inhaled.
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground and bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor. P312 - Call a POISON CENTRE or doctor if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use media other than water to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH208 - Contains N-BUTYL ACRYLATE(141-32-2). May produce an allergic reaction.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
xylene substance with a Community workplace exposure limit	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9	22 – 27	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315
BUTAN-1-OL	CAS-No.: 71-36-3 EC-No.: 200-751-6 EC Index-No.: 603-004-00-6	4.88 – 9.5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335
ETHYLBENZENE substance with a Community workplace exposure limit	CAS-No.: 100-41-4 EC-No.: 202-849-4 EC Index-No.: 601-023-00-4	4.4 – 9	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
n-butyl acetate substance with a Community workplace exposure limit	CAS-No.: 123-86-4 EC-No.: 204-658-1 EC Index-No.: 607-025-00-1	0.5 – 1	Flam. Liq. 3, H226 STOT SE 3, H336
N-BUTYL ACRYLATE substance with a Community workplace exposure limit	CAS-No.: 141-32-2 EC-No.: 205-480-7 EC Index-No.: 607-062-00-3	0.001-0.300	Flam. Liq. 3, H226 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: May cause drowsiness or dizziness. Causes serious eye damage. May cause respiratory irritation.
Symptoms/effects after inhalation	: May cause drowsiness or dizziness. May cause headache, nausea and irritation of respiratory tract.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Harmful if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour.
Explosion hazard	: No direct explosion hazard.
Reactivity in case of fire	: Product is not explosive.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	: Stop leak if safe to do so. Keep container tightly closed and away from heat, sparks and flame.
Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection. In case of fire: stop leak if safe to do so.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it. No flames, no sparks. Eliminate all sources of ignition.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Flammable vapours may accumulate in the container.
Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
Handling temperature : 5 – 35
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.
Incompatible materials : Heat sources. Sources of ignition. Direct sunlight.
Storage temperature : 5 – 35 °C
Storage area : Store in a well-ventilated place. Store away from heat.
Special rules on packaging : Store in a closed container.
Packaging materials : Keep only in the original container in a cool, well-ventilated place away from combustible materials.

7.3. Specific end use(s)

Coatings and paints, thinners, paint removers.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

xylene (1330-20-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Xylene, mixed isomers, pure
IOEL TWA [ppm]	50 ppm
IOEL STEL	442 mg/m ³
IOEL STEL [ppm]	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Albania - Occupational Exposure Limits	
Local name	Ksilen, izomere të përziera, i pastër
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Lëkurë (tregon mundësinë e një marrjeje të rëndësishme nëpërmjet lëkurës)
Regulatory reference	VENDIM Nr. 522, datë 6.8.2014 PËR MIRATIMIN E RREGULLORES "PËR MBROJTJEN E SIGURISË DHE SHËNDETIT TË PUNËMARRËSVE NGA RISQET E LIDHURA ME AGJENTËT KIMIKË NË PUNË"
Austria - Occupational Exposure Limits	
Local name	Xylol (alle Isomeren): Xylol
MAK (OEL TWA)	221 mg/m ³
MAK (OEL TWA) [ppm]	50 ppm
MAK (OEL STEL)	442 mg/m ³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	100 ppm (4x 15(Miw) min)
Regulatory reference	BGBI. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Xylène, isomères mixtes, purs # Xyleen, mengsel van isomeren, zuiver
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	D: la mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans l'air. # D: de vermelding "D" betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020

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xylene (1330-20-7)	
Bulgaria - Occupational Exposure Limits	
Local name	Ксилен (смес от изомери), чист
OEL TWA	221 mg/m³
OEL TWA	50 ppm
OEL STEL	442 mg/m³
OEL STEL	100 ppm
Remark	Кожа (възможна е значителна резорбция чрез кожата); • (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
Local name	Ksilen (svi izomeri)
GVI (OEL TWA) [1]	221 mg/m³
GVI (OEL TWA) [2]	50 ppm
KGVI (OEL STEL)	442 mg/m³
KGVI (OEL STEL) [ppm]	100 ppm
Remark	Direktiva: 2000/39/EZ. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315))
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Croatia - Biological limit values	
Local name	Ksilen
BLV	14.13 µmol/l Karakteristični pokazatelj: ksilen - Biološki uzorak: krv - Vrijeme uzorkovanja: na kraju radne smjene - Napomena: uzimanje alkohola prije izloženosti ksilenu povisuje nalaz 1.5 mg/l Karakteristični pokazatelj: ksilen - Biološki uzorak: krv - Vrijeme uzorkovanja: na kraju radne smjene - Napomena: uzimanje alkohola prije izloženosti ksilenu povisuje nalaz 0.88 mol/mol Creatinine Karakteristični pokazatelj: metilhipurna kiselina - Biološki uzorak: mokraća - Vrijeme uzorkovanja: na kraju radne smjene 1.5 g/g creatinine Karakteristični pokazatelj: metilhipurna kiselina - Biološki uzorak: mokraća - Vrijeme uzorkovanja: na kraju radne smjene
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 91/2018)
Cyprus - Occupational Exposure Limits	
Local name	Ξυλένιο, μικτά ισομερή, καθαρά
OEL TWA	221 mg/m³
OEL TWA	50 ppm
OEL STEL	442 mg/m³
OEL STEL	100 ppm
Remark	δέρμα
Regulatory reference	Κανονισμοί του 2007 (Κ.Δ.Π. 295/2007)
Czech Republic - Occupational Exposure Limits	
Local name	Xylen technická směs isomerů a všechny isomery

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xylene (1330-20-7)	
PEL (OEL TWA)	200 mg/m ³
PEL (OEL TWA) [ppm]	45 ppm
NPK-P (OEL C)	400 mg/m ³
NPK-P (OEL C) [ppm]	90 ppm
Remark	B - u látky je zaveden biologický expoziční test (BET) v moči nebo krvi, D - při expozici se významně uplatňuje pronikání faktoru kůží, I - dráždí sliznice (oči, dýchací cesty), respektive kůží.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Czech Republic - Biological limit values	
Local name	Xyleny
BLV	1400 mg/g creatinine Ukazatel: Methylhippurová kyselina - Biološki uzorak: moči - Doba odběru: konec směny 820 µmol/mmol Creatinine Ukazatel: Methylhippurová kyselina - Biološki uzorak: moči - Doba odběru: konec směny
Regulatory reference	Vyhláška č. 107/2013 Sb. (kterou se mění vyhláška č. 432/2003 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Xylen (Dimethylbenzen), alle isomere
OEL TWA [1]	109 mg/m ³
OEL TWA [2]	25 ppm
Remark	E (betyder, at stoffet har en EF-grænseværdi); H (betyder, at stoffet kan optages gennem huden)
Regulatory reference	BEK nr 1426 af 28. juni 2021
Estonia - Occupational Exposure Limits	
Local name	Ksüleen (dimetüülbenseen)
OEL TWA	200 mg/m ³
OEL TWA	50 ppm
OEL STEL	450 mg/m ³
OEL STEL	100 ppm
Remark	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Ksyleeni
HTP (OEL TWA) [1]	220 mg/m ³
HTP (OEL TWA) [2]	50 ppm
HTP (OEL STEL)	440 mg/m ³
HTP (OEL STEL) [ppm]	100 ppm
Remark	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Ksyleeni

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xylene (1330-20-7)	
BLV	5 mmol/l Parametri: Virtsan metyylihippuurihappo - Näytteenottoajankohta: Työvuoron päätyttyä
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Xylène: mélange d'isomères
VME (OEL TWA)	221 mg/m ³
VME (OEL TWA) [ppm]	50 ppm
VLE (OEL C/STEL)	442 mg/m ³
VLE (OEL C/STEL) [ppm]	100 ppm
Remark	Valeurs réglementaires contraignantes; risque de pénétration percutanée
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n° 2021-434; Décret n° 2021-1849)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	220 mg/m ³
AGW (OEL TWA) [2]	50 ppm
Peak exposure limitation factor	2(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); H - hautresorptiv
Regulatory reference	TRGS900
Germany - Biological limit values (TRGS 903)	
Local name	Xylol (alle Isomere)
Biological limit value	2000 mg/l Parameter: Methylhippur-(Tolur-) säure (alle Isomere) - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 11/2016 DFG
Regulatory reference	TRGS 903
Gibraltar - Occupational Exposure Limits	
Local name	Xylene, mixed isomers, pure
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Skin
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)
Greece - Occupational Exposure Limits	
Local name	Ξυλόλια (όλα τα ισομερή)
OEL TWA	435 mg/m ³
OEL TWA	100 ppm
OEL STEL	650 mg/m ³
OEL STEL	150 ppm

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xylene (1330-20-7)	
Remark	Η ένδειξη «δέρμα» στις οριακές τιμές επαγγελματικής έκθεσης επισημαίνει το ενδεχόμενο σημαντικής διείσδυσης μέσω του δέρματος.
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	XILOL izomerek keveréke
AK (OEL TWA)	221 mg/m ³
CK (OEL STEL)	442 mg/m ³
Remark	b (Bőrön át is felszívódik), BEM (biológiai expozíciós mutató); EU1 (2000/39/EK irányelvben közölt érték); R (Azok az anyagok, amelyek egészségkárosító hatása RÖVID expozíció hatására jelentkezik)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Hungary - Biological Exposure Indices	
Local name	Xilol
BEI	1500 mg/g creatinine Biológiai expozíciós (hatás) mutató: metilhippursavak - Biológiai minta: vizeletben - Mintavétel ideje: m.v. (műszak végén) 860 µmol/mmol Creatinine Biológiai expozíciós (hatás) mutató: metilhippursavak - Biológiai minta: vizeletben - Mintavétel ideje: m.v. (műszak végén)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	Xylene, mixed isomers
OEL TWA [1]	221 mg/m ³
OEL TWA [2]	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
Ireland - Biological limit values	
Local name	Xylene
BLV	1.5 g/g creatinine Parameter: methylhippuric acids - Medium: urine - Sampling time: End of Shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
Italy - Occupational Exposure Limits	
Local name	Xilene, isomeri misti, puro
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Cute

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xylene (1330-20-7)	
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Ksilols (o-,m-,p-ksilols, dimetilbenzols)
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Āda
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumi Nr. 325
Lithuania - Occupational Exposure Limits	
Local name	Ksilenas, mišrūs izomerai, grynas
IPRV (OEL TWA)	221 mg/m ³
IPRV (OEL TWA) [ppm]	50 ppm
TPRV (OEL STEL)	442 mg/m ³
TPRV (OEL STEL) [ppm]	100 ppm
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Luxembourg - Occupational Exposure Limits	
Local name	Xylène, isomères mixtes, purs
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Peau
Regulatory reference	Mémorial A N° 226 de 2021 concernant la protection de la sécurité et de la santé des salariés contre les risques liés à des agents chimiques sur le lieu de travail
Malta - Occupational Exposure Limits	
Local name	Xylene, mixed isomers, pure # Xylene, Isomeri mhallta, puri
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	Skin # Ġilda
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.57 of 2018)
Netherlands - Occupational Exposure Limits	
Local name	Xyleen, o-, m-, p-isomeren
TGG-8u (OEL TWA)	210 mg/m ³
TGG-15min (OEL STEL)	442 mg/m ³

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xylene (1330-20-7)	
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Ksylen mieszanina izomerów: 1,2-; 1,3-; 1,4-
NDS (OEL TWA)	100 mg/m ³
NDSch (OEL STEL)	200 mg/m ³
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Xileno (isómeros)
OEL TWA	100 ppm
OEL STEL	150 ppm
Remark	A4 (Agente não classificável como carcinogénico no Homem); IBE (Índice biológico de exposição)
Regulatory reference	Norma Portuguesa NP 1796:2014
Portugal - Biological Exposure Indices	
Local name	Xilenos (graus técnico e comercial)
BEI	1.5 g/g creatinine Parâmetro: Ácidos (o, m, p)-metilhipúricos - Meio: urina - Momento da amostragem: Fim do turno
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Xilen, izomer mixt, pur
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	P - posibilitatea unei penetrări cutanate importante
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Romania - Biological limit values	
Local name	Xilen
BLV	3 g/l Indicador biologic: Acid metilhipuric - Material biologic: urină - Momentul recoltării: sfârșit schimb
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 584/2018)
Serbia - Occupational Exposure Limits	
Local name	ксилен, мешани изомери, чист
OEL TWA	221 mg/m ³
OEL TWA	50 ppm

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xylene (1330-20-7)	
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	EU* – напомена да се ради о хемијским материјама за које су утврђене индикативне граничне вредности изложености према Директиви 2000/39/EЗ (прва листа); К – напомена да хемијска материја може штетно деловати на кожу
Regulatory reference	ПРАВИЛНИК о превентивним мерама за безбедан и здрав рад при излагању хемијским материјама („Службени гласник РС”, бр. 106/09 и 117/17)
Slovakia - Occupational Exposure Limits	
Local name	Xylén, zmiešané izoméry
NPHV (OEL TWA) [1]	221 mg/m ³
NPHV (OEL TWA) [2]	50 ppm
NPHV (OEL STEL)	442 mg/m ³
NPHV (OEL STEL) [ppm]	100 ppm
Remark	K - znamená, že faktor môže byť ľahko absorbovaný kožou
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovakia - Biological limit values	
Local name	Xylén (všetky izoméry)
BLV	1.5 mg/l Zisťovaný faktor: Xylén - Vyšetrovaný materiál: krv - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny 2000 mg/l Zisťovaný faktor: Suma kyselín 2,3,4-metyl-hippurových - Vyšetrovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (Zmena: 471/2011 Z.z.)
Slovenia - Occupational Exposure Limits	
Local name	ksilen (mešane izomere)
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), BAT (Biološka mejna vrednost), EU
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Slovenia - Biological limit values	
Local name	ksilen (vse izomere)
BLV	2 g/l Parameter: metilhipurna kislina (vse izomere) - Biološki vzorec: urin - Čas vzorčenja: ob koncu delovne izmene
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Xileno, mezcla isómeros
VLA-ED (OEL TWA) [1]	221 mg/m ³
VLA-ED (OEL TWA) [2]	50 ppm
VLA-EC (OEL STEL)	442 mg/m ³
VLA-EC (OEL STEL) [ppm]	100 ppm

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xylene (1330-20-7)	
Remark	Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante), VLB® (Agente químico que tiene Valor Límite Biológico), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Spain - Biological limit values	
Local name	Xilenos, mezcla isómeros
BLV	1 g/g creatinine Parámetro: Ácidos metilhipúricos - Medio: Orina - Momento de muestreo: Final de la jornada laboral
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Xylen
NGV (OEL TWA)	221 mg/m ³
NGV (OEL TWA) [ppm]	50 ppm
KTV (OEL STEL)	442 mg/m ³
KTV (OEL STEL) [ppm]	100 ppm
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (OEL TWA) [1]	220 mg/m ³ o-,m-,p- or mixed isomers
WEL TWA (OEL TWA) [2]	50 ppm o-,m-,p- or mixed isomers
WEL STEL (OEL STEL)	441 mg/m ³ o-,m-,p- or mixed isomers
WEL STEL (OEL STEL) [ppm]	100 ppm o-,m-,p- or mixed isomers
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	Xylene, o-, m-, p- or mixed isomers
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Xýlen, allir ísómerar (dímetýlbensen)
OEL TWA	109 mg/m ³
OEL TWA	25 ppm
OEL STEL	442 mg/m ³
OEL STEL	100 ppm
Remark	H (efnið getur auðveldlega borist inn í líkamann gegnum húð)

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xylene (1330-20-7)	
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Xylen (alle isomere)
Grenseverdi (OEL TWA) [1]	108 mg/m ³
Grenseverdi (OEL TWA) [2]	25 ppm
Remark	H: Kjemikalier som kan tas opp gjennom huden; E: EU har en veiledende grenseverdi og/eller anmerkning for stoffet.
Regulatory reference	FOR-2021-06-28-2248
North Macedonia - Occupational Exposure Limits	
Local name	ксилен (смеша од изомери)
OEL TWA	221 mg/m ³
OEL TWA	50 ppm
KTV	2
Short time value [mg/m ³]	442 mg/m ³
Short time value [ppm]	100 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m ³ или во ml/m ³ (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (K) својство на полесно пренесување на супстанците во организмот преку кожата; (BAT) биолошка гранична вредност – праг на биолошка гранична вредност, што значи предупредување на опасна хемиска супстанца и нејзини метаболити во ткивата, телесните течности или издишувањето на воздухот, без оглед на тоа, дали опасната хемиска супстанца е внесена во организмот со вдишување, голтање или преку кожата; (EU) European Union – гранична вредност, определена на ниво на Европската унија
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	Xylène (tous les isomères) / Xylol (alle Isomere)
MAK (OEL TWA) [1]	435 mg/m ³
MAK (OEL TWA) [2]	100 ppm
KZGW (OEL STEL)	870 mg/m ³
KZGW (OEL STEL) [ppm]	200 ppm
Critical toxicity	VRS, SNC, Yeux, Vertige / OAW, ZNS, Auge, Schwindel
Notation	R, B / H, B
Remark	INRS, NIOSH
Regulatory reference	www.suva.ch, 01.01.2021

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xylene (1330-20-7)	
Switzerland - BAT	
Local name	Xylène (tous les isomères) / Xylol (alle Isomere)
BAT	2 g/l (Paramètre biologique: Acides méthylhippuriques; Substrat d'examen: Urine; Moment du prélèvement: Fin de l'exposition, de la période de travail.) / (Biologischer Parameter: Methylhippursäuren; Untersuchungsmaterial: Urin; Probennahmezeitpunkt: Expositionsende, bzw. Schichtende.)
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte
Turkey - Occupational Exposure Limits	
Local name	Ksilen
OEL TWA	221 mg/m ³ (karışım izomerleri, saf)
OEL TWA	50 ppm (karışım izomerleri, saf)
OEL STEL	442 mg/m ³ (karışım izomerleri, saf)
OEL STEL	100 ppm (karışım izomerleri, saf)
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete
ETHYLBENZENE (100-41-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylbenzene
IOEL TWA [ppm]	100 ppm
IOEL STEL	884 mg/m ³
IOEL STEL [ppm]	200 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Albania - Occupational Exposure Limits	
Local name	Etilbenzen
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	Lëkurë (tregon mundësinë e një marrjeje të rëndësishme nëpërmjet lëkurës)
Regulatory reference	VENDIM Nr. 522, datë 6.8.2014 PËR MIRATIMIN E RREGULLORES "PËR MBROJTJEN E SIGURISË DHE SHËNDETIT TË PUNËMARRËSVE NGA RISQET E LIDHURA ME AGJENTËT KIMIKË NË PUNË"
Austria - Occupational Exposure Limits	
Local name	Ethylbenzol
MAK (OEL TWA)	440 mg/m ³
MAK (OEL TWA) [ppm]	100 ppm
MAK (OEL STEL)	880 mg/m ³ (8x 5(Mow) min)
MAK (OEL STEL) [ppm]	200 ppm (8x 5(Mow) min)
Remark	H

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ETHYLBENZENE (100-41-4)	
Regulatory reference	BGBI. II Nr. 156/2021
Bulgaria - Occupational Exposure Limits	
Local name	Етилбензен
OEL TWA	435 mg/m ³
OEL STEL	545 mg/m ³
Remark	Кожа (възможна е значителна резорбция чрез кожата); • (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Bulgaria - Biological limit values	
Local name	Етилбензен
BLV	2000 mg/g creatinine Биомаркер за експозиция/биомаркер за ефект: бадемена киселина и фенилглиоксалова киселина - сумарно - Биологична среда: урина - Време на пробовземане: В края на експозицията или в края на работната смяна - Специфични ефекти: Кожа – възможна е значителна резорбция чрез кожата
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
Local name	Etilbenzen
GVI (OEL TWA) [1]	442 mg/m ³
GVI (OEL TWA) [2]	100 ppm
KGVI (OEL STEL)	884 mg/m ³
KGVI (OEL STEL) [ppm]	200 ppm
Remark	Direktiva: 2000/39/EZ. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315))
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Croatia - Biological limit values	
Local name	Etilbenzen
BLV	14.1 µmol/l Karakteristični pokazatelj: etilbenzen - Biološki uzorak: krv - Vrijeme uzorkovanja: za vrijeme izloženosti 1.5 mg/l Karakteristični pokazatelj: etilbenzen - Biološki uzorak: krv - Vrijeme uzorkovanja: za vrijeme izloženosti 1.12 mol/mol Creatinine Karakteristični pokazatelj: bademova kiselina - Biološki uzorak: mokraća - Vrijeme uzorkovanja: na kraju radne smjene i na kraju radnog tjedna 1.5 g/g creatinine Karakteristični pokazatelj: bademova kiselina - Biološki uzorak: mokraća - Vrijeme uzorkovanja: na kraju radne smjene i na kraju radnog tjedna
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 91/2018)
Cyprus - Occupational Exposure Limits	
Local name	Αιθυλοβενζένιο
OEL TWA	442 mg/m ³
OEL TWA	100 ppm

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ETHYLBENZENE (100-41-4)	
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	δέγμα
Regulatory reference	Κανονισμοί του 2007 (Κ.Δ.Π. 295/2007)
Czech Republic - Occupational Exposure Limits	
Local name	Ethylbenzen
PEL (OEL TWA)	200 mg/m ³
PEL (OEL TWA) [ppm]	45 ppm
NPK-P (OEL C)	500 mg/m ³
NPK-P (OEL C) [ppm]	114 ppm
Remark	D - při expozici se významně uplatňuje pronikání faktoru kůží, B - u látky je zaveden biologický expoziční test (BET) v moči nebo krvi.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Czech Republic - Biological limit values	
Local name	Ethylbenzen
BLV	1500 mg/g creatinine Ukazatel: Mandlová kyselina - Biološki uzorak: moči - Doba odběru: konec směny 1100 µmol/mmol Creatinine Ukazatel: Mandlová kyselina - Biološki uzorak: moči - Doba odběru: konec směny
Regulatory reference	Vyhláška č. 107/2013 Sb. (kterou se mění vyhláška č. 432/2003 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Ethylbenzen
OEL TWA [1]	217 mg/m ³
OEL TWA [2]	50 ppm
Remark	E (betyder, at stoffet har en EF-grænseværdi); K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 1426 af 28. juni 2021
Estonia - Occupational Exposure Limits	
Local name	Etüülbenseen
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	A (Naha kaudu kergesti imenduv aine), S (Sensibiliseeriv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Etyylibentseeni
HTP (OEL TWA) [1]	220 mg/m ³
HTP (OEL TWA) [2]	50 ppm
HTP (OEL STEL)	880 mg/m ³

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ETHYLBENZENE (100-41-4)	
HTP (OEL STEL) [ppm]	200 ppm
Remark	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Etyylibentseeni
BLV	5.2 mmol/l Parametri: Virtsan mantelihappo - Näytteenottoajankohta: Työvuoron päätyttyä työviikon tai altistumisjakson loputtua
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Ethylbenzène
VME (OEL TWA)	88.4 mg/m³
VME (OEL TWA) [ppm]	20 ppm
VLE (OEL C/STEL)	442 mg/m³
VLE (OEL C/STEL) [ppm]	100 ppm
Remark	Valeurs réglementaires contraignantes; risque de pénétration percutanée
Regulatory reference	Article R4412-149 du Code du travail (réf.: INRS ED 984, 2016; Décret n° 2019-1487; Décret n° 2020-1546; Décret n° 2021-434; Décret n° 2021-1849)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	88 mg/m³
AGW (OEL TWA) [2]	20 ppm
Peak exposure limitation factor	2(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); H - hautresorptiv; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich)
Regulatory reference	TRGS900
Germany - Biological limit values (TRGS 903)	
Local name	Ethylbenzol
Biological limit value	250 mg/g creatinine Parameter: Mandelsäure plus Phenylglyoxylsäure - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 11/2016 DFG
Regulatory reference	TRGS 903
Gibraltar - Occupational Exposure Limits	
Local name	Ethylbenzene
OEL TWA	442 mg/m³
OEL TWA	100 ppm
OEL STEL	884 mg/m³
OEL STEL	200 ppm
Remark	Skin
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)

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ETHYLBENZENE (100-41-4)	
Greece - Occupational Exposure Limits	
Local name	Αιθυλοβενζόλιο
OEL TWA	435 mg/m ³
OEL TWA	100 ppm
OEL STEL	545 mg/m ³
OEL STEL	125 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	ETILBENZOL
AK (OEL TWA)	442 mg/m ³
CK (OEL STEL)	884 mg/m ³
Remark	b (Bőrön át is felszívódik), i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhármát), BEM (biológiai expozíciós mutató); EU1 (2000/39/EK irányelvben közölt érték); T (Azok az anyagok, amelyek egészségkárosító hatása TARTÓS expozíciót követően jelentkezik)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Hungary - Biological Exposure Indices	
Local name	Etilbenzol
BEI	1500 mg/g creatinine Biológiai expozíciós (hatás) mutató: mandulasav - Biológiai minta: vizeletben - Mintavétel ideje: mhv., m.v. (munkahét végén, műszak végén) 1110 µmol/mmol Creatinine Biológiai expozíciós (hatás) mutató: mandulasav - Biológiai minta: vizeletben - Mintavétel ideje: mhv., m.v. (munkahét végén, műszak végén)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	Ethylbenzene
OEL TWA [1]	442 mg/m ³
OEL TWA [2]	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
Ireland - Biological limit values	
Local name	Ethyl benzene
BLV	0.7 g/g creatinine Parameter: mandelic acid and phenylglyoxylic acid - Medium: urine - Sampling time: End of shift at end of workweek - Notations: Ns (Non-specific), Sq (Semi-quantitative) Parameter: ethylbenzene - Medium: end-exhaled air - Sampling time: Not critical - Notations: Sq (Semi-quantitative)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)

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ETHYLBENZENE (100-41-4)	
Italy - Occupational Exposure Limits	
Local name	Etilbenzene
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	Cute
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Etilbenzols
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	Āda, letekme uz dzirdi
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2015. gada 7. aprīlī noteikumiem Nr. 163)
Lithuania - Occupational Exposure Limits	
Local name	Etilbenzenas
IPRV (OEL TWA)	442 mg/m ³
IPRV (OEL TWA) [ppm]	100 ppm
TPRV (OEL STEL)	884 mg/m ³
TPRV (OEL STEL) [ppm]	200 ppm
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Luxembourg - Occupational Exposure Limits	
Local name	Ethylbenzène
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	Peau
Regulatory reference	Mémorial A N° 226 de 2021 concernant la protection de la sécurité et de la santé des salariés contre les risques liés à des agents chimiques sur le lieu de travail
Malta - Occupational Exposure Limits	
Local name	Ethylbenzene
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm

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ETHYLBENZENE (100-41-4)	
Remark	Skin # Gilda
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.57 of 2018)
Netherlands - Occupational Exposure Limits	
Local name	Ethylbenzeen
TGG-8u (OEL TWA)	215 mg/m ³
TGG-15min (OEL STEL)	430 mg/m ³
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Etylobenzen
NDS (OEL TWA)	200 mg/m ³
NDSch (OEL STEL)	400 mg/m ³
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Etilbenzeno
OEL TWA	20 ppm
Remark	A3 (Agente carcinogénico confirmado nos animais de laboratório com relevância desconhecida no Homem); IBE (Índice biológico de exposição)
Regulatory reference	Norma Portuguesa NP 1796:2014
Portugal - Biological Exposure Indices	
Local name	Etilbenzeno
BEI	0.7 g/g creatinine Parâmetro: Soma do ácido mandélico e do ácido fenilfloxílico - Meio: urina - Momento da amostragem: Fim do turno - Notação: Ne (Não específico)
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Etilbenzen
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	P - posibilitatea unei penetrări cutanate importante
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Romania - Biological limit values	
Local name	Etilbenzen
BLV	1.5 g/g creatinine Indicator biologic: Acid mandelic - Material biologic: urină - Momentul recoltării: sfârșit de săptămână

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ETHYLBENZENE (100-41-4)	
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 584/2018)
Serbia - Occupational Exposure Limits	
Local name	етилбензен
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	EU* – напомена да се ради о хемијским материјама за које су утврђене индикативне граничне вредности изложености према Директиви 2000/39/ЕЗ (прва листа); К – напомена да хемијска материја може штетно деловати на кожу
Regulatory reference	ПРАВИЛНИК о превентивним мерама за безбедан и здрав рад при излагању хемијским материјама („Службени гласник РС”, бр. 106/09 и 117/17)
Slovakia - Occupational Exposure Limits	
Local name	Etylbenzén
NPHV (OEL TWA) [1]	442 mg/m ³
NPHV (OEL TWA) [2]	100 ppm
NPHV (OEL STEL)	884 mg/m ³
NPHV (OEL STEL) [ppm]	200 ppm
Remark	K - znamená, že faktor môže byť ľahko absorbovaný kožou
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovakia - Biological limit values	
Local name	Etylbenzén
BLV	12 mg/l Zisťovaný faktor: 2 - a 4 -Etylfenol - Vyšetovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny, c) pri dlhodobej expozícii; po viacerých pracovných zmenách 1600 mg/l Zisťovaný faktor: Kyselina mandľová a kyselina fenylglyoxylová - Vyšetovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny, c) pri dlhodobej expozícii; po viacerých pracovných zmenách
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (Zmena: 471/2011 Z.z.)
Slovenia - Occupational Exposure Limits	
Local name	etilbenzen
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti), BAT (Biološka mejna vrednost), EKA (Zveza med koncentracijo rakotvornih snovi v zraku na delovnem mestu in količino snovi in/ali njenih metabolitov v organizmu), EU
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Slovenia - Biological limit values	
Local name	etilbenzen

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ETHYLBENZENE (100-41-4)	
BLV	250 mg/g creatinine Parameter: mandljeva kislina in fenilglioksilna kislina - Biološki vzorec: urin - Čas vzorčenja: ob koncu delovne izmene
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Etilbenceno
VLA-ED (OEL TWA) [1]	441 mg/m ³
VLA-ED (OEL TWA) [2]	100 ppm
VLA-EC (OEL STEL)	884 mg/m ³
VLA-EC (OEL STEL) [ppm]	200 ppm
Remark	Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante), VLB® (Agente químico que tiene Valor Límite Biológico) , VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	Etylbensen
NGV (OEL TWA)	220 mg/m ³
NGV (OEL TWA) [ppm]	50 ppm
KTV (OEL STEL)	884 mg/m ³
KTV (OEL STEL) [ppm]	200 ppm
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Ethylbenzene
WEL TWA (OEL TWA) [1]	441 mg/m ³
WEL TWA (OEL TWA) [2]	100 ppm
WEL STEL (OEL STEL)	552 mg/m ³
WEL STEL (OEL STEL) [ppm]	125 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Etýlbensen
OEL TWA	200 mg/m ³
OEL TWA	50 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Remark	H (efnið getur auðveldlega borist inn í líkamann gegnum húð)

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ETHYLBENZENE (100-41-4)	
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Etylbenzen
Grenseverdi (OEL TWA) [1]	20 mg/m ³
Grenseverdi (OEL TWA) [2]	5 ppm
Remark	H: Kjemikalier som kan tas opp gjennom huden; K: Kjemikalier som skal betraktes som kreftfremkallende; E: EU har en veiledende grenseverdi og/eller anmerkning for stoffet.
Regulatory reference	FOR-2021-06-28-2248
North Macedonia - Occupational Exposure Limits	
Local name	етилбензен
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
KTV	2
Short time value [mg/m ³]	884 mg/m ³
Short time value [ppm]	200 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покус време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m ³ или во ml/m ³ (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (K) својство на полесно пренесување на супстанците во организмот преку кожата; (BAT) биолошка гранична вредност – праг на биолошка гранична вредност, што значи предупредување на опасна хемиска супстанца и нејзини метаболити во ткивата, телесните течности или издишувањето на воздухот, без оглед на тоа, дали опасната хемиска супстанца е внесена во организмот со вдишување, голтање или преку кожата; (EU) European Union – гранична вредност, определена на ниво на Европската унија
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	Ethylbenzène / Ethylbenzol
MAK (OEL TWA) [1]	220 mg/m ³
MAK (OEL TWA) [2]	50 ppm
KZGW (OEL STEL)	220 mg/m ³
KZGW (OEL STEL) [ppm]	50 ppm
Critical toxicity	Rein, Foie / Niere, Leber
Notation	R, O ⁸ , B / H, O ⁺ , B
Remark	NIOSH
Regulatory reference	www.suva.ch, 01.01.2021

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ETHYLBENZENE (100-41-4)	
Switzerland - BAT	
Local name	Ethylbenzène / Ethylbenzol
BAT	600 mg/g creatinine (Paramètre biologique: Acide mandélique + acide phénylglyoxylique; Substrat d'examen: Urine; Moment du prélèvement: Fin de l'exposition, de la période de travail.) / (Biologischer Parameter: Mandelsäure + Phenylglyoxylsäure; Untersuchungsmaterial: Urin; Probennahmezeitpunkt: Expositionsende, bzw. Schichtende.)
Remark	v. aussi styrène / s. auch Styrol
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte
Turkey - Occupational Exposure Limits	
Local name	Etilbenzen
OEL TWA	442 mg/m ³
OEL TWA	100 ppm
OEL STEL	884 mg/m ³
OEL STEL	200 ppm
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete
BUTAN-1-OL (71-36-3)	
Austria - Occupational Exposure Limits	
Local name	Butanol (Butylalkohol) (alle Isomeren außer 2-Methyl-2-propanol): 1-Butanol
MAK (OEL TWA)	150 mg/m ³
MAK (OEL TWA) [ppm]	50 ppm
MAK (OEL STEL)	600 mg/m ³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	200 ppm (4x 15(Miw) min)
Regulatory reference	BGBI. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Alcool n-butylque # n-Butanol
OEL TWA	62 mg/m ³
OEL TWA	20 ppm
Remark	D: la mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans l'air. # D: de vermelding "D" betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Bulgaria - Occupational Exposure Limits	
Local name	n-Бутилов алкохол
OEL TWA	100 mg/m ³
OEL STEL	150 mg/m ³

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BUTAN-1-OL (71-36-3)	
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
Local name	Butan-1-ol; n-butanol
KGVI (OEL STEL)	154 mg/m ³
KGVI (OEL STEL) [ppm]	50 ppm
Remark	Koža (razvrstana kao tvar koja nadražuje kožu (H315))
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Czech Republic - Occupational Exposure Limits	
Local name	Butanol (Butylalkohol) isomery: 1-Butanol
PEL (OEL TWA)	300 mg/m ³
PEL (OEL TWA) [ppm]	97.5 ppm
NPK-P (OEL C)	600 mg/m ³
NPK-P (OEL C) [ppm]	195 ppm
Remark	I - dráždí sliznice (oči, dýchací cesty), respektive kůže.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Butanol, alle isomere: 1-Butanol (Butylalkohol)
OEL C	150 mg/m ³
OEL C	50 ppm
Remark	H (betyder, at stoffet kan optages gennem huden)
Regulatory reference	BEK nr 1426 af 28. juni 2021
Estonia - Occupational Exposure Limits	
Local name	n-butanool (n-butüülalkohol)
OEL TWA	45 mg/m ³
OEL TWA	15 ppm
OEL STEL	90 mg/m ³ arvutatud 5-minutisele kokkupuuteajale
OEL STEL	30 ppm arvutatud 5-minutisele kokkupuuteajale
Remark	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	n-Butanoli
HTP (OEL TWA) [1]	150 mg/m ³
HTP (OEL TWA) [2]	50 ppm
HTP (OEL STEL)	230 mg/m ³
HTP (OEL STEL) [ppm]	75 ppm
Remark	Iho

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BUTAN-1-OL (71-36-3)	
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Alcool n-butylque
VLE (OEL C/STEL)	150 mg/m ³
VLE (OEL C/STEL) [ppm]	50 ppm
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	310 mg/m ³
AGW (OEL TWA) [2]	100 ppm
Peak exposure limitation factor	1(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
Germany - Biological limit values (TRGS 903)	
Local name	Butan-1-ol (1-Butanol)
Biological limit value	2 mg/g creatinine Parameter: Butan-1-ol (1-Butanol) (nach Hydrolyse) - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: d) vor nachfolgender Schicht - Festlegung/Begründung: 05/2013 DFG 10 mg/g creatinine Parameter: Butan-1-ol (1-Butanol) (nach Hydrolyse) - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 05/2013 DFG
Regulatory reference	TRGS 903
Greece - Occupational Exposure Limits	
Local name	Βουτανόλη, n-
OEL TWA	300 mg/m ³
OEL TWA	100 ppm
OEL STEL	300 mg/m ³
OEL STEL	100 ppm
Remark	Η ένδειξη «δέρμα» στις οριακές τιμές επαγγελματικής έκθεσης επισημαίνει το ενδεχόμενο σημαντικής διείσδυσης μέσω του δέρματος.
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	n-BUTIL-ALKOHOL
AK (OEL TWA)	45 mg/m ³
CK (OEL STEL)	90 mg/m ³
Remark	b (Bőrön át is felszívódik), i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhámat); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)

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BUTAN-1-OL (71-36-3)	
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Hungary - Biological Exposure Indices	
Local name	n-Butil-alkohol
BEI	2 mg/g creatinine Biológiai expozíció (hatás) mutató: n-butilalkohol (hidrolízis után) - Biológiai minta: vizeletben - Mintavétel ideje: köv. m.e. (következő műszak előtt) 3 µmol/mmol Creatinine Biológiai expozíció (hatás) mutató: n-butilalkohol (hidrolízis után) - Biológiai minta: vizeletben - Mintavétel ideje: köv. m.e. (következő műszak előtt) 10 mg/g creatinine Biológiai expozíció (hatás) mutató: n-butilalkohol (hidrolízis után) - Biológiai minta: vizeletben - Mintavétel ideje: m.v. (műszak végén) 15 µmol/mmol Creatinine Biológiai expozíció (hatás) mutató: n-butilalkohol (hidrolízis után) - Biológiai minta: vizeletben - Mintavétel ideje: m.v. (műszak végén)
Remark	A foglalkozási vegyi expozíció esetén ajánlott biológiai expozíciós és hatásmutatók határértékei
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	Butan-1-ol [n-Butyl alcohol]
OEL TWA [2]	20 ppm
Regulatory reference	Chemical Agents Code of Practice 2021
Latvia - Occupational Exposure Limits	
Local name	Butilspirti (pirmējais, otrējais, trešējais) (n-butanols)
OEL TWA	10 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
Lithuania - Occupational Exposure Limits	
Local name	n-butanolis (n-butilo alkoholis)
IPRV (OEL TWA)	45 mg/m ³
IPRV (OEL TWA) [ppm]	15 ppm
NRV (OEL C)	90 mg/m ³
NRV (OEL C) [ppm]	30 ppm
Remark	Ū (ūmus poveikis); O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Poland - Occupational Exposure Limits	
Local name	Butan-1-ol (n-butyłowy alkohol)
NDS (OEL TWA)	50 mg/m ³
NDSch (OEL STEL)	150 mg/m ³
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	n-Butanol (Álcool n-bútilico)
OEL TWA	20 ppm

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BUTAN-1-OL (71-36-3)	
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	n-Butanol
OEL TWA	100 mg/m ³
OEL TWA	33 ppm
OEL STEL	200 mg/m ³
OEL STEL	66 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Slovakia - Occupational Exposure Limits	
Local name	Butylalkoholy (butanoly): n-Butanol
NPHV (OEL TWA) [1]	310 mg/m ³
NPHV (OEL TWA) [2]	100 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovakia - Biological limit values	
Local name	n-Butylalkohol
BLV	2 mg/g creatinine Zisťovaný faktor: n-butyl alkohol - Vyšetrovaný materiál: moč - Čas odberu vzorky: d) pred nasledujúcou pracovnou zmenou 3.13 µmol/mmol Creatinine Zisťovaný faktor: n-butyl alkohol - Vyšetrovaný materiál: moč - Čas odberu vzorky: d) pred nasledujúcou pracovnou zmenou 10 mg/g creatinine Zisťovaný faktor: n-butyl alkohol - Vyšetrovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny 15.34 µmol/mmol Creatinine Zisťovaný faktor: n-butyl alkohol - Vyšetrovaný materiál: moč - Čas odberu vzorky: b) koniec expozície alebo pracovnej zmeny
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (Zmena: 471/2011 Z.z.)
Slovenia - Occupational Exposure Limits	
Local name	butan-1-ol
OEL TWA	310 mg/m ³
OEL TWA	100 ppm
OEL STEL	310 mg/m ³
OEL STEL	100 ppm
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti), BAT (Biološka mejna vrednost)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Slovenia - Biological limit values	
Local name	1-butanol
BLV	2 mg/g creatinine Parameter: 1-butanol (po hidrolizi) - Biološki vzorec: urin - Čas vzorčenja: pred delovno izmeno 10 mg/g creatinine Parameter: 1-butanol (po hidrolizi) - Biološki vzorec: urin - Čas vzorčenja: ob koncu delovne izmene
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	n-Butanol (Alcohol n-butílico)
VLA-ED (OEL TWA) [1]	61 mg/m ³

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BUTAN-1-OL (71-36-3)	
VLA-ED (OEL TWA) [2]	20 ppm
VLA-EC (OEL STEL)	154 mg/m ³
VLA-EC (OEL STEL) [ppm]	50 ppm
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	n-Butanol
NGV (OEL TWA)	45 mg/m ³
NGV (OEL TWA) [ppm]	15 ppm
KTV (OEL STEL)	90 mg/m ³
KTV (OEL STEL) [ppm]	30 ppm
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	Butan-1-ol
WEL STEL (OEL STEL)	154 mg/m ³
WEL STEL (OEL STEL) [ppm]	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	n-Bútanól (n-bútýlalkóhól)
OEL TWA	80 mg/m ³
OEL TWA	25 ppm
OEL STEL	150 mg/m ³
OEL STEL	50 ppm
Remark	H (efnið getur auðveldlega borist inn í líkamann gegnum húð)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Butan-1-ol
Takverdi (OEL C) [1]	75 mg/m ³
Takverdi (OEL C) [2]	25 ppm
Remark	H: Kjemikalier som kan tas opp gjennom huden.
Regulatory reference	FOR-2021-06-28-2248
North Macedonia - Occupational Exposure Limits	
Local name	Бутан-1-ол
OEL TWA	310 mg/m ³
OEL TWA	100 ppm
KTV	1

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BUTAN-1-OL (71-36-3)	
Short time value [mg/m³]	310 mg/m³
Short time value [ppm]	100 ppm
Remark	(КТВ) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m³ или во ml/m³(ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (Y)
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	n-Butanol / n-Butanol
MAK (OEL TWA) [1]	310 mg/m³
MAK (OEL TWA) [2]	100 ppm
KZGW (OEL STEL)	310 mg/m³
KZGW (OEL STEL) [ppm]	100 ppm
Critical toxicity	Yeux / Auge
Notation	SS _C / SS _C
Remark	INRS, NIOSH
Regulatory reference	www.suva.ch, 01.01.2021
Switzerland - BAT	
Local name	n-Butanol / n-Butanol
BAT	2 mg/g creatinine (Paramètre biologique: n-Butanol; Substrat d'examen: Urine) / (Biologischer Parameter: n-Butanol; Untersuchungsmaterial: Urin) 10 mg/g creatinine (Paramètre biologique: n-Butanol; Substrat d'examen: Urine; Moment du prélèvement: Fin de l'exposition, de la période de travail.) / (Biologischer Parameter: n-Butanol; Untersuchungsmaterial: Urin; Probennahmezeitpunkt: Expositionsende, bzw. Schichtende.)
Regulatory reference	Ordonnance 832.30 (OPA), article 50 al. 3, www.suva.ch/valeurs-limites / Verordnung 832.30 (VUV), Art. 50 Abs. 3, www.suva.ch/grenzwerte
N-BUTYL ACRYLATE (141-32-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Butylacrylate
IOEL TWA [ppm]	2 ppm
IOEL STEL	53 mg/m³
IOEL STEL [ppm]	10 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Albania - Occupational Exposure Limits	
Local name	n-Butilakrilat
OEL TWA	11 mg/m³
OEL TWA	2 ppm

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N-BUTYL ACRYLATE (141-32-2)	
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	VENDIM Nr. 522, datë 6.8.2014 PËR MIRATIMIN E RREGULLORES "PËR MBROJTJEN E SIGURISË DHE SHËNDETIT TË PUNËMARRËSVE NGA RISQET E LIDHURA ME AGJENTËT KIMIKE NË PUNË"
Austria - Occupational Exposure Limits	
Local name	n-Butylacrylat (Acrylsäure-n-butylester; Propensäure-n-butylester)
MAK (OEL TWA)	11 mg/m ³
MAK (OEL TWA) [ppm]	2 ppm
MAK (OEL STEL)	53 mg/m ³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	10 ppm (4x 15(Miw) min)
Remark	S
Regulatory reference	BGBI. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Acrylate de n-butyle # n-Butylacrylaat
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Bulgaria - Occupational Exposure Limits	
Local name	n-Бутилакрилат
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Remark	• (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
Local name	n-Butil-akrilat
GVI (OEL TWA) [1]	11 mg/m ³
GVI (OEL TWA) [2]	2 ppm
KGVI (OEL STEL)	53 mg/m ³
KGVI (OEL STEL) [ppm]	10 ppm
Remark	Direktiva: 2000/39/EZ. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315)), alergen kože (tvar koja može izazvati alergijsku reakciju na koži (H317))
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)

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N-BUTYL ACRYLATE (141-32-2)	
Cyprus - Occupational Exposure Limits	
Local name	Ακρυλικό n-βουτύλιο
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Κανονισμοί του 2007 (Κ.Δ.Π. 295/2007)
Czech Republic - Occupational Exposure Limits	
Local name	Butylakrylát (Butylester 2-propenové kyseliny; Butyl 2-propenoát)
PEL (OEL TWA)	10 mg/m ³
PEL (OEL TWA) [ppm]	1.9 ppm
NPK-P (OEL C)	20 mg/m ³
NPK-P (OEL C) [ppm]	3.8 ppm
Remark	I - dráždí sliznice (oči, dýchací cesty), respektive kůže, S - látka má senzibilizující účinek (s větou H317, H334).
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Denmark - Occupational Exposure Limits	
Local name	n-Butylacrylat
OEL TWA [1]	11 mg/m ³
OEL TWA [2]	2 ppm
Remark	E (betyder, at stoffet har en EF-grænseværdi)
Regulatory reference	BEK nr 1426 af 28. juni 2021
Estonia - Occupational Exposure Limits	
Local name	Butüülakrülaat (butüülpropenaat)
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	n-Butyyliakrylaatti
HTP (OEL TWA) [1]	11 mg/m ³
HTP (OEL TWA) [2]	2 ppm
HTP (OEL STEL)	53 mg/m ³
HTP (OEL STEL) [ppm]	10 ppm
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
France - Occupational Exposure Limits	
Local name	Acrylate de n-butyle
VME (OEL TWA)	11 mg/m ³

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N-BUTYL ACRYLATE (141-32-2)	
VME (OEL TWA) [ppm]	2 ppm
VLE (OEL C/STEL)	53 mg/m ³
VLE (OEL C/STEL) [ppm]	10 ppm
Remark	Valeurs réglementaires indicatives
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 984, 2016)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	11 mg/m ³
AGW (OEL TWA) [2]	2 ppm
Peak exposure limitation factor	2(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; H - hautresorptiv; Sh - Hautsensibilisierender Stoff
Regulatory reference	TRGS900
Gibraltar - Occupational Exposure Limits	
Local name	n-Butylacrylate
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)
Greece - Occupational Exposure Limits	
Local name	Ακρυλικός βουτυλεστέρας
OEL TWA	55 mg/m ³
OEL TWA	10 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	n-BUTIL-AKRILÁT
AK (OEL TWA)	11 mg/m ³
CK (OEL STEL)	53 mg/m ³
Remark	i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhármat); I. (HELYILEG IRRITÁLÓ ANYAGOK), EU1 (2000/39/EK irányelvben közölt érték); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	n-Butyl acrylate
OEL TWA [1]	11 mg/m ³
OEL TWA [2]	2 ppm

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N-BUTYL ACRYLATE (141-32-2)	
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values), Sens. (In the workplace respiratory or dermal exposures to sensitising agents may occur. Sensitizers may evoke respiratory or dermal reactions, e.g. asthma, rhinitis and allergic contact dermatitis. The notation does not distinguish between respiratory or dermal sensitisation. Chemical agents that are sensitizers present special problems in the workplace. Should an employee become sensitised, subsequent exposure may cause intense responses, even at low exposure concentrations well below the OELV. Exposure should be eliminated or significantly reduced through control measures such as engineering and process controls and use of personal protective equipment (PPE))
Regulatory reference	Chemical Agents Code of Practice 2021
Italy - Occupational Exposure Limits	
Local name	Acrilato di n-butile
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	n-Butilakrilāts
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325
Lithuania - Occupational Exposure Limits	
Local name	Butilo akrilatas
IPRV (OEL TWA)	11 mg/m ³
IPRV (OEL TWA) [ppm]	2 ppm
TPRV (OEL STEL)	53 mg/m ³
TPRV (OEL STEL) [ppm]	10 ppm
Remark	J (jautrinantis poveikis)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Luxembourg - Occupational Exposure Limits	
Local name	Acrylate de n-butyle
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Mémorial A N° 226 de 2021 concernant la protection de la sécurité et de la santé des salariés contre les risques liés à des agents chimiques sur le lieu de travail

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N-BUTYL ACRYLATE (141-32-2)	
Malta - Occupational Exposure Limits	
Local name	n-Butylacrylate
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.57 of 2018)
Netherlands - Occupational Exposure Limits	
Local name	n-Butylacrylaat
TGG-8u (OEL TWA)	11 mg/m ³
TGG-15min (OEL STEL)	53 mg/m ³
Regulatory reference	Arbeidsomstandighedenregeling 2021
Poland - Occupational Exposure Limits	
Local name	Akrylan butylu
NDS (OEL TWA)	11 mg/m ³
NDSCh (OEL STEL)	30 mg/m ³
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Acrilato de n-butilo
OEL TWA	2 ppm
Remark	SC (Agente com potencial para produzir sensibilização pela via cutânea); A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Acrilat de n-butil
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Serbia - Occupational Exposure Limits	
Local name	н-бутилакрилат
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Remark	EU* – напомена да се ради о хемијским материјама за које су утврђене индикативне граничне вредности изложености према Директиви 2000/39/E3 (прва листа)
Regulatory reference	ПРАВИЛНИК о превентивним мерама за безбедан и здрав рад при излагању хемијским материјама („Службени гласник РС”, бр. 106/09 и 117/17)

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N-BUTYL ACRYLATE (141-32-2)	
Slovenia - Occupational Exposure Limits	
Local name	n-butylakrilat
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Remark	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti), EU
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Acrilato de n-butilo
VLA-ED (OEL TWA) [1]	11 mg/m ³
VLA-ED (OEL TWA) [2]	2 ppm
VLA-EC (OEL STEL)	53 mg/m ³
VLA-EC (OEL STEL) [ppm]	10 ppm
Remark	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo), Sen (Sensibilizante).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	n-Butylakrylat
NGV (OEL TWA)	11 mg/m ³
NGV (OEL TWA) [ppm]	2 ppm
KTV (OEL STEL)	53 mg/m ³
KTV (OEL STEL) [ppm]	10 ppm
Remark	M (Medicinska kontroller kan krävas för hantering av ämnet. Se vidare föreskrifterna om medicinska kontroller i arbetslivet. För vissa ämnen ska arbetsgivaren erbjuda läkarundersökning och för andra ämnen gäller krav på periodisk läkarundersökning och tjänstbarhetsbedömning); S (Ämnet är sensibiliserande. Sensibiliserande ämnen kan ge allergi eller annan överkänslighet. Överkänslighetsbesvären drabbar främst huden eller andningsorganen. Överkänslighet innebär att man reagerar vid kontakt med ämnen som normalt inte ger besvär. Allergi är en undergrupp av överkänslighet som orsakas av reaktioner i kroppens immunsystem. Särskilt låga gränsvärden har fastställts för ämnen med mer uttalat luftvägssensibiliserande egenskaper. Några ämnen med starkt sensibiliserande egenskaper får endast hanteras efter tillstånd från Arbetsmiljöverket, se föreskrifterna om kemiska arbetsmiljörisker. Dessa ämnen har inga gränsvärden men i vissa fall riktvärden)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
United Kingdom - Occupational Exposure Limits	
Local name	n-Butyl acrylate
WEL TWA (OEL TWA) [1]	5 mg/m ³
WEL TWA (OEL TWA) [2]	1 ppm
WEL STEL (OEL STEL)	26 mg/m ³
WEL STEL (OEL STEL) [ppm]	5 ppm

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N-BUTYL ACRYLATE (141-32-2)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	n-Bútýlakrýlat
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Remark	O (efnið er ofnæmisvaldandi)
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Butylakrylat
Grenseverdi (OEL TWA) [1]	11 mg/m ³
Grenseverdi (OEL TWA) [2]	2 ppm
Remark	A: Kjemikalier som skal betraktes som at de fremkaller allergi eller annen overfølsomhet i øynene eller luftveier, eller som skal betraktes som at de fremkaller allergi ved hudkontakt; E: EU har en veiledende grenseverdi og/eller anmerkning for stoffet.
Regulatory reference	FOR-2021-06-28-2248
North Macedonia - Occupational Exposure Limits	
Local name	n-бутилакрилат
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
KTV	5
Short time value [mg/m ³]	55 mg/m ³
Short time value [ppm]	10 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусо време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m ³ или во ml/m ³ (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (EU) European Union – гранична вредност, определена на ниво на Европската унија
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	Acrylate de n-butyle / n-Butylacrylat [Acrylsäure-n-butylester, Propensäure-n-butylester]
MAK (OEL TWA) [1]	11 mg/m ³
MAK (OEL TWA) [2]	2 ppm
KZGW (OEL STEL)	22 mg/m ³
KZGW (OEL STEL) [ppm]	4 ppm

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N-BUTYL ACRYLATE (141-32-2)	
Critical toxicity	VRS, Peau, Yeux / OAW, Haut, Auge
Notation	R, S, SS _C / H, S, SS _C
Remark	INRS
Regulatory reference	www.suva.ch, 01.01.2021
Turkey - Occupational Exposure Limits	
Local name	n-Butilakrilat
OEL TWA	11 mg/m ³
OEL TWA	2 ppm
OEL STEL	53 mg/m ³
OEL STEL	10 ppm
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete
n-butyl acetate (123-86-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Butyl acetate
IOEL TWA [ppm]	50 ppm
IOEL STEL	723 mg/m ³
IOEL STEL [ppm]	150 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2019/1831
Austria - Occupational Exposure Limits	
Local name	Butylacetat (Essigsäurebutylester) alle Isomeren außer tert-Butylacetat: n-Butylacetat
MAK (OEL TWA)	241 mg/m ³
MAK (OEL TWA) [ppm]	50 ppm
OEL C	480 mg/m ³
OEL C	100 ppm
Regulatory reference	BGBl. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Acétate de n-butyle # n-Butylacetaat
OEL TWA	238 mg/m ³
OEL TWA	50 ppm
OEL STEL	712 mg/m ³
OEL STEL	150 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Bulgaria - Occupational Exposure Limits	
Local name	n-Бутилацетат
OEL TWA	241 mg/m ³
OEL TWA	50 ppm
OEL STEL	723 mg/m ³
OEL STEL	150 ppm

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n-butyl acetate (123-86-4)	
Remark	• (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Croatia - Occupational Exposure Limits	
Local name	n-Butil-acetat
GVI (OEL TWA) [1]	241 mg/m ³
GVI (OEL TWA) [2]	50 ppm
KGVI (OEL STEL)	723 mg/m ³
KGVI (OEL STEL) [ppm]	150 ppm
Remark	Direktiva; 2019/1831
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
Czech Republic - Occupational Exposure Limits	
Local name	Butylacetát isomery: n-Butyl-acetát
PEL (OEL TWA)	241 mg/m ³
NPK-P (OEL C)	723 mg/m ³
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
Denmark - Occupational Exposure Limits	
Local name	Butylacetat, alle isomere: n-Butylacetat
OEL TWA [1]	241 mg/m ³
OEL TWA [2]	50 ppm
Remark	E (betyder, at stoffet har en EF-grænseværdi)
Regulatory reference	BEK nr 1426 af 28. juni 2021
Finland - Occupational Exposure Limits	
Local name	n-Butyliasetaatti
HTP (OEL TWA) [1]	240 mg/m ³
HTP (OEL TWA) [2]	50 ppm
HTP (OEL STEL)	725 mg/m ³
HTP (OEL STEL) [ppm]	150 ppm
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
France - Occupational Exposure Limits	
Local name	Acétate de n-butyle
VME (OEL TWA)	241 mg/m ³ (Entre en vigueur le 1er mars 2022) 710 mg/m ³
VME (OEL TWA) [ppm]	50 ppm (Entre en vigueur le 1er mars 2022) 150 ppm
VLE (OEL C/STEL)	723 mg/m ³ (Entre en vigueur le 1er mars 2022) 940 mg/m ³
VLE (OEL C/STEL) [ppm]	150 ppm (Entre en vigueur le 1er mars 2022) 200 ppm

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n-butyl acetate (123-86-4)	
Remark	Valeurs recommandées/admises. Valeurs réglementaires contraignantes (Entre en vigueur le 1er mars 2022)
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016; Décret n° 2021-1849)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	300 mg/m ³
AGW (OEL TWA) [2]	62 ppm
Peak exposure limitation factor	2(l)
Remark	AGS - Ausschuss für Gefahrstoffe; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900
Greece - Occupational Exposure Limits	
Local name	Οξικός- βουτυλεστέρας, n-
OEL TWA	710 mg/m ³
OEL TWA	150 ppm
OEL STEL	950 mg/m ³
OEL STEL	200 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Hungary - Occupational Exposure Limits	
Local name	n-BUTIL-ACETÁT
AK (OEL TWA)	241 mg/m ³
CK (OEL STEL)	723 mg/m ³
Remark	i (ingerlő anyag, amely izgatja a bőrt, nyálkahártyát, szemet vagy mindhármát), sz (Túlerzékenységet okozó (szenzibilizáló) tulajdonságú anyag. Az anyagra érzékeny egyének „túlerzékenységen” alapuló bőr-, légzőrendszeri, esetleg más szervet/szervrendszert károsító megbetegedést okozhat); N (Irritáló anyagok, egyszerű fojtógázok, csekély egészségkárosító hatással bíró anyagok)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
Ireland - Occupational Exposure Limits	
Local name	n-Butyl acetate
OEL TWA [1]	241 mg/m ³
OEL TWA [2]	50 ppm
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
Italy - Occupational Exposure Limits	
Local name	Acetato di n-butile
OEL TWA	241 mg/m ³
OEL TWA	50 ppm

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n-butyl acetate (123-86-4)	
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Latvia - Occupational Exposure Limits	
Local name	Etiķskābes butilesteris (n-butilacetāts)
OEL TWA	241 mg/m ³
OEL TWA	50 ppm
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2021. gada 18. februārī noteikumiem Nr. 110)
Lithuania - Occupational Exposure Limits	
Local name	Butilo acetatas (n-butilacetatas)
IPRV (OEL TWA)	241 mg/m ³
IPRV (OEL TWA) [ppm]	50 ppm
TPRV (OEL STEL)	723 mg/m ³
TPRV (OEL STEL) [ppm]	150 ppm
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-14/A1-11, 2021-01-06)
Luxembourg - Occupational Exposure Limits	
Local name	Acétate de n-butyle
OEL TWA	241 mg/m ³
OEL TWA	50 ppm
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Regulatory reference	Mémorial A N° 226 de 2021 concernant la protection de la sécurité et de la santé des salariés contre les risques liés à des agents chimiques sur le lieu de travail
Poland - Occupational Exposure Limits	
Local name	Octan n-butylu (n-butylu octan)
NDS (OEL TWA)	240 mg/m ³
NDSch (OEL STEL)	720 mg/m ³
Regulatory reference	Dz. U. 2018 poz. 1286
Portugal - Occupational Exposure Limits	
Local name	Acetato de n-butilo
OEL TWA	150 ppm
OEL STEL	200 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
Romania - Occupational Exposure Limits	
Local name	Acetat de n-butil
OEL TWA	241 mg/m ³
OEL TWA	50 ppm

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n-butyl acetate (123-86-4)	
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Slovakia - Occupational Exposure Limits	
Local name	Butylacetáty: n-Butylacetát
NPHV (OEL TWA) [1]	241 mg/m ³
NPHV (OEL TWA) [2]	50 ppm
NPHV (OEL STEL)	723 mg/m ³
NPHV (OEL STEL) [ppm]	150 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
Slovenia - Occupational Exposure Limits	
Local name	n-butylacetat
OEL TWA	241 mg/m ³
OEL TWA	50 ppm
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti), EU
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Acetato de n-butilo
VLA-ED (OEL TWA) [1]	241 mg/m ³
VLA-ED (OEL TWA) [2]	50 ppm
VLA-EC (OEL STEL)	724 mg/m ³
VLA-EC (OEL STEL) [ppm]	150 ppm
Remark	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
Sweden - Occupational Exposure Limits	
Local name	n-Butylacetat
NGV (OEL TWA)	241 mg/m ³
NGV (OEL TWA) [ppm]	50 ppm
KTV (OEL STEL)	723 mg/m ³
KTV (OEL STEL) [ppm]	150 ppm
Regulatory reference	Hygieniska gränsvärden (AFS 2020:6)
United Kingdom - Occupational Exposure Limits	
Local name	Butyl acetate
WEL TWA (OEL TWA) [1]	724 mg/m ³
WEL TWA (OEL TWA) [2]	150 ppm
WEL STEL (OEL STEL)	966 mg/m ³

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n-butyl acetate (123-86-4)	
WEL STEL (OEL STEL) [ppm]	200 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Iceland - Occupational Exposure Limits	
Local name	Bútýlasetat, allir ísómerar (ísóbútýlasetat)
OEL TWA	241 mg/m ³
OEL TWA	50 ppm
OEL STEL	723 mg/m ³
OEL STEL	150 ppm
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 631/2021)
North Macedonia - Occupational Exposure Limits	
Local name	n-бутилацетат
OEL TWA	480 mg/m ³
OEL TWA	100 ppm
KTV	1
Short time value [mg/m ³]	480 mg/m ³
Short time value [ppm]	100 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покусно време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m ³ или во ml/m ³ (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност; (Y)
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија“ бр.46/10)
Switzerland - Occupational Exposure Limits	
Local name	1-Butylacétate / 1-Butylacetat [Essigsäurebutylester]
MAK (OEL TWA) [1]	240 mg/m ³
MAK (OEL TWA) [2]	50 ppm
KZGW (OEL STEL)	720 mg/m ³
KZGW (OEL STEL) [ppm]	150 ppm
Critical toxicity	VR, Yeux / AW, Auge
Notation	SS _c / SS _c
Remark	INRS, NIOSH
Regulatory reference	www.suva.ch, 01.01.2021

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Colour	: Colourless.
Odour	: Characteristic odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 41 (21 – 60) °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable

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Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 0.9 – 1.1
Solubility	: soluble in most organic solvents.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

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 toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Harmful if inhaled.

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ATE CLP (dust,mist)	4.167 mg/l/4h
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xylene (1330-20-7)

LD50 oral rat	3523 mg/kg Source: ECHA
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male, Remarks on results: other:
LC50 Inhalation - Rat [ppm]	5922 ppm

ETHYLBENZENE (100-41-4)

LD50 oral rat	3500 mg/kg Source: ECHA, HSDB
LD50 dermal rabbit	> 20000 mg/kg Source: ECHA

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ETHYLBENZENE (100-41-4)	
LC50 Inhalation - Rat [ppm]	4000 ppm Source: ECHA, Harmonized classification of EU CLP
BUTAN-1-OL (71-36-3)	
LD50 oral rat	2292 mg/kg Source: ECHA
LD50 dermal rabbit	3430 mg/kg Source: ECHA
LC50 Inhalation - Rat [ppm]	8000 ppm Source: ECHA
N-BUTYL ACRYLATE (141-32-2)	
LD50 oral rat	3150 mg/kg Source: ECHA
LD50 dermal rabbit	2000 mg/kg bodyweight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat (Vapours)	10 mg/l Source: ECHA
n-butyl acetate (123-86-4)	
LD50 oral rat	3200 ml/kg Source: ECHA
LD50 dermal rabbit	> 17600 mg/kg Source: ECHA
LC50 Inhalation - Rat (Vapours)	1802 mg/l Source: ECHA
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
xylene (1330-20-7)	
IARC group	3 - Not classifiable
ETHYLBENZENE (100-41-4)	
IARC group	2B - Possibly carcinogenic to humans
N-BUTYL ACRYLATE (141-32-2)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
BUTAN-1-OL (71-36-3)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
N-BUTYL ACRYLATE (141-32-2)	
STOT-single exposure	May cause respiratory irritation.
n-butyl acetate (123-86-4)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
ETHYLBENZENE (100-41-4)	
STOT-repeated exposure	May cause damage to organs (hearing organs) through prolonged or repeated exposure.
Aspiration hazard	: Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	

xylene (1330-20-7)

LC50 - Fish [1]	2.6 mg/l Source: ECHA
EC50 - Crustacea [1]	> 3.4 mg/l Test organisms (species): Ceriodaphnia dubia
LOEC (chronic)	3.16 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

ETHYLBENZENE (100-41-4)

LC50 - Fish [1]	5.1 mg/l Source: ECHA
EC50 96h - Algae [1]	2.6 mg/l Source: ECHA

BUTAN-1-OL (71-36-3)

LC50 - Fish [1]	1376 mg/l Source: ECHA
EC50 - Crustacea [1]	1983 mg/l Source: ECHA
EC50 96h - Algae [1]	225 mg/l Source: ECHA

N-BUTYL ACRYLATE (141-32-2)

LC50 - Fish [1]	2.1 mg/l Source: EHCA
EC50 - Crustacea [1]	8.2 mg/l Source: ECHA
EC50 96h - Algae [1]	2.65 mg/l Source: EHCA

n-butyl acetate (123-86-4)

LC50 - Fish [1]	18 mg/l Source: ECHA
EC50 - Crustacea [1]	44 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	32 mg/l Test organisms (species): Artemia salina
EC50 72h - Algae [1]	674.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

xylene (1330-20-7)

Partition coefficient n-octanol/water (Log Pow)	3.15 Source: HSDB
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ETHYLBENZENE (100-41-4)

Partition coefficient n-octanol/water (Log Pow)	3.15 Source: HSDB
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BUTAN-1-OL (71-36-3)

Partition coefficient n-octanol/water (Log Pow)	1 Source: ECHA
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N-BUTYL ACRYLATE (141-32-2)

Partition coefficient n-octanol/water (Log Pow)	2.36 Source: HSDB
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n-butyl acetate (123-86-4)

Partition coefficient n-octanol/water (Log Pow)	1.78 Source: HSDB
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapours may accumulate in the container.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW, EC 2150/2002)	: 08 00 00 - WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.
R/D code (Recovery/Disposal, EU 2008/98)	: R2 - Solvent reclamation/regeneration
Hazardous Waste Group	: H - Waste with low energy content

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1263	UN 1263	UN 1263	UN 1263	UN 1263

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ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
PAINT	PAINT	Paint	PAINT	PAINT
Transport document description				
UN 1263 PAINT, 3, III, (E)	UN 1263 PAINT, 3, III	UN 1263 Paint, 3, III	UN 1263 PAINT, 3, III	UN 1263 PAINT, 3, III
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 163, 367, 650
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC02, R001
Special packing provisions (ADR)	: PP1, BB4
Mixed packing provisions (ADR)	: MP19
Transport category (ADR)	: 3
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: E
EAC code	: •3YE

Transport by sea

Special provisions (IMDG)	: 163, 223, 367, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T2
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Miscibility with water depends upon the composition.

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L

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CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3, A72, A192
ERG code (IATA)	: 3L

Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 163, 367, 650
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 163, 367, 650
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T2
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE4
Hazard identification number (RID)	: 30

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)
Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

15.1.2. National regulations

France

Occupational diseases

Code	Description
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them
RG 65	Eczematiform lesions of allergic mechanism
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

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Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – : None of the components are listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : xylene is listed

Denmark

Class for fire hazard : Class II-1

Store unit : 5 liter

Classification remarks : R10 <H225;H315;H318;H332>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK) : LK 3 - Flammable liquids

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose

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Abbreviations and acronyms:	
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains N-BUTYL ACRYLATE(141-32-2). May produce an allergic reaction.
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
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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

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Full text of H- and EUH-statements:

H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.