

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

SKIL REINFORCER S

Date of first edition: 6/7/2024

Safety Data Sheet dated 07/06/2024

version 1

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

1.1. Product identifier

Mixture identification:

Trade name: SKIL REINFORCER S

Trade code: 16112021 -20

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

Recommended use: Varnish/impregnating agent

Uses advised against: All uses other than recommended ones

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Ireland Poison information centre: 01 809 2166 (Daily 8am-10pm) In case of emergency call 999 or 112

Malta In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 2	Highly flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
STOT SE 3	May cause respiratory irritation.
STOT SE 3	May cause drowsiness or dizziness.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1	May be fatal if swallowed and enters airways.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours.
P280	Wear protective gloves and eye/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	In case of fire, use a CO2 fire extinguisher to extinguish.
P501	Dispose of contents/container in accordance with applicable regulations.

Contains

Reaction mass of ethylbenzene and m-xylene and p-xylene

Hydrocarbons, C9, aromatics

Hydrocarbons, C12-C15, N-alkanes, isoalkanes, cyclics, < 2% aromatics

propan-2-ol; isopropyl alcohol; isopropanol

Dir. 2004/42/EC (VOC directive)

Binding primers

EU limit value for this product (cat. A/h): 750 g/l

This product contains max 722.93 g/l VOC.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq$ 0.1%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: SKIL REINFORCER S

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 20 -<50 %	Reaction mass of ethylbenzene and m-xylene and p-xylene	EC:905-562-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Asp. Tox. 1, H304; STOT RE 2, H373	01-2119555267-33
≥ 20 -<50 %	Hydrocarbons, C9, aromatics	CAS:128601-23-0 EC:918-668-5	Flam. Liq. 3, H226; STOT SE 3, H335; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411, M-Chronic:1, EUH066	01-2119455851-35
≥ 5 -<10 %	n-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025-00-1	Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119485493-29
≥ 5 -<10 %	propan-2-ol; isopropyl alcohol; isopropanol	CAS:67-63-0 EC:200-661-7 Index:603-117-00-0	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	01-2119457558-25
≥ 5 -<10 %	Hydrocarbons, C12-C15, N-alkanes, isoalkanes, cyclics, < 2% aromatics	EC:920-107-4	Asp. Tox. 1, H304, EUH066	

≥1-<3 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29
≥1-<3 %	xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315; STOT SE 3, H335; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 3, H412; Eye Irrit. 2, H319, M-Chronic:1	01-2119488216-32
≥0.5-<1 %	tetraethyl silicate; ethyl silicate	CAS:78-10-4 EC:201-083-8 Index:014-005-00-0	Flam. Liq. 3, H226; Eye Irrit. 2, H319; STOT SE 3, H335; Acute Tox. 4, H332	01-2119496195-28
≥0.5-<1 %	1-methoxy-2-propanol; monopropylene glycol methyl ether	CAS:107-98-2 EC:203-539-1 Index:603-064-00-3	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119457435-35
≥0.3-<0.5 %	methanol	CAS:67-56-1 EC:200-659-6 Index:603-001-00-X	Flam. Liq. 2, H225 STOT SE 1, H370 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Specific Concentration Limits: C ≥ 10%: STOT SE 1 H370 3% ≤ C < 10%: STOT SE 2 H371	01-2119433307-44
≥0.3-<0.5 %	ethylbenzene	CAS:100-41-4 EC:202-849-4 Index:601-023-00-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 3, H412	01-2119489370-35
<0.05 %	toluene	CAS:108-88-3 EC:203-625-9 Index:601-021-00-3	Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336	01-2116471310-51
<0.05 %	methyl methacrylate	CAS:80-62-6 EC:201-297-1 Index:607-035-00-6	Flam. Liq. 2, H225; STOT SE 3, H335; Skin Irrit. 2, H315; Skin Sens. 1, H317	01-2119452498-28

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Water.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
Hydrocarbons, C9, aromatics CAS: 128601-23-0	NATIONAL	DENMARK	Long Term: 10 ppm Source: At-vejledning C.0.1-1
	NATIONAL	AUSTRIA	Long Term: 241 mg/m3 - 50 ppm; Short Term: Ceiling - 480 mg/m3 - 100 ppm Mow, MAK Source: GKV, BGBl. II Nr. 156/2021
n-butyl acetate CAS: 123-86-4	NATIONAL	BULGARIA	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA	Long Term: 241 mg/m3; Short Term: Ceiling - 723 mg/m3 Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 241 mg/m3 - 50 ppm E Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm
	NATIONAL	FINLAND	Long Term: 240 mg/m3 - 50 ppm; Short Term: 725 mg/m3 - 150 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: INRS outil65, article R. 4412-149 du Code du travail
	NATIONAL	HUNGARY	Long Term: 241 mg/m3; Short Term: 723 mg/m3 i, sz, EU7, N Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL	NETHERLAND S	Long Term: 241 mg/m3; Short Term: 723 mg/m3 Source: Arbeidsomstandighedenregeling - Lijst A
	NATIONAL	POLAND	Long Term: 240 mg/m3; Short Term: 720 mg/m3 Source: Dz.U. 2018 poz. 1286
	NATIONAL	SLOVAKIA	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: 355 NARIADENIE VLADY z 10. mája 2006
	NATIONAL	SWEDEN	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: AFS 2021:3
	SUVA	SWITZERLAND	Long Term: 240 mg/m3 - 50 ppm; Short Term: 720 mg/m3 - 150 ppm SSC, VR Yeux / AW Auge, INRS NIOSH Source: suva.ch/valeurs-limites
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 724 mg/m3 - 150 ppm; Short Term: 966 mg/m3 - 200 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	NATIONAL	BELGIUM	Long Term: 238 mg/m3 - 50 ppm; Short Term: 712 mg/m3 - 150 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	CROATIA	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: 2019/1831
	NATIONAL	CYPRUS	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATIONAL	GERMANY	Long Term: 300 mg/m3 - 62 ppm AGS, Y, 2 (I) Source: TRGS 900
	NATIONAL	GREECE	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: Y.A. 72/2021 (ΦΕΚ 163/A` 9.9.2021)
	NATIONAL	IRELAND	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm IOELV Source: 2021 Code of Practice
	NATIONAL	ITALY	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: D.lgs. 81/2008, Allegato XXXVIII
	NATIONAL	LATVIA	Long Term: 241 mg/m3 - 50 ppm; Short Term: 723 mg/m3 - 150 ppm Source: KN325P1

propan-2-ol; isopropyl alcohol; isopropanol
CAS: 67-63-0

NATIONAL	LUXEMBOURG	Long Term: 241 mg/m ³ - 50 ppm; Short Term: 723 mg/m ³ - 150 ppm Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 241 mg/m ³ - 50 ppm; Short Term: 723 mg/m ³ - 150 ppm Source: S.L.424.24
NATIONAL	PORTUGAL	Long Term: 241 mg/m ³ - 50 ppm; Short Term: 723 mg/m ³ - 150 ppm Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 241 mg/m ³ - 50 ppm; Short Term: 723 mg/m ³ - 150 ppm Dir. 2019/1.831 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 241 mg/m ³ - 50 ppm; Short Term: 723 mg/m ³ - 150 ppm Y, EU5 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 241 mg/m ³ - 50 ppm; Short Term: 723 mg/m ³ - 150 ppm VLI Source: LEP 2022
NATIONAL	AUSTRALIA	Long Term: 983 mg/m ³ - 400 ppm (8h); Short Term: 1230 mg/m ³ - 500 ppm
ACGIH		Long Term: 200 ppm (8h); Short Term: 400 ppm A4, BEI - Eye and URT irr, CNS impair
NATIONAL	AUSTRIA	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 2000 mg/m ³ - 800 ppm 15(Miw), 4x, MAK Source: BGBl. II Nr. 156/2021
NATIONAL	BULGARIA	Long Term: 980 mg/m ³ ; Short Term: 1225 mg/m ³ Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATIONAL	CZECHIA	Long Term: 500 mg/m ³ ; Short Term: Ceiling - 1000 mg/m ³ I Source: Nařízení vlády č. 361-2007 Sb
NATIONAL	DENMARK	Long Term: 490 mg/m ³ - 200 ppm Source: BEK nr 2203 af 29/11/2021
NATIONAL	ESTONIA	Long Term: 350 mg/m ³ - 150 ppm; Short Term: 600 mg/m ³ - 250 ppm Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATIONAL	FINLAND	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 620 mg/m ³ - 250 ppm Source: HTP-ARVOT 2020
NATIONAL	FRANCE	Short Term: 980 mg/m ³ - 400 ppm Source: INRS outil65
NATIONAL	GREECE	Long Term: 980 mg/m ³ - 400 ppm; Short Term: 1225 mg/m ³ - 500 ppm Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	HUNGARY	Long Term: 500 mg/m ³ ; Short Term: 1000 mg/m ³ b, i, R Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	LATVIA	Long Term: 350 mg/m ³ ; Short Term: 600 mg/m ³ Source: KN325P1
NATIONAL	LITHUANIA	Long Term: 350 mg/m ³ - 150 ppm; Short Term: 600 mg/m ³ - 250 ppm Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	NORWAY	Long Term: 245 mg/m ³ - 100 ppm Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 900 mg/m ³ ; Short Term: 1200 mg/m ³ skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	SLOVAKIA	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 350 mg/m ³ - 150 ppm; Short Term: 600 mg/m ³ - 250 ppm V Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm SSC, B, VRS Foie SNC Yeux / OAW Laber ZNS Auge, INRS NIOSH

2-methoxy-1-methylethyl acetate CAS: 108-65-6	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 999 mg/m ³ - 400 ppm; Short Term: 1250 mg/m ³ - 500 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	NATIONAL	BELGIUM	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	CROATIA	Long Term: 999 mg/m ³ - 400 ppm; Short Term: 1250 mg/m ³ - 500 ppm Source: NN 1/2021
	NATIONAL	GERMANY	Long Term: 500 mg/m ³ - 200 ppm DFG, Y, 2(II) Source: TRGS 900
	NATIONAL	IRELAND	Long Term: 200 ppm; Short Term: 400 ppm Sk Source: 2021 Code of Practice
	NATIONAL	ROMANIA	Long Term: 200 mg/m ³ - 81 ppm; Short Term: 500 mg/m ³ - 203 ppm Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SLOVENIA	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm Y, BAT Source: UL št. 72, 11. 5. 2021
	NATIONAL	SPAIN	Long Term: 500 mg/m ³ - 200 ppm; Short Term: 1000 mg/m ³ - 400 ppm VLB®, s Source: LEP 2022
	NATIONAL	AUSTRALIA	Long Term: 274 mg/m ³ - 50 ppm; Short Term: 548 mg/m ³ - 100 ppm
	EU		Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Skin
	NATIONAL	AUSTRIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: Ceiling - 550 mg/m ³ - 100 ppm 5(Mow), 8x, MAK, H Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA	Long Term: 270 mg/m ³ ; Short Term: Ceiling - 550 mg/m ³ D, I Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 275 mg/m ³ - 50 ppm EH Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm A, S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL	FINLAND	Long Term: 270 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm iho Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
	NATIONAL	GREECE	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Δ Source: ΦΕΚ 94/Α` 13.5.1999
	NATIONAL	HUNGARY	Long Term: 275 mg/m ³ ; Short Term: 550 mg/m ³ EU1, N Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL	LITHUANIA	Long Term: 250 mg/m ³ - 50 ppm; Short Term: 400 mg/m ³ - 75 ppm O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATIONAL	NETHERLANDS	Long Term: 550 mg/m ³ Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 270 mg/m ³ - 50 ppm H E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 260 mg/m ³ ; Short Term: 520 mg/m ³ skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	SLOVAKIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm K Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm H Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 275 mg/m ³ - 50 ppm SSC, VRS / OAW Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 274 mg/m ³ - 50 ppm; Short Term: 548 mg/m ³ - 100 ppm Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm koža Source: 2000/39/EZ
NATIONAL	CYPRUS	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 270 mg/m ³ - 50 ppm DFG, EU, Y, 1(I) Source: TRGS 900
NATIONAL	IRELAND	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Sk, IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LATVIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Āda Source: KN325P1
NATIONAL	LUXEMBOURG	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm skin Source: S.L.424.24
NATIONAL	PORTUGAL	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm Cutânea Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm K, Y, EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 275 mg/m ³ - 50 ppm; Short Term: 550 mg/m ³ - 100 ppm

		vía dérmica, VLI Source: LEP 2022
xylene CAS: 1330-20-7	ACGIH	Long Term: 20 ppm (8h) A4, BEI - URT and eye irr; hematologic eff; CNS impair
	EU	Long Term: 221 mg/m3 - 50 ppm (8h); Short Term: 442 mg/m3 - 100 ppm Skin
	NATIONAL AUSTRIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm 15(Miw), 4x, MAK Source: BGBl. II Nr. 156/2021
	NATIONAL BULGARIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL CZECHIA	Long Term: 200 mg/m3; Short Term: Ceiling - 400 mg/m3 B, D, I Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL DENMARK	Long Term: 109 mg/m3 - 25 ppm EH Source: BEK nr 2203 af 29/11/2021
	NATIONAL ESTONIA	Long Term: 200 mg/m3 - 50 ppm; Short Term: 450 mg/m3 - 100 ppm A Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL FINLAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 440 mg/m3 - 100 ppm iho Source: HTP-ARVOT 2020
	NATIONAL FRANCE	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
	NATIONAL GREECE	Long Term: 435 mg/m3 - 100 ppm; Short Term: 650 mg/m3 - 150 ppm Δ Source: ΦΕΚ 94/Α` 13.5.1999
	NATIONAL HUNGARY	Long Term: 221 mg/m3; Short Term: 442 mg/m3 b, BEM, EU1, R Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL LITHUANIA	Long Term: 200 mg/m3 - 50 ppm; Short Term: 450 mg/m3 - 100 ppm O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATIONAL NETHERLANDS	Long Term: 210 mg/m3; Short Term: 442 mg/m3 H Source: Arbeidsomstandighedenregeling - Lijst A
	NATIONAL NORWAY	Long Term: 108 mg/m3 - 25 ppm H E Source: FOR-2021-06-28-2248
	NATIONAL POLAND	Long Term: 100 mg/m3; Short Term: 200 mg/m3 skóra Source: Dz.U. 2018 poz. 1286
	NATIONAL SLOVAKIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	NATIONAL SWEDEN	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm H Source: AFS 2021:3
	SUVA SWITZERLAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 440 mg/m3 - 100 ppm R/H, B, SNC / ZNS, NIOSH INRS Source: suva.ch/valeurs-limites
	WEL-EH40 UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 441 mg/m3 - 100 ppm Sk, BMGV Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)

tetraethyl silicate; ethyl silicate CAS: 78-10-4	NATIONAL	BELGIUM	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	CROATIA	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm koža Source: 2000/39/EZ
	NATIONAL	CYPRUS	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATIONAL	GERMANY	Long Term: 220 mg/m ³ - 50 ppm DFG, EU, H, 2(II) Source: TRGS 900
	NATIONAL	IRELAND	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm Sk, IOELV Source: 2021 Code of Practice
	NATIONAL	ITALY	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm Cute Source: D.lgs. 81/2008, Allegato XXXVIII
	NATIONAL	LATVIA	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm Āda Source: KN325P1
	NATIONAL	LUXEMBOURG	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm Peau Source: Mémorial A n.226 du 22 mars 2021
	NATIONAL	MALTA	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm skin Source: S.L.424.24
	NATIONAL	PORTUGAL	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm Cutânea Source: Decreto-Lei n.º 1/2021
	NATIONAL	ROMANIA	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SLOVENIA	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm K, BAT, EU1 Source: UL št. 72, 11. 5. 2021
	NATIONAL	SPAIN	Long Term: 221 mg/m ³ - 50 ppm; Short Term: 442 mg/m ³ - 100 ppm vía dérmica, VLB®, VLI Source: LEP 2022
	ACGIH		Long Term: 10 ppm (8h) URT and eye irr, kidney dam
	EU		Long Term: 44 mg/m ³ - 5 ppm (8h)
	NATIONAL	AUSTRIA	Long Term: 44 mg/m ³ - 5 ppm; Short Term: Ceiling - 88 mg/m ³ - 10 ppm 5(Mow), 8x, MAK Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 44 mg/m ³ - 5 ppm Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA	Long Term: 44 mg/m ³ ; Short Term: Ceiling - 176 mg/m ³ I Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 44 mg/m ³ - 5 ppm E Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA	Long Term: 44 mg/m ³ - 5 ppm Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL	FINLAND	Long Term: 43 mg/m ³ - 5 ppm; Short Term: 86 mg/m ³ - 10 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 44 mg/m ³ - 5 ppm

NATIONAL	HUNGARY	Long Term: 44 mg/m ³ i, EU4, N Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	NETHERLANDS	Long Term: 44 mg/m ³ Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 44 mg/m ³ - 5 ppm E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 44 mg/m ³ Source: Dz.U. 2018 poz. 1286
NATIONAL	SLOVAKIA	Long Term: 44 mg/m ³ - 5 ppm Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 44 mg/m ³ - 5 ppm; Short Term: 86 mg/m ³ - 10 ppm Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 44 mg/m ³ - 5 ppm Nez / Nase, NIOSH Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 44 mg/m ³ - 5 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 44 mg/m ³ - 5 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 44 mg/m ³ - 5 ppm Source: 2017/164/EU
NATIONAL	CYPRUS	Long Term: 44 mg/m ³ - 5 ppm Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 12 mg/m ³ - 1.4 ppm AGS, 1(I) Source: TRGS 900
NATIONAL	GREECE	Long Term: 44 mg/m ³ - 5 ppm Source: Π.Δ. 82/2018 (ΦΕΚ 152/Α` 21.8.2018)
NATIONAL	IRELAND	Long Term: 44 mg/m ³ - 5 ppm IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 44 mg/m ³ - 5 ppm Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LATVIA	Long Term: 44 mg/m ³ - 5 ppm Source: KN325P1
NATIONAL	LUXEMBOURG	Long Term: 44 mg/m ³ - 5 ppm Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 44 mg/m ³ - 5 ppm Source: S.L.424.24
NATIONAL	PORTUGAL	Long Term: 44 mg/m ³ - 5 ppm Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 44 mg/m ³ - 5 ppm Dir. 2017/164 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 44 mg/m ³ - 5 ppm; Short Term: 44 mg/m ³ - 5 ppm EU4 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 44 mg/m ³ - 5 ppm VLI Source: LEP 2022

1-methoxy-2-propanol;
monopropylene glycol methyl
ether
CAS: 107-98-2

ACGIH		Long Term: 50 ppm (8h); Short Term: 100 ppm A4 - Eye and URT irr
EU		Long Term: 375 mg/m ³ - 100 ppm (8h); Short Term: 563 mg/m ³ - 150 ppm Skin
NATIONAL	AUSTRIA	Long Term: 187 mg/m ³ - 50 ppm; Short Term: Ceiling - 187 mg/m ³ - 50 ppm Mow, MAK, H Source: BGBl. II Nr. 156/2021
NATIONAL	BULGARIA	Long Term: 375 mg/m ³ - 100 ppm; Short Term: 568 mg/m ³ - 150 ppm Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATIONAL	CZECHIA	Long Term: 270 mg/m ³ ; Short Term: Ceiling - 550 mg/m ³ D Source: Nařízení vlády č. 361-2007 Sb
NATIONAL	DENMARK	Long Term: 185 mg/m ³ - 50 ppm EH Source: BEK nr 2203 af 29/11/2021
NATIONAL	ESTONIA	Long Term: 375 mg/m ³ - 100 ppm; Short Term: 568 mg/m ³ - 150 ppm A, S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATIONAL	FINLAND	Long Term: 370 mg/m ³ - 100 ppm; Short Term: 560 mg/m ³ - 150 ppm iho Source: HTP-ARVOT 2020
NATIONAL	FRANCE	Long Term: 188 mg/m ³ - 50 ppm; Short Term: 375 mg/m ³ - 100 ppm Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
NATIONAL	GREECE	Long Term: 360 mg/m ³ - 100 ppm; Short Term: 1080 mg/m ³ - 300 ppm Δ Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	HUNGARY	Long Term: 375 mg/m ³ ; Short Term: 568 mg/m ³ b, EU1, R+T Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	LITHUANIA	Long Term: 190 mg/m ³ - 50 ppm; Short Term: 300 mg/m ³ - 75 ppm Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	NETHERLAND S	Long Term: 375 mg/m ³ ; Short Term: 563 mg/m ³ H Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 180 mg/m ³ - 50 ppm H E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 180 mg/m ³ ; Short Term: 360 mg/m ³ skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	SLOVAKIA	Long Term: 375 mg/m ³ - 100 ppm; Short Term: 568 mg/m ³ - 150 ppm K Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 190 mg/m ³ - 50 ppm; Short Term: 568 mg/m ³ - 150 ppm H Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 360 mg/m ³ - 100 ppm; Short Term: 720 mg/m ³ - 200 ppm SSC, B, VRS Yeux / OAW Auge Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 375 mg/m ³ - 100 ppm; Short Term: 560 mg/m ³ - 150 ppm Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 184 mg/m ³ - 50 ppm; Short Term: 369 mg/m ³ - 100 ppm D

		Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm Source: 2000/39/EZ
NATIONAL	CYPRUS	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 370 mg/m3 - 100 ppm DFG, EU, Y, 2(I) Source: TRGS 900
NATIONAL	IRELAND	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LATVIA	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm Āda Source: KN325P1
NATIONAL	LUXEMBOUR G	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm skin Source: S.L.424.24
NATIONAL	PORTUGAL	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm K, Y, BAT, EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 375 mg/m3 - 100 ppm; Short Term: 568 mg/m3 - 150 ppm vía dérmica, VLI Source: LEP 2022
methanol CAS: 67-56-1	ACGIH	Long Term: 200 ppm (8h); Short Term: 250 ppm Skin, BEI - Headache, eye dam, dizziness, nausea
	EU	Long Term: 260 mg/m3 - 200 ppm (8h) Skin
	NATIONAL	AUSTRIA
		Long Term: 260 mg/m3 - 200 ppm; Short Term: 1040 mg/m3 - 800 ppm 15(Miw), 4x, MAK, H Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA
		Long Term: 260 mg/m3 - 200 ppm Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA
		Long Term: 250 mg/m3; Short Term: Ceiling - 1000 mg/m3 D, B Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK
		Long Term: 260 mg/m3 - 200 ppm EH Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA
		Long Term: 250 mg/m3 - 200 ppm; Short Term: 350 mg/m3 - 250 ppm A Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL	FINLAND
		Long Term: 270 mg/m3 - 200 ppm; Short Term: 330 mg/m3 - 250 ppm iho Source: HTP-ARVOT 2020
	NATIONAL	FRANCE
		Long Term: 260 mg/m3 - 200 ppm; Short Term: 1300 mg/m3 - 1000 ppm

NATIONAL	GREECE	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 325 mg/m ³ - 250 ppm Δ Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	HUNGARY	Long Term: 260 mg/m ³ b, i, BEM, EU2, R+T Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	LITHUANIA	Long Term: 260 mg/m ³ - 200 ppm O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	NETHERLANDS	Long Term: 133 mg/m ³ H Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 130 mg/m ³ - 100 ppm H E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 100 mg/m ³ ; Short Term: 300 mg/m ³ skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	SLOVAKIA	Long Term: 260 mg/m ³ - 200 ppm K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 250 mg/m ³ - 200 ppm; Short Term: 350 mg/m ³ - 250 ppm H, V Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 260 mg/m ³ - 200 ppm; Short Term: 520 mg/m ³ - 400 ppm R/H, SSC, B, SNC / ZNS, INRS NIOSH Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 266 mg/m ³ - 200 ppm; Short Term: 333 mg/m ³ - 250 ppm Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 266 mg/m ³ - 200 ppm; Short Term: 333 mg/m ³ - 250 ppm D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 260 mg/m ³ - 200 ppm koža Source: 2006/15/EZ
NATIONAL	CYPRUS	Long Term: 260 mg/m ³ - 200 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 130 mg/m ³ - 100 ppm DFG, EU, H, Y, 2(II) Source: TRGS 900
NATIONAL	IRELAND	Long Term: 260 mg/m ³ - 200 ppm Sk, IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 260 mg/m ³ - 200 ppm Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LATVIA	Long Term: 260 mg/m ³ - 200 ppm Āda Source: KN325P1
NATIONAL	LUXEMBOURG	Long Term: 260 mg/m ³ - 200 ppm Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 260 mg/m ³ - 200 ppm

ethylbenzene CAS: 100-41-4		skin Source: S.L.424.24
	NATIONAL PORTUGAL	Long Term: 260 mg/m3 - 200 ppm Cutânea Source: Decreto-Lei n.º 1/2021
	NATIONAL ROMANIA	Long Term: 260 mg/m3 - 200 ppm P, Dir. 2006/15 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL SLOVENIA	Long Term: 260 mg/m3 - 200 ppm; Short Term: 1040 mg/m3 - 800 ppm K, Y, BAT, EU2 Source: UL št. 72, 11. 5. 2021
	NATIONAL SPAIN	Long Term: 266 mg/m3 - 200 ppm vía dérmica, VLB®, VLI, r Source: LEP 2022
	ACGIH	Long Term: 20 ppm (8h) OTO; A3, BEI - URT & eye irr; ototoxicity; kidney eff; CNS impair
	EU	Long Term: 442 mg/m3 - 100 ppm (8h); Short Term: 884 mg/m3 - 200 ppm Skin
	NATIONAL AUSTRIA	Long Term: 440 mg/m3 - 100 ppm; Short Term: Ceiling - 880 mg/m3 - 200 ppm 5(Mow), 8x, MAK, H Source: BGBl. II Nr. 156/2021
	NATIONAL BULGARIA	Long Term: 435 mg/m3; Short Term: 545 mg/m3 Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL CZECHIA	Long Term: 200 mg/m3; Short Term: Ceiling - 500 mg/m3 D, B Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL DENMARK	Long Term: 217 mg/m3 - 50 ppm EHK Source: BEK nr 2203 af 29/11/2021
	NATIONAL ESTONIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm A, S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL FINLAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 880 mg/m3 - 200 ppm iho Source: HTP-ARVOT 2020
	NATIONAL FRANCE	Long Term: 88.4 mg/m3 - 20 ppm; Short Term: 442 mg/m3 - 100 ppm Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
	NATIONAL GREECE	Long Term: 435 mg/m3 - 100 ppm; Short Term: 545 mg/m3 - 125 ppm Source: ΦΕΚ 94/Α` 13.5.1999
	NATIONAL HUNGARY	Long Term: 442 mg/m3; Short Term: 884 mg/m3 b, i, BEM, EU1, T Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL LITHUANIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
	NATIONAL NETHERLANDS	Long Term: 215 mg/m3; Short Term: 430 mg/m3 H Source: Arbeidsomstandighedenregeling - Lijst A
	NATIONAL NORWAY	Long Term: 20 mg/m3 - 5 ppm H K E Source: FOR-2021-06-28-2248
	NATIONAL POLAND	Long Term: 200 mg/m3; Short Term: 400 mg/m3 skóra Source: Dz.U. 2018 poz. 1286
	NATIONAL SLOVAKIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006

NATIONAL	SWEDEN	Long Term: 220 mg/m ³ - 50 ppm; Short Term: 884 mg/m ³ - 200 ppm H Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 220 mg/m ³ - 50 ppm; Short Term: 220 mg/m ³ - 50 ppm R/H, OB, B, Rein Foie / Niere Leber, NIOSH Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 441 mg/m ³ - 100 ppm; Short Term: 552 mg/m ³ - 125 ppm Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	CROATIA	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm koža Source: 2000/39/EZ
NATIONAL	CYPRUS	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 88 mg/m ³ - 20 ppm DFG, H, Y, EU, 2(II) Source: TRGS 900
NATIONAL	IRELAND	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm Sk, IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LATVIA	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm Āda; Ietekme uz dzirdi Source: KN325P1
NATIONAL	LUXEMBOURG	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm skin Source: S.L.424.24
NATIONAL	PORTUGAL	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm Cutânea Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 442 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm K, Y, BAT, EKA EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 441 mg/m ³ - 100 ppm; Short Term: 884 mg/m ³ - 200 ppm vía dérmica, VLB®, VLI Source: LEP 2022
toluene CAS: 108-88-3	ACGIH	Long Term: 20 ppm (8h) OTO; A4; BEI - CNS, visual & hearing impair; female repro system eff; pregnancy loss
	EU	Long Term: 192 mg/m ³ - 50 ppm (8h); Short Term: 384 mg/m ³ - 100 ppm Skin
	NATIONAL	AUSTRIA Long Term: 190 mg/m ³ - 50 ppm; Short Term: 380 mg/m ³ - 100 ppm 15(Miw), 4x, MAK, d, H Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CZECHIA Long Term: 192 mg/m ³ ; Short Term: Ceiling - 384 mg/m ³ B, D, I

NATIONAL	DENMARK	Long Term: 94 mg/m ³ - 25 ppm EH Source: BEK nr 2203 af 29/11/2021
NATIONAL	ESTONIA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm A Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATIONAL	FINLAND	Long Term: 81 mg/m ³ - 25 ppm; Short Term: 380 mg/m ³ - 100 ppm iho, melu Source: HTP-ARVOT 2020
NATIONAL	FRANCE	Long Term: 76.8 mg/m ³ - 20 ppm; Short Term: 384 mg/m ³ - 100 ppm Toxique pour la reproduction de catégorie 2, Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
NATIONAL	HUNGARY	Long Term: 190 mg/m ³ ; Short Term: 380 mg/m ³ b, i, BEM, EU2, R+T Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	LITHUANIA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm R O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	NETHERLANDS	Long Term: 150 mg/m ³ ; Short Term: 384 mg/m ³ Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 94 mg/m ³ - 25 ppm H E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 100 mg/m ³ ; Short Term: 200 mg/m ³ skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	SLOVAKIA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm B, H Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 190 mg/m ³ - 50 ppm; Short Term: 760 mg/m ³ - 200 ppm R/H, R2D, R2F, SSC, OB, B, Vue SNC / Sehen ZNS, INRS HSE NIOSH DFG Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 191 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 77 mg/m ³ - 20 ppm; Short Term: 384 mg/m ³ - 100 ppm D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm koža Source: 2006/15/EZ
NATIONAL	CYPRUS	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	GERMANY	Long Term: 190 mg/m ³ - 50 ppm DFG, EU, H, Y, 2 (II) Source: TRGS 900
NATIONAL	GREECE	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Δ Source: ΦΕΚ 202/Α` 23.8.2007
NATIONAL	IRELAND	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Sk, IOELV Source: 2021 Code of Practice

methyl methacrylate CAS: 80-62-6	NATIONAL	ITALY	Long Term: 192 mg/m ³ - 50 ppm Cute Source: D.lgs. 81/2008, Allegato XXXVIII
	NATIONAL	LATVIA	Long Term: 50 mg/m ³ - 14 ppm; Short Term: 150 mg/m ³ - 40 ppm Āda; Ietekme uz dzirdi Source: KN325P1
	NATIONAL	LUXEMBOURG	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Peau Source: Mémorial A n.226 du 22 mars 2021
	NATIONAL	MALTA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm skin Source: S.L.424.24
	NATIONAL	PORTUGAL	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm Cutânea Source: Decreto-Lei n.º 1/2021
	NATIONAL	ROMANIA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm P, R2, Dir. 2006/15 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SLOVENIA	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm K, Y, BAT, EU2, RD2 Source: UL št. 72, 11. 5. 2021
	NATIONAL	SPAIN	Long Term: 192 mg/m ³ - 50 ppm; Short Term: 384 mg/m ³ - 100 ppm vía dérmica, VLB®, VLI, r Source: LEP 2022
	ACGIH		Long Term: 50 ppm (8h); Short Term: 100 ppm DSEN, A4 - URT and eye irr, body weight eff, pulm edema
	EU		Long Term: 50 ppm (8h); Short Term: 100 ppm
	NATIONAL	AUSTRIA	Long Term: 210 mg/m ³ - 50 ppm; Short Term: Ceiling - 420 mg/m ³ - 100 ppm 5(Mow), 8x, MAK, Sh Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 50 ppm; Short Term: 100 ppm Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CYPRUS	Long Term: 50 ppm; Short Term: 100 ppm Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATIONAL	CZECHIA	Long Term: 50 mg/m ³ ; Short Term: Ceiling - 150 mg/m ³ I, S Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	DENMARK	Long Term: 102 mg/m ³ - 25 ppm EH Source: BEK nr 2203 af 29/11/2021
	NATIONAL	ESTONIA	Long Term: 50 ppm; Short Term: 100 ppm S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATIONAL	FINLAND	Long Term: 42 mg/m ³ - 10 ppm; Short Term: 210 mg/m ³ - 50 ppm Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 205 mg/m ³ - 50 ppm; Short Term: 410 mg/m ³ - 100 ppm Source: INRS outil65, article R. 4412-149 du Code du travail
	NATIONAL	GREECE	Long Term: 50 ppm; Short Term: 100 ppm Source: ΦΕΚ 19/Α` 9.2.2012
	NATIONAL	HUNGARY	Long Term: 208 mg/m ³ ; Short Term: 415 mg/m ³ b, i, sz, EU3, N Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL	LATVIA	Long Term: 10 mg/m ³ Source: KN325P1
	NATIONAL	LITHUANIA	Long Term: 200 mg/m ³ - 50 ppm; Short Term: 400 mg/m ³ - 100 ppm J Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389

NATIONAL	NETHERLAND S	Long Term: 205 mg/m ³ ; Short Term: 410 mg/m ³ Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 100 mg/m ³ - 25 ppm; Short Term: 400 mg/m ³ - 100 ppm A E S Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 100 mg/m ³ ; Short Term: 300 mg/m ³ Source: Dz.U. 2018 poz. 1286
NATIONAL	PORTUGAL	Long Term: 50 ppm; Short Term: 100 ppm Source: Decreto-Lei n.º 1/2021
NATIONAL	SLOVAKIA S	Long Term: 50 ppm; Short Term: 100 ppm Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 200 mg/m ³ - 50 ppm; Short Term: 400 mg/m ³ - 100 ppm M, S Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 210 mg/m ³ - 50 ppm; Short Term: 420 mg/m ³ - 100 ppm S, SSC, Poumons VRS Yeux / Lunge OAW Auge, INRS NIOSH Source: suva.ch/valeurs-limites
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 208 mg/m ³ - 50 ppm; Short Term: 416 mg/m ³ - 100 ppm Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
NATIONAL	BELGIUM	Long Term: 208 mg/m ³ - 50 ppm; Short Term: 416 mg/m ³ - 100 ppm Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	CROATIA	Long Term: 50 ppm; Short Term: 100 ppm koža, alergen koža Source: 2009/161/EU
NATIONAL	GERMANY	Long Term: 210 mg/m ³ - 50 ppm DFG, EU, Y, 2(I) Source: TRGS 900
NATIONAL	IRELAND	Long Term: 50 ppm; Short Term: 100 ppm IOELV, Sens Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 50 ppm; Short Term: 100 ppm Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LUXEMBOURG	Long Term: 50 ppm; Short Term: 100 ppm Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	MALTA	Long Term: 50 ppm; Short Term: 100 ppm Source: S.L.424.24
NATIONAL	ROMANIA	Long Term: 205 mg/m ³ - 50 ppm; Short Term: 410 mg/m ³ - 100 ppm Dir. 2009/161 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVENIA	Long Term: 210 mg/m ³ - 50 ppm; Short Term: 420 mg/m ³ - 100 ppm Y, EU3 Source: UL št. 72, 11. 5. 2021
NATIONAL	SPAIN	Long Term: 50 ppm; Short Term: 100 ppm Sen, VLI Source: LEP 2022

Biological limit values

propan-2-ol; isopropyl alcohol; isopropanol
CAS: 67-63-0

Biological Indicator: Acetone; Sampling Period: End of turn
Value: 25 mg/L; Medium: Urine

Biological Indicator: Acetone; Sampling Period: End of turn
Value: 25 mg/L; Medium: Blood

xylene
CAS: 1330-20-7

Biological Indicator: Methyl hippuric acid in urine; Sampling Period: End of turn
Value: 2000 mg/L; Medium: Urine

1-methoxy-2-propanol; monopropylene glycol methyl ether CAS: 107-98-2	Biological Indicator: 1-Methoxypropanol-2; Sampling Period: End of turn Value: 20 mg/L; Medium: Urine
methanol CAS: 67-56-1	Biological Indicator: Methyl alcohol; Sampling Period: End of turn; End of working week Value: 30 mg/L; Medium: Urine
toluene CAS: 108-88-3	Biological Indicator: Toluene in blood; Sampling Period: End of turn Value: 600 µg/L; Medium: Blood
	Biological Indicator: Hippuric acid in urine; Sampling Period: End of turn; End of working week Value: 2 g/g; Medium: Urine Remark: Not Specific; Semiquantitative
	Biological Indicator: o-Cresol in urine; Sampling Period: End of turn; End of working week Value: 0.5 mg/L; Medium: Urine Remark: Not Quantitative; Not Specific

Predicted No Effect Concentration (PNEC) values

Reaction mass of ethylbenzene and m- xylene and p-xylene	Exposure Route: Fresh Water; PNEC Limit: 44 µg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 10 µg/l
	Exposure Route: Marine water; PNEC Limit: 4.4 µg/l
	Exposure Route: Intermittent releases (marine water); PNEC Limit: 1 µg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1.6 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 2.52 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 252 µg/kg
	Exposure Route: Soil; PNEC Limit: 852 µg/kg
n-butyl acetate CAS: 123-86-4	Exposure Route: Fresh Water; PNEC Limit: 180 µg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 360 µg/l
	Exposure Route: Marine water; PNEC Limit: 18 µg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 35.6 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 981 µg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 98.1 µg/kg
	Exposure Route: Soil; PNEC Limit: 90.3 µg/kg
propan-2-ol; isopropyl alcohol; isopropanol CAS: 67-63-0	Exposure Route: Fresh Water; PNEC Limit: 140.9 mg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 140.9 mg/l
	Exposure Route: Marine water; PNEC Limit: 140.9 mg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 2251 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 552 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 552 mg/kg
	Exposure Route: Soil; PNEC Limit: 28 mg/kg
	Exposure Route: Secondary poisoning; PNEC Limit: 160 mg/kg
2-methoxy-1-methylethyl acetate CAS: 108-65-6	Exposure Route: Fresh Water; PNEC Limit: 635 µg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 6.35 mg/l
	Exposure Route: Marine water; PNEC Limit: 63.5 µg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 3.29 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 329 µg/kg
	Exposure Route: Soil; PNEC Limit: 290 µg/kg
xylene CAS: 1330-20-7	Exposure Route: Fresh Water; PNEC Limit: 327 µg/l
	Exposure Route: Intermittent releases (fresh water); PNEC Limit: 327 µg/l
	Exposure Route: Marine water; PNEC Limit: 327 µg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 6.58 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 12.46 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 12.46 mg/kg
Exposure Route: Soil; PNEC Limit: 2.31 mg/kg

tetraethyl silicate; ethyl
silicate
CAS: 78-10-4

Exposure Route: Fresh Water; PNEC Limit: 190 µg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 10 mg/l
Exposure Route: Marine water; PNEC Limit: 19 µg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 4000 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 830 µg/kg
Exposure Route: Marine water sediments; PNEC Limit: 83 µg/kg
Exposure Route: Soil; PNEC Limit: 50 µg/kg

1-methoxy-2-propanol;
monopropylene glycol
methyl ether
CAS: 107-98-2

Exposure Route: Fresh Water; PNEC Limit: 10 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 100 mg/l
Exposure Route: Marine water; PNEC Limit: 1 mg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 52.3 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 5.2 mg/kg
Exposure Route: Soil; PNEC Limit: 4.59 mg/kg

methanol
CAS: 67-56-1

Exposure Route: Fresh Water; PNEC Limit: 20.8 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1540 mg/l
Exposure Route: Marine water; PNEC Limit: 2.08 mg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 77 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 7.7 mg/kg
Exposure Route: Soil; PNEC Limit: 100 mg/kg

ethylbenzene
CAS: 100-41-4

Exposure Route: Fresh Water; PNEC Limit: 100 µg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 100 µg/l
Exposure Route: Marine water; PNEC Limit: 55 µg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 9.6 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 13.7 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 1.37 mg/kg
Exposure Route: Soil; PNEC Limit: 2.68 mg/kg

toluene
CAS: 108-88-3

Exposure Route: Secondary poisoning; PNEC Limit: 20 mg/kg
Exposure Route: Fresh Water; PNEC Limit: 680 µg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 680 µg/l
Exposure Route: Marine water; PNEC Limit: 680 µg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 13.61 µg/l
Exposure Route: Freshwater sediments; PNEC Limit: 16.39 mg/kg
Exposure Route: Marine water sediments; PNEC Limit: 16.39 mg/kg
Exposure Route: Soil; PNEC Limit: 2.89 mg/kg

methyl methacrylate
CAS: 80-62-6

Exposure Route: Fresh Water; PNEC Limit: 940 µg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 940 µg/l
Exposure Route: Marine water; PNEC Limit: 940 µg/l
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l
Exposure Route: Freshwater sediments; PNEC Limit: 5.74 mg/kg
Exposure Route: Soil; PNEC Limit: 1.47 mg/kg

Derived No Effect Level (DNEL) values

Reaction mass of
ethylbenzene and m-
xylene and p-xylene

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 221 mg/m³; Consumer: 65.3 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 442 mg/m³; Consumer: 260 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 221 mg/m³; Consumer: 65.3 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 442 mg/m³; Consumer: 260 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 212 mg/kg; Consumer: 125 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 2.5 mg/kg

Hydrocarbons, C9,
aromatics
CAS: 128601-23-0

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 150 mg/m³; Consumer: 32 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 25 mg/kg; Consumer: 11 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 11 mg/kg

n-butyl acetate
CAS: 123-86-4

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 48 mg/m³; Consumer: 12 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 600 mg/m³; Consumer: 300 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 300 mg/m³; Consumer: 35.7 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 600 mg/m³; Consumer: 300 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 7 mg/kg; Consumer: 3.4 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Professional: 11 mg/kg; Consumer: 6 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 2 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 2 mg/kg

propan-2-ol; isopropyl
alcohol; isopropanol
CAS: 67-63-0

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Consumer: 89 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Consumer: 319 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 26 mg/kg

2-methoxy-1-methylethyl
acetate
CAS: 108-65-6

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 275 mg/m³; Consumer: 33 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 550 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Consumer: 33 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 796 mg/kg; Consumer: 320 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 36 mg/kg

xylene
 CAS: 1330-20-7

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 221 mg/m³; Consumer: 65.3 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
 Worker Professional: 442 mg/m³; Consumer: 260 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
 Worker Professional: 221 mg/m³; Consumer: 65.3 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
 Worker Professional: 442 mg/m³; Consumer: 260 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 212 mg/kg; Consumer: 125 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
 Consumer: 12.5 mg/kg

tetraethyl silicate; ethyl silicate
 CAS: 78-10-4

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Consumer: 14 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
 Consumer: 14 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 56 mg/kg; Consumer: 3 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
 Worker Professional: 56 mg/kg; Consumer: 3 mg/kg

1-methoxy-2-propanol;
 monopropylene glycol
 methyl ether
 CAS: 107-98-2

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 369 mg/m³; Consumer: 43.9 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
 Worker Professional: 553.5 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
 Worker Professional: 553.5 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 183 mg/kg; Consumer: 78 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
 Consumer: 33 mg/kg

methanol
 CAS: 67-56-1

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 130 mg/m³; Consumer: 26 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
 Worker Professional: 130 mg/m³; Consumer: 26 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
 Worker Professional: 130 mg/m³; Consumer: 26 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
 Worker Professional: 130 mg/m³; Consumer: 26 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 20 mg/kg; Consumer: 4 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
 Worker Professional: 20 mg/kg; Consumer: 4 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
 Consumer: 4 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
 Consumer: 4 mg/kg

ethylbenzene
 CAS: 100-41-4

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 77 mg/m³; Consumer: 15 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
 Worker Professional: 293 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Professional: 180 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Worker Professional: 1.6 mg/kg

toluene
CAS: 108-88-3

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 192 mg/m³; Consumer: 56.5 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 384 mg/m³; Consumer: 226 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 192 mg/m³; Consumer: 56.5 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 384 mg/m³; Consumer: 226 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 384 mg/kg; Consumer: 226 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 8.13 mg/kg

methyl methacrylate
CAS: 80-62-6

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 208 mg/m³; Consumer: 74.3 mg/m³

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Worker Professional: 208 mg/m³; Consumer: 104 mg/m³

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 13.67 mg/kg; Consumer: 8.2 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects
Worker Professional: 1.5 mg/cm²; Consumer: 1.5 mg/cm²

Exposure Route: Human Dermal; Exposure Frequency: Short Term, local effects
Worker Professional: 1.5 mg/cm²; Consumer: 1.5 mg/cm²

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

Protection for hands:

Protection for hands:

Suitable materials for safety gloves; EN 374:

Nitrile rubber - NBR: thickness ≥0,35mm; breakthrough time ≥480min.

Respiratory protection:

Gas filter type AX .

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: In compliance with the product description

Odour: Characteristic

Odour threshold: N.A.

pH: Not Relevant

Kinematic viscosity: ≤ 20,5 mm²/sec (40 °C)

Melting point/freezing point: N.A.

Boiling point or initial boiling point and boiling range: > 35.1 °C (95.2 °F)

Flash point: < 23°C

Lower and upper explosion limit: N.A.

Relative vapour density: N.A.

Vapour pressure: N.A.

Density and/or relative density: 0.89 g/cm³

Solubility in water: Immiscible

Solubility in oil: N.A.
Partition coefficient n-octanol/water (log value): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Flammability: The product is classified Flam. Liq. 2 H225
Volatile Organic compounds - VOCs = 81.69 % ; 722.93 g/l

Particle characteristics:

Particle size: N.A.

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335), STOT SE 3(H336)
i) STOT-repeated exposure	The product is classified: STOT RE 2(H373)
j) aspiration hazard	The product is classified: Asp. Tox. 1(H304)

Toxicological information on main components of the mixture:

Reaction mass of ethylbenzene and m-xylene and p-xylene	a) acute toxicity	LD50 Oral Rat = 3523 ml/Kg	
		LC50 Inhalation Vapour Rat = 27.12 mg/l 4h	
		LD50 Skin Rabbit = 12126 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 1h	
	f) carcinogenicity	Genotoxicity Negative	Mouse subcutaneous route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 500	ppm
Hydrocarbons, C9,	a) acute toxicity	LD50 Oral Rat = 4 ml/Kg	

		LC50 Inhalation Vapour Rat > 6193 mg/m ³ 4h	
		LD50 Skin Rabbit > 3160 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Rat Negative	Inhalation route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 7500 mg/m ³	
n-butyl acetate	a) acute toxicity	LD50 Oral Rat = 10760 mg/kg LC50 Inhalation of aerosol Rat = 0.74 mg/l 4h LD50 Skin Rabbit > 16 ml/Kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 750	ppm
propan-2-ol; isopropyl alcohol; isopropanol	a) acute toxicity	LD50 Oral Rat = 5840 mg/kg LC50 Inhalation Vapour Rat > 10000 Ppm 6h LD50 Skin Rabbit = 16.4 ml/Kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity = 5000 Ppm	Mouse intraperitoneal route NOEC for mouse
2-methoxy-1-methylethyl acetate	a) acute toxicity	LD50 Oral Rat = 6190 mg/kg LD50 Skin Rabbit > 5000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	g) reproductive toxicity	No Observed Effect Level Rat = 3.69 mg/l	Inhalation route
xylene	a) acute toxicity	LD50 Oral Rat = 3523 ml/Kg LC50 Inhalation Vapour Rat = 29000 mg/m ³ 4h LD50 Skin Rabbit = 12126 mg/kg 24h	
	b) skin corrosion/irritation	Skin Corrosive Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 1h	
	f) carcinogenicity	Genotoxicity Negative	Mouse subcutaneous route

	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 2171 mg/kg	
tetraethyl silicate; ethyl silicate	a) acute toxicity	LD50 Oral Rat > 2500 mg/kg	
		LC50 Inhalation of aerosol Rat = 10 mg/l 4h	
		LD50 Skin Rabbit = 6.3 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral = 12.5 mg/kg	Mouse
1-methoxy-2-propanol; monopropylene glycol methyl ether	a) acute toxicity	LD50 Oral Rat = 4016 mg/kg	
		LC50 Inhalation Vapour Rat Negative 6h	No mortalities observed
		LD50 Skin Rat > 2000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Carcinogenicity Negative	Mouse intraperitoneal route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 300	ppm
methanol	a) acute toxicity	LD50 Oral Rat >= 2528 mg/kg	
		LC50 Inhalation = 43.68 mg/l 6h	Cat
		LD50 Skin Rabbit = 17100 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative	
	f) carcinogenicity	Genotoxicity Negative Carcinogenicity Rat Negative	Mouse intraperitoneal route
	g) reproductive toxicity	Lowest Observed Adverse Effect Level Oral = 1000 mg/kg	Mouse
ethylbenzene	a) acute toxicity	LD50 Oral Rat = 3500 mg/kg	
		LC50 Inhalation Mouse = 1432 Ppm	
		LD50 Skin Rabbit = 17.8 ml/Kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 24h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	f) carcinogenicity	Genotoxicity Negative 24h	Mouse oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 100	ppm
toluene	a) acute toxicity	LD50 Oral Rat = 5580 mg/kg	

		LC50 Inhalation of aerosol Rat > 20 mg/l 4h	
		LD50 Skin Rabbit > 5000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Negative	
	f) carcinogenicity	Genotoxicity Rat Negative	Intraperitoneal route
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 2261 mg/m ³	
methyl methacrylate	a) acute toxicity	LD50 Oral Rat = 7900 mg/kg	
		LC50 Inhalation Vapour Rat = 29.8 mg/l 4h	
		LD50 Skin Rabbit > 5000 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Irritant Rabbit No	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	Mouse
	f) carcinogenicity	Genotoxicity Negative	Mouse inhalation route
		Carcinogenicity Rat Negative	

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Reaction mass of ethylbenzene and m-xylene and p-xylene	EINECS: 905-562-9	a) Aquatic acute toxicity : LC50 Fish Danio rerio = 0.71 mg/L 96h OECD Guideline 210
		b) Aquatic chronic toxicity : NOEC Fish freshwater fish = 1.3 mg/L - 56days
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1 mg/L 24h OECD 202
		b) Aquatic chronic toxicity : NOEC Daphnia Ceriodaphnia dubia = 1.17 mg/L OECD 211 - 7days
		a) Aquatic acute toxicity : EC50 Algae freshwater algae = 2.2 mg/L 72h OECD 201
		a) Aquatic acute toxicity : EC50 microorganisms = 16 mg/L OECD 301F - 28days
Hydrocarbons, C9, aromatics	CAS: 128601-23-0 - EINECS: 918-668-5	d) Terrestrial toxicity : LC50 soil macroorganisms = 88.8 mg/kg - 14days
		a) Aquatic acute toxicity : LL50 Fish Oncorhynchus mykiss = 9.2 mg/L 96h
		b) Aquatic chronic toxicity : NOELR Fish = 1.23 mg/L - 28days
		a) Aquatic acute toxicity : EL50 Daphnia Daphnia magna = 21.3 mg/L 48h
		b) Aquatic chronic toxicity : NOELR freshwater invertebrate = 2.14 mg/L - 21days
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 2.9

		mg/L
n-butyl acetate	CAS: 123-86-4 - EINECS: 204- 658-1 - INDEX: 607-025-00-1	a) Aquatic acute toxicity : EL50 Tetrahymena pyriformis = 4.73 mg/L 48h a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 18 mg/L 96h similar to OECD 203 a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 44 mg/L 48h similar to OECD 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 23 mg/L OECD 211 - 21days a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 397 mg/L 72h OECD 201
propan-2-ol; isopropyl alcohol; isopropanol	CAS: 67-63-0 - EINECS: 200- 661-7 - INDEX: 603-117-00-0	a) Aquatic acute toxicity : EC50 Tetrahymena pyriformis = 356 mg/L - 40h a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 9640 mg/L 96h a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 10000 mg/L 24h OECD guideline 202 d) Terrestrial toxicity : LC50 Drosophila melanogaster = 25.1 g/L 24h e) Plant toxicity : IC50 Lactuca sativa = 2104 mg/kg 72h
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203- 603-9	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 130 mg/L 96h OECD guideline 203 b) Aquatic chronic toxicity : NOEC Fish Oryzias latipes = 47.5 mg/L OECD guideline 204 - 14days a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 408 mg/L 48h OECD guideline 202 b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna > 100 mg/L OECD guideline 211 - 24days a) Aquatic acute toxicity : NOEC Algae Selenastrum capricornutum >= 1000 mg/L OECD guideline 201
xylene	CAS: 1330-20-7 - EINECS: 215- 535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : LC50 Fish freshwater fish = 2.6 mg/L 96h OECD 203 b) Aquatic chronic toxicity : NOEC Fish freshwater fish = 1.3 mg/L - 56days a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1 mg/L 24h OECD 202 b) Aquatic chronic toxicity : NOEC Daphnia Ceriodaphnia dubia = 0.96 mg/L - 7days a) Aquatic acute toxicity : EC50 Algae freshwater algae = 1.3 mg/L 48h OECD 201 a) Aquatic acute toxicity : EC50 microorganisms = 96 mg/L OECD 301F d) Terrestrial toxicity : NOEC Worm earthworms = 16 mg/kg - 14days e) Plant toxicity : LC50 terrestrial plants = 1 mg/kg - 14days
tetraethyl silicate; ethyl silicate	CAS: 78-10-4 - EINECS: 201- 083-8 - INDEX: 014-005-00-0	a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio > 245 mg/L 96h a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 75 mg/L 48h a) Aquatic acute toxicity : EC50 Algae Pseudokirchnerella subcapitata > 22 mg/L 72h a) Aquatic acute toxicity : EC50 Sludge activated sludge > 100 mg/L 3h OECD 209

1-methoxy-2-propanol; monopropylene glycol methyl ether	CAS: 107-98-2 - EINECS: 203- 539-1 - INDEX: 603-064-00-3	a) Aquatic acute toxicity : LC50 Fish <i>Leuciscus idus</i> = 6812 mg/L OECD guideline 203
		a) Aquatic acute toxicity : LC50 <i>Daphnia</i> = 23300 mg/L 48h OECD guideline 202
		a) Aquatic acute toxicity : EC50 Algae = 1000 mg/L OECD guideline 201 - 7days
		a) Aquatic acute toxicity : NOEC Sludge = 1000 mg/L OECD guideline 201
methanol	CAS: 67-56-1 - EINECS: 200- 659-6 - INDEX: 603-001-00-X	a) Aquatic acute toxicity : LC50 Fish <i>Lepomis macrochirus</i> = 15400 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish = 450 mg/L
		a) Aquatic acute toxicity : EC50 <i>Daphnia magna</i> = 22200 mg/L 48h
		b) Aquatic chronic toxicity : NOEC <i>Daphnia magna</i> = 208 mg/L
		a) Aquatic acute toxicity : EC50 Algae <i>Selenastrum capricornutum</i> = 22000 mg/L 96h OECD 201 Guideline.
		d) Terrestrial toxicity : NOEC Worm <i>Eisenia andrei</i> = 10000 mg/kg
		d) Terrestrial toxicity : NOEC <i>Folsomia candida</i> = 1000 mg/kg OECD Guideline 232
ethylbenzene	CAS: 100-41-4 - EINECS: 202- 849-4 - INDEX: 601-023-00-4	a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> = 4.2 mg/L 96h
		a) Aquatic acute toxicity : LC50 <i>Daphnia magna</i> = 1.8 mg/L 48h
		b) Aquatic chronic toxicity : NOEC <i>Ceriodaphnia dubia</i> = 1 mg/L - 7days
		a) Aquatic acute toxicity : EC50 Algae <i>Selenastrum capricornutum</i> = 3.6 mg/L 96h
		c) Bacteria toxicity : EC50 > 96 mg/L 24h
		d) Terrestrial toxicity : LC50 Worm <i>Eisenia fetida</i> = 4.93 µg/L 48h OECD TG 207
toluene	CAS: 108-88-3 - EINECS: 203- 625-9 - INDEX: 601-021-00-3	a) Aquatic acute toxicity : LC50 Fish Coho Salmon = 5.5 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish Coho Salmon = 1.4 mg/L - 40days
		a) Aquatic acute toxicity : LC50 freshwater invertebrates = 3.78 mg/L 48h
		b) Aquatic chronic toxicity : NOEC freshwater invertebrates = 0.74 mg/L - 7days
		a) Aquatic acute toxicity : EC50 Algae freshwater algae = 134 mg/L 3h
		a) Aquatic acute toxicity : NOEC Algae freshwater algae = 10 mg/L 72h
		c) Bacteria toxicity : EC50 microorganisms = 84 mg/L 24h
		d) Terrestrial toxicity : NOEC Worm <i>Eisenia fetida</i> = 32.5 mg/kg - 28days
methyl methacrylate	CAS: 80-62-6 - EINECS: 201- 297-1 - INDEX: 607-035-00-6	a) Aquatic acute toxicity : LC50 Fish rainbow trout > 100 mg/L 96h
		a) Aquatic acute toxicity : EC50 <i>Daphnia magna</i> = 69 mg/L 48h
		a) Aquatic acute toxicity : NOEC <i>Daphnia magna</i> = 37 mg/L OECD guideline 211 - 21days
		a) Aquatic acute toxicity : NOEC Algae = 110 72h OECD guideline 201

12.2. Persistence and degradability

Component	Persitence/Degradability:	Test	Value	Notes:
Reaction mass of ethylbenzene and m-xylene and p-xylene	Readily biodegradable			

Hydrocarbons, C9, aromatics	Non-readily biodegradable		78.000	
n-butyl acetate	Readily biodegradable		83.000	%; OECD 301 D
propan-2-ol; isopropyl alcohol; isopropanol	Readily biodegradable	Biochemical oxygen demand		
2-methoxy-1-methylethyl acetate	Readily biodegradable	Dissolved organic carbon		OECD GL 301E
xylene	Readily biodegradable			
tetraethyl silicate; ethyl silicate	Persistent and Biodegradable	Dissolved organic carbon	98.000	28days
1-methoxy-2-propanol; monopropylene glycol methyl ether	Readily biodegradable		69.000	28days
methanol	Readily biodegradable			
ethylbenzene	Readily biodegradable	CO2 production		
toluene	Readily biodegradable			
methyl methacrylate	Readily biodegradable		94.000	14days

12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes:
Reaction mass of ethylbenzene and m-xylene and p-xylene	Bioaccumulative	BCF - Bioconcentration factor	25.900	
n-butyl acetate	Bioaccumulative	BCF - Bioconcentration factor		
xylene	Bioaccumulative	BCF - Bioconcentration factor	25.900	
methanol	Not bioaccumulative	BCF - Bioconcentration factor		< 10
ethylbenzene	Bioaccumulative	BCF - Bioconcentration factor	110.000	L/kg ww
toluene	Bioaccumulative	BCF - Bioconcentration factor	90.000	3days
methyl methacrylate	Not bioaccumulative			

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration $\geq 0.1\%$

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

SECTION 14: Transport information

14.1. UN number or ID number

1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT

IATA-Technical name: PAINT

IMDG-Technical name: PAINT

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-E, S-E

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 3

ADR - Hazard identification number: 33

ADR-Special Provisions: 163 367 640C 650

ADR-Transport category (Tunnel restriction code): 2 (D/E)

ADR Limited Quantities: 5 L

ADR Excepted Quantities: E2

Air (IATA):

IATA-Passenger Aircraft: 353

IATA-Cargo Aircraft: 364

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3 A72 A192

Sea (IMDG):

IMDG-Stowage Code: Category B

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 163 367

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 48, 69, 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c 5000

50000

Explosives precursors – Regulation 2019/1148

No substances listed

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 3: extremely hazardous.

German Lagerklasse according to TRGS 510:

LGK 3

SVHC Substances:

No SVHC substances present in concentration $\geq 0.1\%$

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 81.69 %

Volatile Organic compounds - VOCs = 722.93 g/L

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Reaction mass of ethylbenzene and m-xylene and p-xylene

n-butyl acetate

propan-2-ol; isopropyl alcohol; isopropanol

2-methoxy-1-methylethyl acetate

SECTION 16: Other information

Code	Description	
EUH066	Repeated exposure may cause skin dryness or cracking.	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H301	Toxic if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H311	Toxic in contact with skin.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H361d	Suspected of damaging the unborn child.	
H370	Causes damage to organs.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	
Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2

2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.7/2	Repr. 2	Reproductive toxicity, Category 2
3.8/1	STOT SE 1	Specific target organ toxicity — single exposure, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
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Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

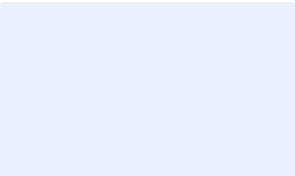
DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration
 ECHA: European Chemicals Agency
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 ES: Exposure Scenario
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IARC: International Agency for Research on Cancer
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 IC50: half maximal inhibitory concentration
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 IMDG: International Maritime Code for Dangerous Goods.
 INCI: International Nomenclature of Cosmetic Ingredients.
 IRCCS: Scientific Institute for Research, Hospitalization and Health Care
 KAFH: Keep Away From Heat
 KSt: Explosion coefficient.
 LC50: Lethal concentration, for 50 percent of test population.
 LD50: Lethal dose, for 50 percent of test population.
 LDLo: Leathal Dose Low
 N.A.: Not Applicable
 N/A: Not Applicable
 N/D: Not defined/ Not available
 NA: Not available
 NIOSH: National Institute for Occupational Safety and Health
 NOAEL: No Observed Adverse Effect Level
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, Bioaccumulative and Toxic
 PGK: Packaging Instruction
 PNEC: Predicted No Effect Concentration.
 PSG: Passengers
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 STEL: Short Term Exposure limit.
 STOT: Specific Target Organ Toxicity.
 TLV: Threshold Limiting Value.
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
 vPvB: Very Persistent, Very Bioaccumulative.
 WGK: German Water Hazard Class.



Exposure Scenario

2-methoxy-1-methylethyl acetate

Exposure Scenario, 08/06/2021

Substance identity	
	2-methoxy-1-methylethyl acetate
CAS No.	108-65-6
INDEX No.	607-195-00-7
EINECS No.	203-603-9
Registration number	01-2119475791-29

Table of contents

1. ES 1

1. ES 1

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks by brush or roller
Date - Version	29/04/2021 - 1.0
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario

CS1	ERC8a - ERC8d
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Worker Contributing Scenario

CS2 Large surfaces - Rolling, Brushing	PROC10
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1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 100 %

Amount used, frequency and duration of use (or from service life)

Amounts used:

Daily amount per site = 5000 kg

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to sewage treatment plant

STP type:

Municipal Sewage Treatment Plant

Water - minimum efficiency of: = 87.3 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment

Contain and dispose of waste according to local regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

1.2. CS2: Worker Contributing Scenario: Large surfaces - Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)
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Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 100 %

Amount used, frequency and duration of use/exposure**Amounts used:**

Daily amount per site = 5000 kg

Duration:

Exposure duration = 8 h/day

Frequency:

Use frequency = 365 days per year

Technical and organisational conditions and measures**Technical and organisational measures**

Ensure control measures are regularly inspected and maintained.

Carry out in a vented booth or extracted enclosure.

Conditions and measures related to personal protection, hygiene and health evaluation**Personal protection**

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.003 mg/L	ECETOC TRA environment v3	= 0.004
freshwater sediment	= 0.014 mg/kg KW	ECETOC TRA environment v3	= 0.004
marine water	= 0.0004 mg/L	ECETOC TRA environment v3	= 0.007
marine sediment	= 0.002 mg/kg KW	ECETOC TRA environment v3	= 0.007
soil	= 0.001 mg/kg KW	ECETOC TRA environment v3	= 0.004

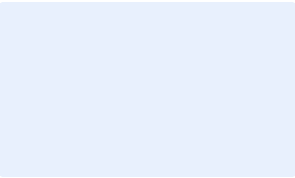
1.3. CS2: Worker Contributing Scenario: Large surfaces - Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 137.71 mg/m ³	ECETOC TRA worker v3	= 0.5
dermal, systemic, long-term	= 13.71 mg/kg bw/day	ECETOC TRA worker v3	0.18

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure Scenario

N-butyl acetate

Exposure Scenario, 13/07/2021

Substance identity	
	N-butyl acetate
CAS No.	123-86-4
INDEX No.	607-025-00-1
EINECS No.	204-658-1
Registration number	01-2119485493-29

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1. **ES 1** Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

1. ES 1		Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks		
Date - Version	14/05/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Coatings and paints, thinners, paint removers (PC9a)		
Environment Contributing Scenario			
CS1	ERC8a		
Worker Contributing Scenario			
CS2 Equipment cleaning and maintenance - Roller, spreader, flow application	PROC11		
CS3 Equipment cleaning and maintenance - Rolling, Brushing - Material transfers	PROC8a - PROC10		
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8a)			
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) (ERC8a)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Concentration of substance in product: Covers percentage substance in the product up to 100 %.			
<i>Amount used, frequency and duration of use (or from service life)</i>			
Amounts used: Application rate = 4000 t(tonnes)/year			
<i>Conditions and measures related to sewage treatment plant</i>			
STP type: Municipal Sewage Treatment Plant Water - minimum efficiency of: = 89.1 %			
<i>Other conditions affecting environmental exposure</i>			
Local marine water dilution factor: 100 Local freshwater dilution factor: 10 Receiving surface water flow: 18000 m ³ /day Covers indoor and outdoor use			
1.2. CS2: Worker Contributing Scenario: Equipment cleaning and maintenance - Roller, spreader, flow application (PROC11)			
Process Categories	Non industrial spraying (PROC11)		
<i>Product (article) characteristics</i>			
Physical form of product: Liquid			
Vapour pressure: < 10000 Pa			

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure**Duration:**

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures**Technical and organisational measures**

Closed systems

Open systems

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Wear suitable respiratory protection.

1.2. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - Rolling, Brushing - Material transfers (PROC8a, PROC10)**Process Categories**

Transfer of substance or mixture (charging and discharging) at non-dedicated facilities -
Roller application or brushing (PROC8a, PROC10)

Product (article) characteristics**Physical form of product:**

Liquid

Vapour pressure:

< 10000 Pa

Concentration of substance in product:

Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure**Duration:**

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures**Technical and organisational measures**

Closed systems

Open systems

Other conditions affecting worker exposure

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source**1.3. CS1: Environment Contributing Scenario (ERC8a)**

Release route	Release rate	Release estimation method
N/A	N/A	ESVOC SPERC 8.3b.v1

1.3. CS2: Worker Contributing Scenario: Equipment cleaning and maintenance - Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 242 mg/m ³	ECETOC TRA worker v3	= 0.504

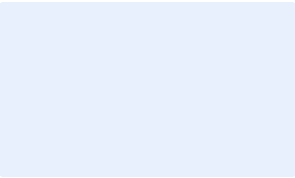
1.3. CS3: Worker Contributing Scenario: Equipment cleaning and maintenance - Rolling, Brushing - Material transfers (PROC8a, PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, long-term	= 290.4 mg/m ³	ECETOC TRA worker v3	= 0.605

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Exposure Scenario

Propan-2-ol

Exposure Scenario, 29/07/2021

Substance identity	
	Propan-2-ol
CAS No.	67-63-0
INDEX No.	603-117-00-0
EINECS No.	200-661-7
Registration number	01-2119457558-25

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1. **ES 1** Widespread use by professional workers; Various products (PC9a, PC1)

1. ES 1		Widespread use by professional workers; Various products (PC9a, PC1)	
1.1 TITLE SECTION			
Exposure Scenario name	Professional application of coatings and inks		
Date - Version	29/07/2021 - 1.0		
Life Cycle Stage	Widespread use by professional workers		
Main user group	Professional uses		
Sector(s) of use	Professional uses (SU22)		
Product Categories	Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1)		
Environment Contributing Scenario			
CS1		ERC8a - ERC8d	
Worker Contributing Scenario			
CS2 Material transfers		PROC8a	
CS3 Rolling, Brushing		PROC10	
CS4 Roller, spreader, flow application		PROC11	
CS5 Handling and dilution of concentrates		PROC19	
1.2 Conditions of use affecting exposure			
1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)			
Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)		
Product (article) characteristics			
Physical form of product: Liquid			
Concentration of substance in product: Covers concentrations up to 35 %			
1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)			
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)		
Product (article) characteristics			
Physical form of product: Liquid			
Vapour pressure: < 100000 Pa			
Concentration of substance in product: Covers concentrations up to 35 %			
Amount used, frequency and duration of use/exposure			
Duration: Covers daily exposures up to 8 hours			
Conditions and measures related to personal protection, hygiene and health evaluation			
Personal protection			
For further specification, refer to section 8 of the SDS.			

Other conditions affecting worker exposure	
Covers indoor and outdoor use Professional use Temperature: Assumes use at not more than 20 °C above ambient temperature.	
1.2. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)	
Process Categories	Roller application or brushing (PROC10)
Product (article) characteristics	
Physical form of product: Liquid	
Vapour pressure: < 100000 Pa	
Concentration of substance in product: Covers concentrations up to 35 %	
Amount used, frequency and duration of use/exposure	
Duration: Covers daily exposures up to 8 hours	
Conditions and measures related to personal protection, hygiene and health evaluation	
Personal protection For further specification, refer to section 8 of the SDS.	
Other conditions affecting worker exposure	
Covers indoor and outdoor use Professional use Temperature: Assumes use at not more than 20 °C above ambient temperature.	
1.2. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)	
Process Categories	Non industrial spraying (PROC11)
Product (article) characteristics	
Physical form of product: Liquid	
Vapour pressure: < 100000 Pa	
Concentration of substance in product: Covers concentrations up to 35 %	
Amount used, frequency and duration of use/exposure	
Duration: Covers daily exposures up to 8 hours	
Technical and organisational conditions and measures	
Technical and organisational measures Carry out in a vented booth or extracted enclosure.	
Conditions and measures related to personal protection, hygiene and health evaluation	
Personal protection For further specification, refer to section 8 of the SDS.	
Other conditions affecting worker exposure	
Covers indoor and outdoor use Professional use Temperature: Assumes use at not more than 20 °C above ambient temperature.	
1.2. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)	
Process Categories	Manual activities involving hand contact (PROC19)

Product (article) characteristics

Physical form of product:

Liquid

Vapour pressure:

< 100000 Pa

Concentration of substance in product:

Covers concentrations up to 35 %

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

For further specification, refer to section 8 of the SDS.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Professional use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Additional information on exposure estimation:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

1.3. CS2: Worker Contributing Scenario: Material transfers (PROC8a)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	= 100 ppm	ECETOC TRA worker v2.0	= 0.5
dermal	= 13.71 mg/kg bw/day	ECETOC TRA worker v2.0	= 0

1.3. CS3: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	= 100 ppm	ECETOC TRA worker v2.0	= 0.5
dermal	= 27.43 mg/kg bw/day	ECETOC TRA worker v2.0	= 0

1.3. CS4: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
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inhalative	= 150 ppm	ECETOC TRA worker v2.0	= 0.7
dermal	= 107.14 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.1

1.3. CS5: Worker Contributing Scenario: Handling and dilution of concentrates (PROC19)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative	= 150 ppm	ECETOC TRA worker v2.0	= 0.5
dermal	= 141.43 mg/kg bw/day	ECETOC TRA worker v2.0	= 0.2

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure Scenario

reaction mass of ethylbenzene and m-xylene and p-xylene

Exposure Scenario, 30/08/2021

Substance identity	
	reaction mass of ethylbenzene and m-xylene and p-xylene
EINECS No.	905-562-9
Registration number	01-2119555267-33

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1. **ES 1** Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

1. ES 1

Widespread use by professional workers; Coatings and paints, thinners, paint removers (PC9a)

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	30/08/2021 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario

CS1	ERC8a - ERC8d
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Worker Contributing Scenario

CS2 Material transfers	PROC8a
CS3 Rolling, Brushing - Roller, spreader, flow application	PROC10 - PROC11

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)
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*Product (article) characteristics***Physical form of product:**

Liquid, vapour pressure 0,5 - 10 kPa at STP

Vapour pressure:

= 821 Pa

Concentration of substance in product:

Covers concentrations up to 51 %

*Amount used, frequency and duration of use (or from service life)***Amounts used:**

Annual site tonnage 10 t(tonnes)/year

Maximum allowable site tonnage (MSafe): 4628 kg/day

Emission days: 365 days per year

*Technical and organisational conditions and measures***Control measures to prevent releases**

	Water - minimum efficiency of: = 93.67 %
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*Conditions and measures related to sewage treatment plant***STP type:**

Onsite Sewage Treatment Plant

Water - minimum efficiency of: = 93.67 %

STP effluent (m³/day): 2000

Conditions and measures related to treatment of waste (including article waste)

Waste treatment	
External treatment and disposal of waste should comply with applicable local and/or national regulations.	
<i>Other conditions affecting environmental exposure</i>	
Local marine water dilution factor: 100	
Local freshwater dilution factor: 10	
1.2. CS2: Worker Contributing Scenario: Material transfers (PROC8a)	
Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid, vapour pressure 0,5 - 10 kPa at STP	
Vapour pressure: = 821 Pa	
Concentration of substance in product: Covers concentrations up to 51 %	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	
<i>Other conditions affecting worker exposure</i>	
Temperature: Assumes use at not more than 20 °C above ambient temperature.	
1.2. CS3: Worker Contributing Scenario: Rolling, Brushing - Roller, spreader, flow application (PROC10, PROC11)	
Process Categories	Roller application or brushing - Non industrial spraying (PROC10, PROC11)
<i>Product (article) characteristics</i>	
Physical form of product: Liquid, vapour pressure 0,5 - 10 kPa at STP	
Vapour pressure: = 821 Pa	
Concentration of substance in product: Covers concentrations up to 51 %	
<i>Amount used, frequency and duration of use/exposure</i>	
Duration: Covers daily exposures up to 8 hours	
<i>Technical and organisational conditions and measures</i>	
Technical and organisational measures Provide a good standard of controlled ventilation (10 to 15 air changes per hour).	
<i>Conditions and measures related to personal protection, hygiene and health evaluation</i>	
Personal protection Wear a respirator conforming to EN140.	
<i>Other conditions affecting worker exposure</i>	
Temperature: Assumes use at not more than 20 °C above ambient temperature.	
1.3 Exposure estimation and reference to its source	
N/A	

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.