Safety Data Sheet

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

KERADECOR SINTOLITE

Date of first edition: 3/29/2021

Safety Data Sheet dated 09/11/2026 version 9

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

1.1. Product identifier

Mixture identification:

Trade name: KERADECOR SINTOLITE

Trade code: 30032021

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

Recommended use: primer

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 Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

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. 3 Flammable liquid and vapour.

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



Warning

Hazard statements

H226 Flammable liquid and vapour.

Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves and eye protection.

P370+P378 In case of fire, use water to extinguish.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH066 Repeated exposure may cause skin dryness or cracking.

Dir. 2004/42/EC (VOC directive)

Primers

EU limit value for this product (cat. A/g): 350 g/l

This product contains max 317.08 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 >= 0.1%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: KERADECOR SINTOLITE

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

Qty	Name	Ident. Numb.	Classification	Registration Number
≥10-<20 %	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	EC:919-857-5 Index:649-327-00-6	Asp. Tox. 1, H304; Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119463258-33
<0.01 %	2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve	CAS:111-76-2 EC:203-905-0 Index:603-014-00-0	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 3, H331 Acute Toxicity Estimate: ATE - Oral: 1200 mg/kg bw ATE - Inhalation (Vapours): 3 mg/l	01-2119475108-36
<0.01 %	xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H335	01-2119488216-32
<0.01 %	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

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

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

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

N.A.

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

N.A.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use water to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

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.

Remove persons to safety.

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.

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.

Contamined 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:

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)

Titanium dioxide

CAS: 13463-67-7	ACGIH	Long Term: 2.5 mg/m3 (8h) Notes: Finescale particles; R ; A3 - LRT irr, pneumoconiosis
	NATION AUSTRIA AL	Long Term: 5 mg/m3; Short Term: 10 mg/m3 Notes: 60(Miw), 2x, MAK, A Source: BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 10 mg/m3 Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION BULGARIA AL	Long Term: 10 mg/m3 Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.

NATIONAL	GERMANY	Long Term: 0.3 mg/m3; Short Term: 2.4 mg/m3 Notes: DFG; Long term and short term: excluding ultrafine particles; respirable fraction; multiplied by the material density; Source: TRGS900
NATIONAL	DENMARK	Long Term: 6 mg/m3 Notes: K Source: BEK nr 2203 af 29/11/2021
NATIONAL	SPAIN	Long Term: 10 mg/m3 Source: LEP 2022
NATIONAL	ESTONIA	Long Term: 5 mg/m3 Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATIONAL	FRANCE	Long Term: 10 mg/m3 Notes: Cancérogène de catégorie 2 Source: INRS outil65
NATIONAL	GREECE	Long Term: 10 mg/m3 Notes: εισην. Source: ΦΕΚ 94/Α` 13.5.1999  Long Term: 5 mg/m3 Notes: αναην. Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	CROATIA	Long Term: 10 mg/m3 Notes: U Source: NN 1/2021 Long Term: 4 mg/m3 Notes: R Source: NN 1/2021
NATIONAL	IRELAND	Long Term: 10 mg/m3 Source: 2021 Code of Practice Long Term: 4 mg/m3 Source: 2021 Code of Practice
NATIONAL	LITHUANIA	Long Term: 5 mg/m3 Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	LATVIA	Long Term: 10 mg/m3 Source: KN325P1
NATIONAL	NORWAY	Long Term: 5 mg/m3 Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 10 mg/m3 Notes: 4), 7) Source: Dz.U. 2018 poz. 1286
NATIONAL	ROMANIA	Long Term: 10 mg/m3; Short Term: 15 mg/m3 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVAKIA	Long Term: 5 mg/m3 Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SWEDEN	Long Term: 5 mg/m3 Notes: 3 Source: AFS 2021:3
SUVA	SWITZERLAND	Long Term: 3 mg/m3 Notes: TWA mg/m3: (a), SSC, Formel / Formal, NIOSH Source: suva.ch/valeurs-limites

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2	ACGIH	Long Term: 20 ppm (8h) Notes: A3, BEI - Eye and URT irr
	EU	Long Term: 98 mg/m3 - 20 ppm (8h); Short Term: 246 mg/m3 - 50 ppm Notes: Skin
	NATIONAL AUSTRIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 200 mg/m3 - 40 ppm Notes: 30(Miw), 4x, MAK, H Source: GKV, BGBl. II Nr. 156/2021

NATIONAL	BELGIUM	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
NATIONAL	BULGARIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
NATIONAL	CYPRUS	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
NATIONAL	CZECHIA	Long Term: 100 mg/m3; Short Term: Ceiling - 200 mg/m3 Notes: D, I, B Source: Nařízení vlády č. 361-2007 Sb
NATIONAL	GERMANY	Long Term: 49 mg/m3 - 10 ppm Notes: EU, DFG; H, Y, 2(I) Source: TRGS 900
NATIONAL	DENMARK	Long Term: 98 mg/m3 - 20 ppm Notes: EH Source: BEK nr 2203 af 29/11/2021
NATIONAL	SPAIN	Long Term: 98 mg/m3 - 20 ppm; Short Term: 245 mg/m3 - 50 ppm Notes: vía dérmica VLI, VLB® Source: LEP 2022
NATIONAL	ESTONIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: A, S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
NATIONAL	FINLAND	Long Term: 98 mg/m3 - 20 ppm; Short Term: 250 mg/m3 - 50 ppm Notes: iho Source: HTP-ARVOT 2020
NATIONAL	FRANCE	Long Term: 49 mg/m3 - 10 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
NATIONAL	GREECE	Long Term: 120 mg/m3 Notes: Δ Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	CROATIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: koža Source: 2000/39/EZ
NATIONAL	HUNGARY	Long Term: 98 mg/m3; Short Term: 246 mg/m3 Notes: b, i, EU1, T Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	IRELAND	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Sk, IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LITHUANIA	Long Term: 50 mg/m3 - 10 ppm; Short Term: 100 mg/m3 - 20 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	LUXEMBOURG	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	LATVIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Āda Source: KN325P1
NATIONAL	MALTA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: skin Source: S.L.424.24
NATIONAL	NETHERLANDS	Long Term: 100 mg/m3; Short Term: 246 mg/m3 Notes: H Source: Arbeidsomstandighedenregeling - Lijst A

	NATIONAL	NORWAY	Long Term: 50 mg/m3 - 10 ppm Notes: H E Source: FOR-2021-06-28-2248
	NATIONAL	POLAND	Long Term: 98 mg/m3; Short Term: 200 mg/m3 Notes: skóra Source: Dz.U. 2018 poz. 1286
	NATIONAL	PORTUGAL	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Cutânea Source: Decreto-Lei n.º 1/2021
	NATIONAL	ROMANIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
	NATIONAL	SLOVAKIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: K Source: 355 NARIADENIE VLÁDY z 10. mája 2006
	NATIONAL	SLOVENIA	Long Term: 98 mg/m3 - 20 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: K, Y, BAT, EU1 Source: UL št. 72, 11. 5. 2021
	NATIONAL	SWEDEN	Long Term: 50 mg/m3 - 10 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: H Source: AFS 2021:3
	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 123 mg/m3 - 25 ppm; Short Term: 246 mg/m3 - 50 ppm Notes: Sk, BMGV Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	SUVA	SWITZERLAND	Long Term: 49 mg/m3 - 10 ppm; Short Term: 98 mg/m3 - 20 ppm Notes: R/H, SSC, B, VRS Yeux / OAW Auge, INRS HSE NIOSH Source: suva.ch/valeurs-limites

xylene

CAS: 1330-20-7	ACGIH		Long Term: 20 ppm (8h) Notes: 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 Notes: Skin
	NATIONAL	AUSTRIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: 15(Miw), 4x, MAK Source: BGBl. II Nr. 156/2021
	NATIONAL	BELGIUM	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATIONAL	BULGARIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CYPRUS	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATIONAL	CZECHIA	Long Term: 200 mg/m3; Short Term: Ceiling - 400 mg/m3 Notes: B, D, I Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	GERMANY	Long Term: 220 mg/m3 - 50 ppm Notes: DFG, EU, H, 2(II) Source: TRGS 900
	NATIONAL	DENMARK	Long Term: 109 mg/m3 - 25 ppm Notes: EH Source: BEK nr 2203 af 29/11/2021
	NATIONAL	SPAIN	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: vía dérmica, VLB®, VLI Source: LEP 2022

NATIONAL	ESTONIA	Long Term: 200 mg/m3 - 50 ppm; Short Term: 450 mg/m3 - 100 ppm Notes: 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 Notes: iho Source: HTP-ARVOT 2020
NATIONAL	FRANCE	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: 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 Notes: Δ Source: ΦΕΚ 94/Α` 13.5.1999
NATIONAL	CROATIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: koža Source: 2000/39/EZ
NATIONAL	HUNGARY	Long Term: 221 mg/m3; Short Term: 442 mg/m3 Notes: b, BEM, EU1, R Source: 5/2020. (II. 6.) ITM rendelet
NATIONAL	IRELAND	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: Sk, IOELV Source: 2021 Code of Practice
NATIONAL	ITALY	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: Cute Source: D.lgs. 81/2008, Allegato XXXVIII
NATIONAL	LITHUANIA	Long Term: 200 mg/m3 - 50 ppm; Short Term: 450 mg/m3 - 100 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	LUXEMBOURG	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	LATVIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: Āda Source: KN325P1
NATIONAL	MALTA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: skin Source: S.L.424.24
NATIONAL	NETHERLANDS	Long Term: 210 mg/m3; Short Term: 442 mg/m3 Notes: H Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 108 mg/m3 - 25 ppm Notes: H E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 100 mg/m3; Short Term: 200 mg/m3 Notes: skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	PORTUGAL	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: Cutânea Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVAKIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SLOVENIA	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: K, BAT, EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SWEDEN	Long Term: 221 mg/m3 - 50 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: H Source: AFS 2021:3

	WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 441 mg/m3 - 100 ppm Notes: Sk, BMGV Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	SUVA	SWITZERLAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 440 mg/m3 - 100 ppm Notes: R/H, B, SNC / ZNS, NIOSH INRS Source: suva.ch/valeurs-limites
ethylbenzene			
CAS: 100-41-4	ACGIH		Long Term: 20 ppm (8h) Notes: 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 Notes: Skin
	NATIONAL	AUSTRIA	Long Term: 440 mg/m3 - 100 ppm; Short Term: Ceiling - 880 mg/m3 - 200 ppm Notes: 5(Mow), 8x, MAK, H Source: BGBl. II Nr. 156/2021
	NATIONAL	BULGARIA	Long Term: 435 mg/m3; Short Term: 545 mg/m3 Notes: Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATIONAL	CYPRUS	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATIONAL	CZECHIA	Long Term: 200 mg/m3; Short Term: Ceiling - 500 mg/m3 Notes: D, B Source: Nařízení vlády č. 361-2007 Sb
	NATIONAL	GERMANY	Long Term: 88 mg/m3 - 20 ppm Notes: DFG, H, Y, EU, 2(II) Source: TRGS 900
	NATIONAL	DENMARK	Long Term: 217 mg/m3 - 50 ppm Notes: EHK Source: BEK nr 2203 af 29/11/2021
	NATIONAL	SPAIN	Long Term: 441 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: vía dérmica, VLB®, VLI Source: LEP 2022
	NATIONAL	ESTONIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: 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 Notes: iho Source: HTP-ARVOT 2020
	NATIONAL	FRANCE	Long Term: 88.4 mg/m3 - 20 ppm; Short Term: 442 mg/m3 - 100 ppm Notes: 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	CROATIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: koža Source: 2000/39/EZ
	NATIONAL	HUNGARY	Long Term: 442 mg/m3; Short Term: 884 mg/m3 Notes: b, i, BEM, EU1, T Source: 5/2020. (II. 6.) ITM rendelet
	NATIONAL	IRELAND	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: Sk, IOELV Source: 2021 Code of Practice
	NATIONAL	ITALY	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: Cute Source: D.lgs. 81/2008, Allegato XXXVIII

NATIONAL	LITHUANIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	LUXEMBOURG	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	LATVIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: Āda; Ietekme uz dzirdi Source: KN325P1
NATIONAL	MALTA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: skin Source: S.L.424.24
NATIONAL	NETHERLANDS	Long Term: 215 mg/m3; Short Term: 430 mg/m3 Notes: H Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 20 mg/m3 - 5 ppm Notes: H K E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 200 mg/m3; Short Term: 400 mg/m3 Notes: skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	PORTUGAL	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: Cutânea Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVAKIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: K, 7) Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SLOVENIA	Long Term: 442 mg/m3 - 100 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: K, Y, BAT, EKA EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SWEDEN	Long Term: 220 mg/m3 - 50 ppm; Short Term: 884 mg/m3 - 200 ppm Notes: H Source: AFS 2021:3
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 441 mg/m3 - 100 ppm; Short Term: 552 mg/m3 - 125 ppm Notes: Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	SWITZERLAND	Long Term: 220 mg/m3 - 50 ppm; Short Term: 220 mg/m3 - 50 ppm Notes: R/H, OB, B, Rein Foie / Niere Leber, NIOSH Source: suva.ch/valeurs-limites

Biological limit values

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2 Biological Indicator: 2-Butoxyethylacetat; Sampling Period: End of turn; End of working week
Value: 150 mg/g; Medium: Urine

Predicted No Effect Concentration (PNEC) values

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2 Exposure Route: Fresh Water; PNEC Limit: 8.8 mg/l

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 26.4 mg/l

Exposure Route: Marine water; PNEC Limit: 880 mg/m3

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 463 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 34.6 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 3.46 mg/kg

Exposure Route: Soil; PNEC Limit: 2.33 mg/kg

Exposure Route: Secondary poisoning; PNEC Limit: 20 mg/kg

xylene

CAS: 1330-20-7 Exposure Route: Fresh Water; PNEC Limit: 327 mg/m3

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 327 mg/m3

Exposure Route: Marine water; PNEC Limit: 327 mg/m3

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

ethylbenzene

CAS: 100-41-4 Exposure Route: Fresh Water; PNEC Limit: 100 mg/m3

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 100 mg/m3

Exposure Route: Marine water; PNEC Limit: 55 mg/m3

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

Exposure Route: Secondary poisoning; PNEC Limit: 20 mg/kg

Derived No Effect Level (DNEL) values

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 98 mg/kg/day; Consumer: 59 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 1091 mg/kg/day; Consumer: 426 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 246 mg/kg/day; Consumer: 147 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 125 mg/kg; Consumer: 75 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects
Worker Professional: 89 mg/kg; Consumer: 89 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 6.3 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects
Consumer: 26.7 mg/kg

xylene

CAS: 1330-20-7 Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 289 mg/kg/day; Consumer: 174 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects
Worker Professional: 289 mg/kg/day; Consumer: 174 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 180 mg/kg; Consumer: 108 mg/kg

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

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 77 mg/kg; Consumer: 14.8 mg/kg

ethylbenzene

CAS: 100-41-4 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 77 mg/kg/day; Consumer: 15 mg/kg/day

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

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

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; BS EN 16523-1:2015+A1:2018: Level 6.

Butyl rubber - BR: thickness ≥0.40mm; breakthrough time ≥480min.

Nitrile rubber - NBR: thickness ≥0.40mm; breakthrough time ≥480min.

Respiratory protection:

Gas filter type A .

Thermal Hazards:

Wear appropriate thermal protective clothing, when necessary.

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	White
Odour:	Like: Hydrocarbons, aliphatic
pH:	N.A.
Kinematic viscosity:	> 20,5 mm2/s (40 °C)
Melting point/freezing point:	N.A.
Boiling point or initial boiling point and boiling range:	N.A.
Flash point:	23°C / 60°C
Lower and upper explosion limit:	N.A.
Relative vapour density:	N.A.
Vapour pressure:	N.A.
Density and/or relative density:	1.75 g/cm3
Solubility in water:	Insoluble
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. 3
Volatile Organic compounds - VOCs =	15.31%; 267.98g/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 oxidizing 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	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified
	Based on available data, the classification criteria are not met
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	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
	LC50 Inhalation Vapour Rat > 5000 mg/m3 8h
	LD50 Skin Rabbit > 2000 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
f) carcinogenicity	Genotoxicity Rat Negative
	Carcinogenicity Inhalation Rat Positive
g) reproductive toxicity	No Observed Adverse Effect Level Rat > 20000 mg/m3

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2	a) acute toxicity	ATE - Oral: 1200 mg/kg bw
		ATE - Inhalation (Vapours): 3 mg/l
		LD50 Oral Guineapig = 1414 mg/kg
		LC50 Inhalation Vapour Rat = 2.56 mg/l 4h
		LD50 Skin Guineapig > 2000 mg/kg
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive 4h

	c) serious eye damage/irritation	Eye Irritant Rabbit Yes 24h
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Negative
		Carcinogenicity Inhalation Rat = 125 mg/m3
	g) reproductive toxicity	No Observed Adverse Effect Level Oral = 720 mg/kg

xylene

CAS: 1330-20-7	a) acute toxicity	LD50 Oral Rat = 3523 ml/Kg
		LC50 Inhalation Vapour Rabbit = 26 mg/l 4h
		LD50 Skin Rat = 4350 mg/kg

ethylbenzene

CAS: 100-41-4	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
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 100

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 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:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

a) Aquatic acute toxicity: LL50 Fish Oncorhynchus mykiss = 10 mg/L 96h

a) Aquatic acute toxicity: EL50 Daphnia Daphnia magna = 4.5 mg/L 48h

b) Aquatic chronic toxicity: NOELR Daphnia Daphnia magna = 2.6 mg/L

a) Aquatic acute toxicity: NOELR Algae Pseudokirchnerella subcapitata = 0.5 mg/L 72h

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 1474 mg/L 96h

b) Aquatic chronic toxicity: NOEC Fish Brachydanio rerio = 100 mg/L

a) Aquatic acute toxicity: EC50 freshwater invertebrates = 690 mg/L

b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna = 100 mg/L

a) Aquatic acute toxicity: EC50 Algae pseudokirchneriella subcapitata = 623 mg/L 72h

c) Bacteria toxicity: NOEC Uronema parduczi = 463 mg/L 48h

ethylbenzene

CAS: 100-41-4

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 4.2 mg/L 96h

a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 1.8 mg/L 48h

b) Aquatic chronic toxicity: NOEC Daphnia Ceriodaphnia dubia = 1 mg/L

a) Aquatic acute toxicity: EC50 Algae Selenastrum capricornutum = 3.6 mg/L 96h

c) Bacteria toxicity: EC50 > 96 mg/L 24h

d) Terrestrial toxicity: LC50 Worm Eisenia fetida = 4.93 µg/L 48h

12.2. Persistence and degradability

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

CAS: 111-76-2	Readily biodegradable	Test: Biochemical oxigen demand; Value: 98 Notes: 28days

ethylbenzene

CAS: 100-41-4	Readily biodegradable	Test: CO2 production

12.3. Bioaccumulative potential

xylene

CAS: 1330-20-7	Bioaccumulative	Test: BCF - Bioconcentrantion factor; Value: 25.9

ethylbenzene

CAS: 100-41-4	Bioaccumulative	Test: BCF - Bioconcentrantion factor; Value: 110 Notes: L/kg ww

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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

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.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

SECTION 14: Transport information

14.1. UN number or ID number

1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT

IATA-Shipping Name: PAINT

IMDG-Shipping Name: PAINT

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

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: -

ADR-Special Provisions: 163 367 650

ADR-Transport category (Tunnel restriction code): 3 (E)

ADR Limited Quantities: 5 L

ADR Excepted Quantities: E1

Air (IATA):

IATA-Passenger Aircraft: 355
IATA-Cargo Aircraft: 366
IATA-Label: 3
IATA-Subsidiary hazards: -
IATA-Erg: 3L
IATA-Special Provisions: A3 A72 A192

Sea (IMDG):

IMDG-Stowage and handling: Category A
IMDG-Segregation: -
IMDG-Subsidiary hazards: -
IMDG-Special Provisions: 163 223 367 955

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 (EU) n. 2020/878

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. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)	Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)	Regulation (EU) n. 2024/2564 (ATP 22 CLP)
Regulation (EU) n. 2024/2865	Regulation (EU) n. 2025/1222 (ATP 23 CLP)

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: 75

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

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
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 1: slightly hazardous for water.

German Lagerklasse according to TRGS 510:

LGK 3

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 19.33 %
Volatile Organic compounds - VOCs = 317.08 g/L

KERADECOR SINTOLITE (not ready to use)

Volatile Organic compounds - VOCs = 15.31 %

Volatile Organic compounds - VOCs = 267.98 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:

2-butoxyethanol; ethyleneglycol monobutyl ether; butyl cellosolve

xylene

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.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
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.

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/Inhal	Acute Tox. 3	Acute toxicity (inhalation), 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
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), 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
3.8/3	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/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
Flam. Liq. 3, H226	On basis of test data

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.

Paragraphs modified from the previous revision:

- Safety Data Sheet
- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage

- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information

Exposure Scenario
2-butoxyethanol

Exposure Scenario, 17/03/2023

Substance identity	
	2-butoxyethanol
CAS No.	111-76-2
INDEX No.	603-014-00-0
EINECS No.	203-905-0
Registration number	01-2119475108-36

Table of contents

1. **ES 1**

1. ES 1

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	17/03/2023 - 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
Worker Contributing Scenario	
CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Rolling, Brushing	PROC10
CS5 Roller, spreader, flow application	PROC11
CS6 Roller, spreader, flow application	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)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 117 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

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

Emission days: 365 days per year

Technical and organisational conditions and measures

Control measures to prevent releases

	Air - minimum efficiency of: 98 % Soil - minimum efficiency of: 1 % Water - minimum efficiency of: 1 %

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
STP effluent (m^3/day): 2000

Other conditions affecting environmental exposure

Local marine water dilution factor: 100

Local freshwater dilution factor: 10
Receiving surface water flow: 18000 m³/day
Covers indoor and outdoor use

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 > 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 117 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 use up to = 480 min
Frequency:
Covers use up to 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Provide a good standard of controlled ventilation (5 to 10 air changes per hour).	Inhalation - minimum efficiency of: = 70 %

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

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 80 %
Wear suitable face shield.	

Other conditions affecting worker exposure

Indoor 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 > 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 117 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 use up to = 480 min
Frequency:

Covers use up to 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures

Provide a good standard of controlled ventilation (5 to 10 air changes per hour).	Inhalation - minimum efficiency of: = 70 %

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

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 80 %
Wear suitable face shield.	

Other conditions affecting worker exposure

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

1.2. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 117 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 use up to = 480 min
Frequency:
Covers use up to 5 days per week

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

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 80 %
Wear suitable face shield.	

Other conditions affecting worker exposure

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

1.2. CS5: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 117 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use < 3 L/min

Duration:
Covers use up to = 240 min

Frequency:
Covers use up to 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

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

Personal protection

Wear suitable gloves tested to EN374.	Dermal - minimum efficiency of: = 80 %
Wear suitable respiratory protection.	Inhalation - minimum efficiency of: = 95 %
Wear suitable face shield.	

Other conditions affecting worker exposure

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

1.2. CS6: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Process Categories	Non industrial spraying (PROC11)

Product (article) characteristics

Physical form of product:
Liquid, vapour pressure > 10 Pa (Standard Temperature and Pressure)

Vapour pressure:
= 117 Pa

Concentration of substance in product:
Covers percentage substance in the product up to 25 %.

Amount used, frequency and duration of use/exposure

Amounts used:
Amount per use < 3 L/min

Duration:
Covers use up to = 480 min

Frequency:
Covers use up to 5 days per week

Technical and organisational conditions and measures

Technical and organisational measures
Ensure operatives are trained to minimise exposures.
Ensure that a spraying booth is used.

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

Personal protection
Wear suitable respiratory protection.
Wear suitable face shield.

Other conditions affecting worker exposure

Indoor 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)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
soil	N/A	ECETOC TRA environment v3	= 0.018688

Additional information on exposure estimation:
Risk from environmental exposure is driven by soil.

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 2.7429 mg/kg bw/day	ECETOC TRA worker v3	= 0.021943
inhalative, systemic, long-term	= 36.9294 mg/m³	ECETOC TRA worker v3	= 0.376831

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 5.4857 mg/kg bw/day	ECETOC TRA worker v3	= 0.043886
inhalative, systemic, long-term	= 36.9294 mg/m³	ECETOC TRA worker v3	= 0.376831

1.3. CS4: Worker Contributing Scenario: Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 3.2914 mg/kg bw/day	ECETOC TRA worker v3	= 0.026331
inhalative, systemic, long-term	= 57.7012 mg/m³	ECETOC TRA worker v3	= 0.527563

1.3. CS5: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 21.4286 mg/kg bw/day	ECETOC TRA worker v3	= 0.171429

inhalative, systemic, long-term	= 55 mg/m³	ECETOC TRA worker v3	= 0.561224

1.3. CS6: Worker Contributing Scenario: Roller, spreader, flow application (PROC11)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
dermal, systemic, long-term	= 12.8571 mg/kg bw/day	ECETOC TRA worker v3	= 0.102857
inhalative, systemic, long-term	= 62 mg/m³	ECETOC TRA worker v3	= 0.632653

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
Xylene, Mixed Isomers

Exposure Scenario, 14/10/2022

Substance identity	
	Xylene, Mixed Isomers
CAS No.	1330-20-7
INDEX No.	601-022-00-9
EINECS No.	215-535-7
Registration number	01-2119488216-32

Table of contents

1. **ES 1** Widespread use by professional workers

1. ES 1 Widespread use by professional workers

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks
Date - Version	14/10/2022 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)

Environment Contributing Scenario	
CS1	ERC8a - ERC8d

Worker Contributing Scenario	
CS2 Material transfers	PROC8a
CS3 Rolling, Brushing	PROC10
CS4 Roller, spreader, flow application	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)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

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

Emission days: 300 days per year

Conditions and measures related to sewage treatment plant

STP type:
Onsite Sewage Treatment Plant

STP effluent (m^3/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.

Other conditions affecting environmental exposure

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)

Product (article) characteristics

Physical form of product:
Liquid

Vapour pressure:
= 500 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
Use in closed process
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

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

Personal protection
Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

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:
= 500 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
Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

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

Personal protection
Wear suitable gloves tested to EN374.
Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

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:
= 500 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

Carry out in a vented booth provided with laminar airflow.

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

Personal protection

Wear suitable gloves tested to EN374.

Other conditions affecting worker exposure

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)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.0015 mg/L	N/A	= 0.005
marine water	= 0.000145 mg/L	N/A	< 0.001
freshwater sediment	= 0.016 mg/kg wet weight	N/A	= 0.006
marine sediment	= 0.0156 mg/kg wet weight	N/A	< 0.001
soil	= 0.0117 mg/kg wet weight	N/A	= 0.006
Sewage treatment plant	= 0.00866 mg/L	N/A	= 0.001

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 14 ppm	N/A	= 0.79
dermal, systemic, long-term	= 13.71 mg/kg bw/day	N/A	= 0.08
combined routes	N/A	N/A	= 0.87

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

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 3 ppm	N/A	= 0.17
dermal, systemic, long-term	= 27.43 mg/kg bw/day	N/A	= 0.15
combined routes	N/A	N/A	= 0.32

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)

inhalative, systemic, long-term	= 5 ppm	N/A	= 0.28
dermal, systemic, long-term	= 13.71 mg/kg bw/day	N/A	= 0.08
combined routes	N/A	N/A	= 0.29

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.