UG1 Uni-Mould™ Tooling Gelcoat (Black)

Safety Data Sheet

SDS EU format according to COMMISSION REGULATION (EU) 2020/878
Reference number: 311020614009900
Issue date: 27/06/2016 Revision date: 22/03/2021 Supersedes version of: 17/04/2020 Version: 5.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	UG1 Uni-Mould™ Tooling Gelcoat (Black)
Product code	:	UG1
Product group	:	Trade product

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

1.2.1. Relevant identified uses

Main use category	:	Industrial use,Professional use,Consumer use
Use of the substance/mixture	:	Coating

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Easy Composites Ltd
Unit 39 Park Hall Business Village
Stoke on Trent,
Staffordshire,
ST3 5XA.
United Kingdom.
T 00 44 1782 454499
safety@easycomposites.co.uk

1.4. Emergency telephone number

Emergency number	:	00 44 1782 454499 (Office Hours Only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3	H226
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 2	H361
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity — Repeated exposure, Category 1	H372
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS08

Signal word (CLP) : Danger

Contains : Styrene; Cobalt bis(2-ethylhexanoate)

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H361 - Suspected of damaging fertility or the unborn child.
H372 - Causes damage to organs through prolonged or repeated exposure.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, eye protection.
P241 - Use explosion-proof electrical equipment.
P271 - Use only outdoors or in a well-ventilated area.
P370+P378 - In case of fire: Use Water fog, foam, extinguishing powder, carbon dioxide (CO2) for extinction.
P264 - Wash hands thoroughly after handling.
P210 - Keep away from heat, hot surfaces, sparks, open flames. — No smoking.

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Styrene	CAS-No.: 100-42-5 EC-No.: 202-851-5 EC Index-No.: 601-026-00-0 REACH-no: 01-2119457861-32	25 – 50	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
MONOETHYLENE GLYCOL substance with a Community workplace exposure limit	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119472426-35	0,3 – 1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg de poids corporel) STOT RE 2, H373

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,2'-iminodiethanol	CAS-No.: 111-42-2 EC-No.: 203-868-0 EC Index-No.: 603-071-00-1 REACH-no: 01-2119488930-28	0,2 – 0,3	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg de poids corporel) Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361fd STOT RE 2, H373
2-(2-butoxyethoxy)ethanol substance with a Community workplace exposure limit	CAS-No.: 112-34-5 EC-No.: 203-961-6 EC Index-No.: 603-096-00-8 REACH-no: 01-2119475104-44	0,1 – 0,2	Eye Irrit. 2, H319
Potassium 2-ethylhexanoate	CAS-No.: 3164-85-0 EC-No.: 221-625-7 REACH-no: 01-2119980714-29	0,1 – 0,2	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361
Cobalt bis(2-ethylhexanoate)	CAS-No.: 136-52-7 EC-No.: 205-250-6 REACH-no: 01-2119524678-29	0,01 – 0,2	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 1B, H360F Aquatic Acute 1, H400 Aquatic Chronic 3, H412
xylene substance with a Community workplace exposure limit	CAS-No.: 1330-20-7 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9 REACH-no: 01-2119488216-32	0,01 – 0,1	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg de poids corporel) Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
ethylbenzene substance with a Community workplace exposure limit	CAS-No.: 100-41-4 EC-No.: 202-849-4 EC Index-No.: 601-023-00-4 REACH-no: 01-2119489370-35	0,01 – 0,1	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Copper di(acetate)	CAS-No.: 142-71-2 EC-No.: 205-553-3 REACH-no: 01-2119980669-16	< 0,1	Acute Tox. 4 (Oral), H302 (ATE=300 mg/kg de poids corporel) Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
Hydrotreated Heavy naphtha - benzene <0.1% substance with a Community workplace exposure limit	CAS-No.: 64742-48-9 EC-No.: 265-150-3 EC Index-No.: 649-327-00-6 REACH-no: 01-2119463258-33	< 0,01	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

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

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

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Use water spray or fog for cooling exposed containers. Prevent entry to sewers and public waters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe vapours. fume.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe fume. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

Styrene (100-42-5)	
Austria - Occupational Exposure Limits	
Local name	Styrol
MAK (OEL TWA)	85 mg/m³
MAK (OEL TWA) [ppm]	20 ppm
MAK (OEL STEL)	340 mg/m³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	80 ppm (4x 15(Miw) min)
Remark (AT)	Fortpflanzungsgefährdend: d
Regulatory reference	BGBl. II Nr. 382/2020
Belgium - Occupational Exposure Limits	
Local name	Styrène (monomère) # Styreen (monomeer)
OEL TWA	108 mg/m³
OEL TWA [ppm]	25 ppm
OEL STEL	216 mg/m³
OEL STEL [ppm]	50 ppm
Remark (BE)	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Czech Republic - Occupational Exposure Limits	
Local name	Styren (Ethenylbenzen; Fenylethylen; Vinylbenzen)

Styrene (100-42-5)	
PEL (OEL TWA)	100 mg/m³
PEL (OEL TWA) [ppm]	23 ppm
NPK-P (OEL C)	400 mg/m³
NPK-P (OEL C) [ppm]	92 ppm
Remark (CZ)	B - u látky je zaveden biologický expoziční test (BET) v moči nebo krvi, I - dráždí sliznice (oči, dýchací cesty), respektive kůži, P - u látky nelze vyloučit závažné pozdní účinky (s větou H372, H373).
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Czech Republic - Biological limit values	
Local name	Styren (Ethenylbenzen; Fenylethylen; Vinylbenzen)
BLV	400 mg/g creatinine Ukazatel: Mandlová kyselina - Biološki uzorak: moči - Doba odběru: konec směny 300 µmol/mmol Creatinine Ukazatel: Mandlová kyselina - Biološki uzorak: moči - Doba odběru: konec směny 600 mg/g creatinine Ukazatel: Mandlová + fenylglyoxylová kyselina - Biološki uzorak: moči - Doba odběru: konec směny
Regulatory reference	Vyhláška č. 107/2013 Sb. (kterou se mění vyhláška č. 432/2003 Sb.)
Estonia - Occupational Exposure Limits	
Local name	Stüreen (fenüületeen, vinüülbenseen)
OEL TWA	90 mg/m³
OEL TWA [ppm]	20 ppm
OEL STEL	200 mg/m³
OEL STEL [ppm]	50 ppm
Remark (ET)	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Styreeni
HTP (OEL TWA) [1]	86 mg/m³
HTP (OEL TWA) [2]	20 ppm
HTP (OEL STEL)	430 mg/m³
HTP (OEL STEL) [ppm]	100 ppm
Huomautus (FI)	Melu
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Styreeni
BLV	1,2 mmol/l Parametri: Virtsan MAPGA (Virtsan manteli- ja fenyyliglyoksyylihappo) - Näytteenottoajankohta: Työpäivän jälkeinen aamu
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Greece - Occupational Exposure Limits	
Local name	Στυρόλιο
OEL TWA	425 mg/m³

Styrene (100-42-5)	
OEL TWA [ppm]	100 ppm
OEL STEL	1050 mg/m³
OEL STEL [ppm]	250 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Romania - Occupational Exposure Limits	
Local name	Stiren
OEL TWA	50 mg/m³
OEL TWA [ppm]	12 ppm
OEL STEL	150 mg/m³
OEL STEL [ppm]	35 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 157/2020)
Romania - Biological limit values	
Local name	Stiren
BLV	800 mg/g creatinine Indicador biologic: Acid mandelic - Material biologic: urină - Momentul recoltarii: sfârşit schimb 300 mg/g creatinine Indicador biologic: Acid mandelic - Material biologic: urină - Momentul recoltarii: începutul schimbului următor 100 mg/g creatinine Indicador biologic: Acid fenilglioxalic - Material biologic: urină - Momentul recoltarii: sfârşit schimb 0,55 mg/l Indicador biologic: Stiren - Material biologic: sânge - Momentul recoltarii: sfârşit schimb 0,02 mg/l Indicador biologic: Stiren - Material biologic: sânge - Momentul recoltarii: începutul schimbului următor
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 584/2018)
United Kingdom - Occupational Exposure Limits	
Local name	Styrene
WEL TWA (OEL TWA) [1]	430 mg/m³
WEL TWA (OEL TWA) [2]	100 ppm
WEL STEL (OEL STEL)	1080 mg/m³
WEL STEL (OEL STEL) [ppm]	250 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

MONOETHYLENE GLYCOL (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	246 mg/m³
IOEL TWA [ppm]	50 ppm
IOEL STEL	492 mg/m³
IOEL STEL [ppm]	100 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
Local name	Ethylenglykol (Ethandiol; Glykol)

MONOETHYLENE GLYCOL (107-21-1)	
MAK (OEL TWA)	26 mg/m³
MAK (OEL TWA) [ppm]	10 ppm
MAK (OEL STEL)	52 mg/m³ (8x 5(Mow) min)
MAK (OEL STEL) [ppm]	20 ppm (8x 5(Mow) min)
Remark (AT)	H
Regulatory reference	BGBl. II Nr. 382/2020
Belgium - Occupational Exposure Limits	
Local name	Ethylèneglycol (en aérosol) # Ethyleenglycol
OEL TWA	52 mg/m³
OEL TWA [ppm]	20 ppm
OEL STEL	104 mg/m³
OEL STEL [ppm]	40 ppm
Remark (BE)	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air, M: la mention “M” indique que lors d’une exposition supérieure à la valeur limite, des irritations apparaissent ou un danger d’intoxication aiguë existe. Le procédé de travail doit être conçu de telle façon que l’exposition ne dépasse jamais la valeur limite. Lors des mesurages, la période d’échantillonnage doit être aussi courte que possible afin de pouvoir effectuer des mesurages fiables. Le résultat des mesurages est calculé en fonction de la période d’échantillonnage. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht, M: de vermelding “M” duidt aan dat bij de blootstelling boven de grenswaarde irritatie optreedt of er gevaar bestaat voor acute vergiftiging. Het werkprocédé moet zo zijn ontworpen dat de blootstelling de grenswaarde nooit overschrijdt. Bij een controle geldt dat de bemonsterde periode zo kort mogelijk moet zijn om een betrouwbare meting te kunnen verrichten. Het meetresultaat wordt dan gerelateerd aan de beschouwde periode.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Czech Republic - Occupational Exposure Limits	
Local name	Ethylenglykol (Ethan-1,2-diol)
PEL (OEL TWA)	50 mg/m³
PEL (OEL TWA) [ppm]	20 ppm
NPK-P (OEL C)	100 mg/m³
NPK-P (OEL C) [ppm]	39 ppm
Remark (CZ)	D - při expozici se významně uplatňuje pronikání faktoru kůží.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Estonia - Occupational Exposure Limits	
Local name	1,2-etaandiool (etüleenglükool)
OEL TWA	52 mg/m³
OEL TWA [ppm]	20 ppm
OEL STEL	104 mg/m³
OEL STEL [ppm]	40 ppm
Remark (ET)	A (Naha kaudu kergesti imenduv aine), 18 (Piirnorm kehtib auru ja aerosooli summaarse sisalduse kohta)

MONOETHYLENE GLYCOL (107-21-1)	
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	1,2-Etaanidioli
HTP (OEL TWA) [1]	50 mg/m³
HTP (OEL TWA) [2]	20 ppm
HTP (OEL STEL)	100 mg/m³
HTP (OEL STEL) [ppm]	40 ppm
Huomautus (FI)	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Greece - Occupational Exposure Limits	
Local name	Αιθυλενογλυκόλη (στμοί)
OEL TWA	125 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	125 mg/m³
OEL STEL [ppm]	50 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Italy - Occupational Exposure Limits	
Local name	Etilen glicol
OEL TWA	52 mg/m³
OEL TWA [ppm]	20 ppm
OEL STEL	104 mg/m³
OEL STEL [ppm]	40 ppm
Notes	Cute
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Netherlands - Occupational Exposure Limits	
Local name	Ethaan-1,2-diol
MAC-TGG (OEL TWA)	52 mg/m³ (damp) 10 mg/m³ (druppels)
MAC-15 (OEL STEL)	104 mg/m³ (damp)
Remark (MAC)	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2020
Romania - Occupational Exposure Limits	
Local name	Etilenglicol/Etandiol
OEL TWA	52 mg/m³
OEL TWA [ppm]	20 ppm
OEL STEL	104 mg/m³

MONOETHYLENE GLYCOL (107-21-1)	
OEL STEL [ppm]	40 ppm
Remark	P - posibilitatea unei penetrări cutanate importante
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 157/2020)
United Kingdom - Occupational Exposure Limits	
Local name	Ethane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m³ particulate 52 mg/m³ vapour
WEL TWA (OEL TWA) [2]	20 ppm vapour
WEL STEL (OEL STEL)	104 mg/m³ vapour
WEL STEL (OEL STEL) [ppm]	40 ppm vapour
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Turkey - Occupational Exposure Limits	
Local name	Etilen glikol
OEL TWA	52 mg/m³
OEL TWA [ppm]	20 ppm
OEL STEL	104 mg/m³
OEL STEL [ppm]	40 ppm
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete

ethylbenzene (100-41-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylbenzene
IOEL TWA	442 mg/m³
IOEL TWA [ppm]	100 ppm
IOEL STEL	884 mg/m³
IOEL STEL [ppm]	200 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
Local name	Ethylbenzol
MAK (OEL TWA)	440 mg/m³
MAK (OEL TWA) [ppm]	100 ppm
MAK (OEL STEL)	880 mg/m³ (8x 5(Mow) min)
MAK (OEL STEL) [ppm]	200 ppm (8x 5(Mow) min)
Remark (AT)	H
Regulatory reference	BGBl. II Nr. 382/2020

ethylbenzene (100-41-4)	
Czech Republic - Occupational Exposure Limits	
Local name	Ethylbenzen
PEL (OEL TWA)	200 mg/m³
PEL (OEL TWA) [ppm]	45 ppm
NPK-P (OEL C)	500 mg/m³
NPK-P (OEL C) [ppm]	114 ppm
Remark (CZ)	D - při expozici se významně uplatňuje pronikání faktoru kůží, B - u látky je zaveden biologický expoziční test (BET) v moči nebo krvi.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Czech Republic - Biological limit values	
Local name	Ethylbenzen
BLV	1500 mg/g creatinine Ukazatel: Mandlová kyselina - Biološki uzorak: moči - Doba odběru: konec směny 1100 µmol/mmol Creatinine Ukazatel: Mandlová kyselina - Biološki uzorak: moči - Doba odběru: konec směny
Regulatory reference	Vyhláška č. 107/2013 Sb. (kterou se mění vyhláška č. 432/2003 Sb.)
Estonia - Occupational Exposure Limits	
Local name	Etüülbenseen
OEL TWA	442 mg/m³
OEL TWA [ppm]	100 ppm
OEL STEL	884 mg/m³
OEL STEL [ppm]	200 ppm
Remark (ET)	A (Naha kaudu kergesti imenduv aine), S (Sensibiliseeriv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Etyylibentseeni
HTP (OEL TWA) [1]	220 mg/m³
HTP (OEL TWA) [2]	50 ppm
HTP (OEL STEL)	880 mg/m³
HTP (OEL STEL) [ppm]	200 ppm
Huomautus (FI)	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Etyylibentseeni
BLV	5,2 mmol/l Parametri: Virtsan mantelihappo - Näytteenottoajankohta: Työvuoron päätyttyä työviikon tai altistumisjakson loputtua
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Greece - Occupational Exposure Limits	
Local name	Αιθυλοβενζόλιο
OEL TWA	435 mg/m³

ethylbenzene (100-41-4)	
OEL TWA [ppm]	100 ppm
OEL STEL	545 mg/m³
OEL STEL [ppm]	125 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Italy - Occupational Exposure Limits	
Local name	Etilbenzene
OEL TWA	442 mg/m³
OEL TWA [ppm]	100 ppm
OEL STEL	884 mg/m³
OEL STEL [ppm]	200 ppm
Notes	Cute
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Netherlands - Occupational Exposure Limits	
Local name	Ethylbenzeen
MAC-TGG (OEL TWA)	215 mg/m³
MAC-15 (OEL STEL)	430 mg/m³
Remark (MAC)	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2020
Romania - Occupational Exposure Limits	
Local name	Etilbenzen
OEL TWA	442 mg/m³
OEL TWA [ppm]	100 ppm
OEL STEL	884 mg/m³
OEL STEL [ppm]	200 ppm
Remark	P - posibilitatea unei penetrări cutanate importante
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 157/2020)
Romania - Biological limit values	
Local name	Etilbenzen
BLV	1,5 g/g creatinine Indicador biologic: Acid mandelic - Material biologic: urină - Momentul recoltarii: sfârșit de săptămână
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 584/2018)
United Kingdom - Occupational Exposure Limits	
Local name	Ethylbenzene
WEL TWA (OEL TWA) [1]	441 mg/m³
WEL TWA (OEL TWA) [2]	100 ppm
WEL STEL (OEL STEL)	552 mg/m³
WEL STEL (OEL STEL) [ppm]	125 ppm

ethylbenzene (100-41-4)	
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Turkey - Occupational Exposure Limits	
Local name	Etilbenzen
OEL TWA	442 mg/m³
OEL TWA [ppm]	100 ppm
OEL STEL	884 mg/m³
OEL STEL [ppm]	200 ppm
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete

xylene (1330-20-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Xylene, mixed isomers, pure
IOEL TWA	221 mg/m³
IOEL TWA [ppm]	50 ppm
IOEL STEL	442 mg/m³
IOEL STEL [ppm]	100 ppm
Notes	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Austria - Occupational Exposure Limits	
Local name	Xylol (alle Isomeren): Xylol
MAK (OEL TWA)	221 mg/m³
MAK (OEL TWA) [ppm]	50 ppm
MAK (OEL STEL)	442 mg/m³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	100 ppm (4x 15(Miw) min)
Regulatory reference	BGBl. II Nr. 382/2020
Belgium - Occupational Exposure Limits	
Local name	Xylène, isomères mixtes, purs # Xyleen, mengsel van isomeren, zuiver
OEL TWA	221 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	442 mg/m³
OEL STEL [ppm]	100 ppm
Remark (BE)	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020

xylene (1330-20-7)	
Czech Republic - Occupational Exposure Limits	
Local name	Xylen technická směs isomerů a všechny isomery
PEL (OEL TWA)	200 mg/m³
PEL (OEL TWA) [ppm]	45 ppm
NPK-P (OEL C)	400 mg/m³
NPK-P (OEL C) [ppm]	90 ppm
Remark (CZ)	B - u látky je zaveden biologický expoziční test (BET) v moči nebo krvi, D - při expozici se významně uplatňuje pronikání faktoru kůží, I - dráždí sliznice (oči, dýchací cesty), respektive kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Czech Republic - Biological limit values	
Local name	Xyleny
BLV	1400 mg/g creatinine Ukazatel: Methylhippurová kyselina - Biologický uzorak: moči - Doba odběru: konec směny 820 µmol/mmol Creatinine Ukazatel: Methylhippurová kyselina - Biologický uzorak: moči - Doba odběru: konec směny
Regulatory reference	Vyhláška č. 107/2013 Sb. (kterou se mění vyhláška č. 432/2003 Sb.)
Estonia - Occupational Exposure Limits	
Local name	Ksüleen (dimetüülbenseen)
OEL TWA	200 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	450 mg/m³
OEL STEL [ppm]	100 ppm
Remark (ET)	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Ksyleeni
HTP (OEL TWA) [1]	220 mg/m³
HTP (OEL TWA) [2]	50 ppm
HTP (OEL STEL)	440 mg/m³
HTP (OEL STEL) [ppm]	100 ppm
Huomautus (FI)	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Finland - Biological limit values	
Local name	Ksyleeni
BLV	5 mmol/l Parametri: Virtsan metyylihippuurihappo - Näytteenottoajankohta: Työvuoron päätyttyä
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Greece - Occupational Exposure Limits	
Local name	Ξυλόλια (όλα τα ισομερή)

xylene (1330-20-7)	
OEL TWA	435 mg/m³
OEL TWA [ppm]	100 ppm
OEL STEL	650 mg/m³
OEL STEL [ppm]	150 ppm
Remark	Η ένδειξη «δέρμα» στις οριακές τιμές επαγγελματικής έκθεσης επισημαίνει το ενδεχόμενο σημαντικής διείσδυσης μέσω του δέρματος.
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Italy - Occupational Exposure Limits	
Local name	Xilene, isomeri misti, puro
OEL TWA	221 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	442 mg/m³
OEL STEL [ppm]	100 ppm
Notes	Cute
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Netherlands - Occupational Exposure Limits	
Local name	Xyleen, o-, m-, p-isomeren
MAC-TGG (OEL TWA)	210 mg/m³
MAC-15 (OEL STEL)	442 mg/m³
Remark (MAC)	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2020
Romania - Occupational Exposure Limits	
Local name	Xilen, izomer mixt, pur
OEL TWA	221 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	442 mg/m³
OEL STEL [ppm]	100 ppm
Remark	P - posibilitatea unei penetrări cutanate importante
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 157/2020)
Romania - Biological limit values	
Local name	Xilen
BLV	3 g/l Indicador biologic: Acid metilhipuric - Material biologic: urină - Momentul recoltarii: sfârşit schimb
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 584/2018)
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (OEL TWA) [1]	220 mg/m³ o-,m-,p- or mixed isomers

xylene (1330-20-7)	
WEL TWA (OEL TWA) [2]	50 ppm o-,m-,p- or mixed isomers
WEL STEL (OEL STEL)	441 mg/m³ o-,m-,p- or mixed isomers
WEL STEL (OEL STEL) [ppm]	100 ppm o-,m-,p- or mixed isomers
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
United Kingdom - Biological limit values	
Local name	Xylene, o-, m-, p- or mixed isomers
BMGV	650 mmol/mol Creatinine Parameter: methyl hippuric acid - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Turkey - Occupational Exposure Limits	
Local name	Ksilen
OEL TWA	221 mg/m³ (karışım izomerleri, saf)
OEL TWA [ppm]	50 ppm (karışım izomerleri, saf)
OEL STEL	442 mg/m³ (karışım izomerleri, saf)
OEL STEL [ppm]	100 ppm (karışım izomerleri, saf)
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete

Copper di(acetate) (142-71-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Copper(II) acetate
Notes	(Year of adoption 2014)
Regulatory reference	SCOEL Recommendations

2-(2-butoxyethoxy)ethanol (112-34-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-(2-Butoxyethoxy)ethanol
IOEL TWA [ppm]	10 ppm
IOEL STEL	101,2 mg/m³
IOEL STEL [ppm]	15 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Austria - Occupational Exposure Limits	
Local name	Butyldiglykol (Butoxydiethylenglykol; 2-(2-Butoxyethoxy)-ethanol; Diethylenglykolmonobutylether)
MAK (OEL TWA)	67,5 mg/m³
MAK (OEL TWA) [ppm]	10 ppm
MAK (OEL STEL)	101,2 mg/m³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	15 ppm (4x 15(Miw) min)
Regulatory reference	BGBl. II Nr. 382/2020

2-(2-butoxyethoxy)ethanol (112-34-5)	
Belgium - Occupational Exposure Limits	
Local name	2-(2-Butoxyéthoxy)éthanol # 2-(2-Butoxyethoxy)ethanol
OEL TWA	67,5 mg/m³
OEL TWA [ppm]	10 ppm
OEL STEL	101,2 mg/m³
OEL STEL [ppm]	15 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Czech Republic - Occupational Exposure Limits	
Local name	2-(2-Buthoxyethoxy)ethanol (Butyldiglykol)
PEL (OEL TWA)	70 mg/m³
PEL (OEL TWA) [ppm]	10 ppm
NPK-P (OEL C)	100 mg/m³
NPK-P (OEL C) [ppm]	15 ppm
Remark (CZ)	I - dráždí sliznice (oči, dýchací cesty), respektive kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Finland - Occupational Exposure Limits	
Local name	2-(2-Butoksietoksi)etanoli
HTP (OEL TWA) [1]	68 mg/m³
HTP (OEL TWA) [2]	10 ppm
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Greece - Occupational Exposure Limits	
Local name	2−(2−βουτοξυαιθοξυ) αιθανόλη
OEL TWA	67,5 mg/m³
OEL TWA [ppm]	10 ppm
OEL STEL	101,2 mg/m³
OEL STEL [ppm]	15 ppm
Regulatory reference	Π.Δ. 162/2007 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Italy - Occupational Exposure Limits	
Local name	2-(2-Butossietossi)etanolo
OEL TWA	67,5 mg/m³
OEL TWA [ppm]	10 ppm
OEL STEL	101,2 mg/m³
OEL STEL [ppm]	15 ppm
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
Netherlands - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
MAC-TGG (OEL TWA)	50 mg/m³
MAC-15 (OEL STEL)	100 mg/m³

2-(2-butoxyethoxy)ethanol (112-34-5)	
Remark (MAC)	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2020
Romania - Occupational Exposure Limits	
Local name	2-(2-Butoxietoxi)-etanol/Dowanol DB
OEL TWA	67,5 mg/m³ 10 mg/m³
OEL STEL	101,2 mg/m³ 15 mg/m³
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 157/2020)
United Kingdom - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
WEL TWA (OEL TWA) [1]	67,5 mg/m³
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	101,2 mg/m³
WEL STEL (OEL STEL) [ppm]	15 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Turkey - Occupational Exposure Limits	
Local name	2-(2-Bütoksietoksi)etanol
OEL TWA	67,5 mg/m³
OEL TWA [ppm]	10 ppm
OEL STEL	101,2 mg/m³
OEL STEL [ppm]	15 ppm
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete

2,2'-iminodiethanol (111-42-2)	
Austria - Occupational Exposure Limits	
Local name	Diethanolamin (2,2'-Iminodiethanol)
MAK (OEL TWA)	2 mg/m³
MAK (OEL TWA) [ppm]	0,46 ppm
MAK (OEL STEL)	4 mg/m³ (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	0,92 ppm (4x 15(Miw) min)
Remark (AT)	H, Sh. Reaktion mit nitrosierenden Agentien kann zur Bildung des kanzerogenen N-Nitrosodiethanolamins führen.
Regulatory reference	BGBl. II Nr. 382/2020
Belgium - Occupational Exposure Limits	
Local name	Diéthanolamine (vapeur et aérosol) # Di-ethanolamine (damp en aërosol)
OEL TWA	1 mg/m³
OEL TWA [ppm]	0,2 ppm

2,2'-iminodiethanol (111-42-2)	
Remark (BE)	D: la mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
Czech Republic - Occupational Exposure Limits	
Local name	Diethanolamin (2,2-Iminobis(ethanol))
PEL (OEL TWA)	5 mg/m³
NPK-P (OEL C)	10 mg/m³
Remark (CZ)	I - dráždí sliznice (oči, dýchací cesty), respektive kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 41/2020 Sb.)
Estonia - Occupational Exposure Limits	
Local name	Dietanoolamiin
OEL TWA	5 mg/m³
OEL TWA [ppm]	3 ppm
OEL STEL	30 mg/m³
OEL STEL [ppm]	6 ppm
Remark (ET)	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
Finland - Occupational Exposure Limits	
Local name	Dietanoliamiini
HTP (OEL TWA) [1]	2 mg/m³
HTP (OEL TWA) [2]	0,46 ppm
Huomautus (FI)	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Greece - Occupational Exposure Limits	
Local name	Διαιθανολαμίνη
OEL TWA	15 mg/m³
OEL TWA [ppm]	3 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους

Hydrotreated Heavy naphtha - benzene <0.1% (64742-48-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	White spirit Type 3
IOEL TWA [ppm]	20 ppm
IOEL STEL	290 mg/m³
IOEL STEL [ppm]	50 ppm
Notes	Skin. (Year of adoption 2007)

Hydrotreated Heavy naphtha - benzene <0.1% (64742-48-9)	
Regulatory reference	SCOEL Recommendations

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

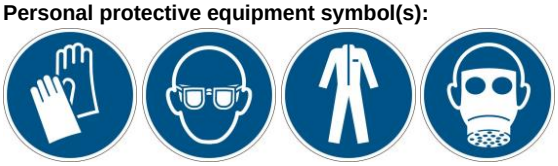
8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Protective gloves made of PVC. neoprene gloves. Nitrile rubber gloves

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
	Type A - High-boiling (>65 °C) organic compounds		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Black.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	- 31 °C (Styrene)
Freezing point	:	Not available
Boiling point	:	145 °C (Styrene)
Flammability	:	Not applicable
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	1.1 %(V) (Styrene)
Upper explosive limit (UEL)	:	6.1 %(V) (Styrene)
Flash point	:	31 °C (Styrene)
Auto-ignition temperature	:	490 °C (Styrene)
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	Not available
Relative density	:	1,1
Relative vapour density at 20 °C	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	Not applicable

Styrene (100-42-5)	
Boiling point	145 °C
Flash point	31 °C
Auto-ignition temperature	490 °C
Vapour pressure	6,67 hPa (20°C)

MONOETHYLENE GLYCOL (107-21-1)	
Boiling point	197,4 °C Atm. press.: 1013 hPa
Flash point	111 °C Atm. press.: 1013,25 hPa
Vapour pressure	0,123 hPa Temp.: 25 °C

ethylbenzene (100-41-4)	
Boiling point	136,1 °C Atm. press.: 1013,3 mBar Decomposition: 'no'
Flash point	23 °C Atm. press.: 1013 hPa
Vapour pressure	9,52 mbar Temp.: 20 °C

xylene (1330-20-7)	
Vapour pressure	≈ 821 Pa

Potassium 2-ethylhexanoate (3164-85-0)	
Flash point	> 117 °C
Vapour pressure	0,000000001 mm Hg

Copper di(acetate) (142-71-2)	
Vapour pressure	0,00239 Pa Temp.: 25 °C

2-(2-butoxyethoxy)ethanol (112-34-5)	
Boiling point	231 °C Atm. press.: 1 atm Decomposition: 'no'
Vapour pressure	0,0219 mm Hg Temp.: 25 °C

2,2'-iminodiethanol (111-42-2)	
Boiling point	269,9 °C Atm. press.: 1013,25 hPa Decomposition: 'yes' Decomp. temp.: 200 °C
Vapour pressure	0,00008553 hPa

Hydrotreated Heavy naphtha - benzene <0.1% (64742-48-9)	
Boiling point	-20 – 260 °C Atm. press.: 101,325 kPa
Flash point	< -40 °C Atm. press.: 101,325 other:kPa (assumed). Pressure not stipulated in the citation
Auto-ignition temperature	> 230 °C
Vapour pressure	≤ 240 kPa Temp.: 37,8 °C

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

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

GEL COAT 206 MOULE BLACK 9900 PRE_ACCELERATED BRUSH	
ATE CLP (dust,mist)	3,614 mg/l/4h

Styrene (100-42-5)	
LD50 oral rat	≈ 5000 mg/kg
LD50 dermal rat	2000 mg/kg
LC50 Inhalation - Rat	11,8 mg/l
ATE CLP (dermal)	2000 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11,8 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

MONOETHYLENE GLYCOL (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight Animal: rat
LD50 dermal	> 3500 mg/kg mouse
LC50 Inhalation - Rat	> 2,5 mg/l 6 h
ATE CLP (oral)	500 mg/kg bodyweight

ethylbenzene (100-41-4)	
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
ATE CLP (oral)	3523 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

Potassium 2-ethylhexanoate (3164-85-0)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Copper di(acetate) (142-71-2)	
LD50 oral rat	300 – 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method), Guideline: EU Method B.1 bis (Acute Oral Toxicity - Fixed Dose Procedure)
LD50 oral	300 – 200 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
ATE CLP (oral)	300 mg/kg bodyweight

2-(2-butoxyethoxy)ethanol (112-34-5)	
LD50 oral rat	5660 mg/kg
LD50 dermal rabbit	2764 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), 95% CL: 2090 - 3645
ATE CLP (oral)	5660 mg/kg bodyweight
ATE CLP (dermal)	2764 mg/kg bodyweight

2,2'-iminodiethanol (111-42-2)	
ATE CLP (oral)	500 mg/kg bodyweight

Cobalt bis(2-ethylhexanoate) (136-52-7)	
LD50 oral rat	3129 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), 95% CL: 1750 - 5000
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE CLP (oral)	3129 mg/kg bodyweight

Hydrotreated Heavy naphtha - benzene <0.1% (64742-48-9)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

MONOETHYLENE GLYCOL (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)

2,2'-iminodiethanol (111-42-2)	
NOAEL (chronic, oral, animal/male, 2 years)	64 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 451 (Carcinogenicity Studies), Remarks on results: other:Effect type: carcinogenicity (migrated information)

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
STOT-single exposure : May cause respiratory irritation.

Styrene (100-42-5)	
STOT-single exposure	May cause respiratory irritation.

xylene (1330-20-7)	
STOT-single exposure	May cause respiratory irritation.

Hydrotreated Heavy naphtha - benzene <0.1% (64742-48-9)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Styrene (100-42-5)	
STOT-repeated exposure	Causes damage to organs (hearing organs) through prolonged or repeated exposure.

MONOETHYLENE GLYCOL (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

ethylbenzene (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
STOT-repeated exposure	May cause damage to organs (hearing organs) through prolonged or repeated exposure.

xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Potassium 2-ethylhexanoate (3164-85-0)	
NOAEL (oral, rat, 90 days)	≈ 300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

2-(2-butoxyethoxy)ethanol (112-34-5)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)

2,2'-iminodiethanol (111-42-2)	
LOAEL (dermal, rat/rabbit, 90 days)	32 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0,003 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Styrene (100-42-5)	
LC50 - Fish [1]	4,02 mg/l (96 h) (Pimephales promelas)
EC50 - Crustacea [1]	4,7 mg/l (48 h) (Daphnia magna)
EC50 72h - Algae [1]	4,9 mg/l (Pseudokirchneriella subcapitata)
ErC50 algae	4,9 mg/l (Pseudokirchneriella subcapitata)

MONOETHYLENE GLYCOL (107-21-1)	
LC50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other:grenn algae
EC50 96h - Algae [2]	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
NOEC chronic fish	15380 mg/l Pimephales Promelas
NOEC chronic crustacea	8590 mg/l Ceriodaphnia Dubia

ethylbenzene (100-41-4)	
LC50 - Fish [1]	5,1 mg/l Test organisms (species): Menidia menidia
EC50 72h - Algae [1]	4,9 mg/l Test organisms (species): Skeletonema costatum
EC50 72h - Algae [2]	5,4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	7,7 mg/l Test organisms (species): Skeletonema costatum
EC50 96h - Algae [2]	3,6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	1,7 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0,96 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'

xylene (1330-20-7)	
LC50 - Fish [1]	2,6 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 3,4 mg/l Test organisms (species): Ceriodaphnia dubia
EC50 72h - Algae [1]	2,2 mg/l
NOEC chronic fish	> 1,3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

Potassium 2-ethylhexanoate (3164-85-0)	
NOEC (chronic)	25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

2-(2-butoxyethoxy)ethanol (112-34-5)	
LC50 - Fish [1]	1300 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

2,2'-iminodiethanol (111-42-2)	
EC50 - Crustacea [1]	30,1 mg/l Test organisms (species): Ceriodaphnia dubia

2,2'-iminodiethanol (111-42-2)	
EC50 - Crustacea [2]	89,9 mg/l Test organisms (species): Ceriodaphnia dubia
EC50 72h - Algae [1]	9,5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	2,7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	9,7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	1,56 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0,78 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 1 mg/l Test organisms (species): other:freshwater fish

Hydrotreated Heavy naphtha - benzene <0.1% (64742-48-9)	
LC50 - Fish [1]	> 1000 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 1000 mg/l

12.2. Persistence and degradability

MONOETHYLENE GLYCOL (107-21-1)	
Biodegradation	90 – 100 %

12.3. Bioaccumulative potential

Styrene (100-42-5)	
Partition coefficient n-octanol/water (Log Pow)	2,96

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

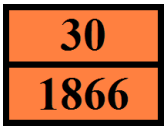
In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 1866	UN 1866	UN 1866
14.2. UN proper shipping name		
RESIN SOLUTION	RESIN SOLUTION	Resin solution
Transport document description		
UN 1866 RESIN SOLUTION, 3, III, (D/E)	UN 1866 RESIN SOLUTION, 3, III	UN 1866 Resin solution, 3, III
14.3. Transport hazard class(es)		
3	3	3
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

Overland transport

Special provisions (ADR) : 640E
Transport category (ADR) : 3
Hazard identification number (Kemler No.) : 30
Orange plates :



Tunnel restriction code (ADR) : D/E
EAC code : •3YE

Transport by sea

EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : A
Properties and observations (IMDG) : Miscibility with water depends upon the composition.

Air transport

PCA packing instructions (IATA) : 355
CAO packing instructions (IATA) : 366
ERG code (IATA) : 3L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Netherlands

SZW-lijst van kankerverwekkende stoffen	:	Hydrotreated Heavy naphtha - benzene <0.1% is listed
SZW-lijst van mutagene stoffen	:	Hydrotreated Heavy naphtha - benzene <0.1% is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	Styrene,xylene are listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1

Full text of H- and EUH-statements	
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360F	May damage fertility.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Flam. Liq. 3	H226	Calculation method
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Repr. 2	H361	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 1	H372	Calculation method
Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet (SDS), EU

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