SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
SDS Ref. (EU): S2080-SDS
Issue date: 7/13/2015 Revision date: 8/28/2020 Supersedes version of: 9/23/2019 Version: 5.0

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1)
UFI	:	0EW0-V04W-700N-0U52
Product code	:	S2080/1, S2080/5
Product group	:	Clearcoat

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
Use of the substance/mixture	:	Coatings and paints, thinners, paint removers
Function or use category	:	Topcoat

1.2.2. Uses advised against

Restrictions on use	:	Consumer uses: Private households (= general public = consumers)

1.3. Details of the supplier of the safety data sheet

Manufacturer
U-POL Limited
Denington Road
NN8 2QH Wellingborough - United Kingdom
T +44 (0) 1933 230310
technicalsupport@u-pol.com - www.u-pol.com

Importer
U-POL Netherlands B.V.
Hoorgoorddreef 15
1101BA Amsterdam - Netherlands
T +31 20 240 2216
technicalsupport@u-pol.com - www.u-pol.com

1.4. Emergency telephone number

Emergency number	:	CHEMTREC: +44 (0) 870 8200418 (24 hrs)

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	NHS England, Scotland & Wales	-	Call 111 or a Doctor	In Northern Ireland, contact your local GP or pharmacist during normal hours (www.gpoutofhours.hscni.net)

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
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335

Specific target organ toxicity — Repeated exposure, Category 2	H373
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. May cause damage to organs through prolonged or repeated exposure. May cause drowsiness or dizziness. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS08

Signal word (CLP) : Warning

Contains : Xylene; n-butyl acetate; hydrocarbons, C9, aromatics; reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate; reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Hazard statements (CLP) : H226 - Flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing spray, vapours.
P264 - Wash hands thoroughly after handling.
P280 - Wear face protection, protective clothing, protective gloves.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

Unknown acute toxicity (CLP) - SDS : 0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

2.3. Other hazards

Component	
n-butyl acetate (123-86-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Xylene (1330-20-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-methoxy-1-methylethyl acetate (108-65-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Ethylbenzene (100-41-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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]
n-butyl acetate substance with a Community workplace exposure limit	(CAS-No.) 123-86-4 (EC-No.) 204-658-1 (EC Index-No.) 607-025-00-1 (REACH-no) 01-2119485493-29	5 – 20	Flam. Liq. 3, H226 STOT SE 3, H336
hydrocarbons, C9, aromatics	(CAS-No.) 64742-95-6 (EC-No.) 918-668-5 (REACH-no) 01-2119455851-35	3 – 20	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Xylene substance with a Community workplace exposure limit (Note C)	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	10 – 20	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 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
4-methylpentan-2-one; isobutyl methyl ketone substance with a Community workplace exposure limit	(CAS-No.) 108-10-1 (EC-No.) 203-550-1 (EC Index-No.) 606-004-00-4 (REACH-no) 01-2119473980-30	5 – 10	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 STOT SE 3, H335
2-methoxy-1-methylethyl acetate substance with a Community workplace exposure limit	(CAS-No.) 108-65-6 (EC-No.) 203-603-9 (EC Index-No.) 607-195-00-7 (REACH-no) 01-2119475791-29	3 – 10	Flam. Liq. 3, H226
reaction mass of ethylbenzene, m-xylene and p-xylene	(EC-No.) 905-562-9 (REACH-no) 01-2119555267-33	1 – 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 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	3 – 5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Asp. Tox. 1, H304

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	(EC-No.) 400-830-7 (EC Index-No.) 607-176-00-3 (REACH-no) 01-0000015075-76	0.3 – 1	Skin Sens. 1A, H317 Aquatic Chronic 2, H411
reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	(CAS-No.) 1065336-91-5 (EC-No.) 915-687-0 (REACH-no) 01-2119491304-40	0.1 – 0.25	Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash 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 : May cause drowsiness or dizziness.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.

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

6.1.2. For emergency responders

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain released product, pump into suitable containers.

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. Do not breathe vapours, spray, fume. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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. Store locked up.

Storage temperature : < 25 °C

Storage area : Store in a well-ventilated place.

Special rules on packaging : Keep only in original container.

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

n-butyl acetate (123-86-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	n-Butyl acetate

n-butyl acetate (123-86-4)	
IOEL TWA	241 mg/m³
IOEL TWA [ppm]	50 ppm
IOEL STEL	723 mg/m³ 723 mg/m³
IOEL STEL [ppm]	150 ppm 150 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2019/1831 COMMISSION DIRECTIVE (EU) 2019/1831
Ireland - Occupational Exposure Limits	
Local name	Butyl acetate
OEL TWA [1]	710 mg/m³
OEL TWA [2]	150 ppm
OEL STEL	950 mg/m³
OEL STEL [ppm]	200 ppm
Regulatory reference	Chemical Agents Code of Practice 2020
United Kingdom - Occupational Exposure Limits	
Local name	Butyl acetate
WEL TWA (OEL TWA) [1]	724 mg/m³
WEL TWA (OEL TWA) [2]	150 ppm
WEL STEL (OEL STEL)	966 mg/m³
WEL STEL (OEL STEL) [ppm]	200 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	4-Methylpentan-2-one
IOEL TWA	83 mg/m³
IOEL TWA [ppm]	20 ppm
IOEL STEL	208 mg/m³
IOEL STEL [ppm]	50 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Methyl isobutyl ketone (MIBK) [Hexone, Isobutyl methyl keton, 4-Methylpentan-2-one)
OEL TWA [1]	83 mg/m³
OEL TWA [2]	20 ppm
OEL STEL	208 mg/m³
OEL STEL [ppm]	50 ppm
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
Ireland - Biological limit values	
Local name	Methyl isobutyl ketone (MIBK)/ 4-methylpentan-2-one
BLV	1 mg/l Parameter: MIBK - Medium: urine - Sampling time: End of shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
United Kingdom - Occupational Exposure Limits	
Local name	4-Methylpentan-2-one
WEL TWA (OEL TWA) [1]	208 mg/m³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	416 mg/m³
WEL STEL (OEL STEL) [ppm]	100 ppm
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	4-methylpentan-2-one
BMGV	20 µmol/l Parameter: 4-methylpentan-2-one - Medium: urine - Sampling time: Post shift
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2-methoxy-1-methylethyl acetate (108-65-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-Methoxy-1-methylethylacetate
IOEL TWA	275 mg/m³
IOEL TWA [ppm]	50 ppm
IOEL STEL	550 mg/m³
IOEL STEL [ppm]	100 ppm
Notes	Skin Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	2-Methoxy-1-methylethylacetate
OEL TWA [1]	275 mg/m³
OEL TWA [2]	50 ppm
OEL STEL	550 mg/m³
OEL STEL [ppm]	100 ppm
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020
United Kingdom - Occupational Exposure Limits	
Local name	1-Methoxypropyl acetate
WEL TWA (OEL TWA) [1]	274 mg/m³

2-methoxy-1-methylethyl acetate (108-65-6)	
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	548 mg/m³
WEL STEL (OEL STEL) [ppm]	100 ppm
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

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 Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Xylene, mixed isomers
OEL TWA [1]	221 mg/m³
OEL TWA [2]	50 ppm
OEL STEL	442 mg/m³
OEL STEL [ppm]	100 ppm
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020
Ireland - Biological limit values	
Local name	Xylene
BLV	1.5 g/g creatinine Parameter: methylhippuric acids - Medium: urine - Sampling time: End of Shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
United Kingdom - Occupational Exposure Limits	
Local name	Xylene
WEL TWA (OEL TWA) [1]	220 mg/m³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	441 mg/m³
WEL STEL (OEL STEL) [ppm]	100 ppm
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

Xylene (1330-20-7)	
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

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 Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Ethylbenzene
OEL TWA [1]	442 mg/m³
OEL TWA [2]	100 ppm
OEL STEL	884 mg/m³
OEL STEL [ppm]	200 ppm
Notes (IE)	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2020
Ireland - Biological limit values	
Local name	Ethyl benzene
BLV	0.7 g/g creatinine Parameter: mandelic acid and phenylglyoxylic acid - Medium: urine - Sampling time: End of shift at end of workweek - Notations: Ns (Non-specific), Sq (Semi-quantitative) Parameter: ethylbenzene - Medium: end-exhaled air - Sampling time: Not critical - Notations: Sq (Semi-quantitative)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
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
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)

Ethylbenzene (100-41-4)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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

n-butyl acetate (123-86-4)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	11 mg/kg bw/day
Acute - systemic effects, inhalation	600 mg/m³
Acute - local effects, inhalation	600 mg/m³
Long-term - systemic effects, dermal	11 mg/kg bw/day
Long-term - systemic effects, inhalation	300 mg/m³
Long-term - local effects, inhalation	300 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	6 mg/kg bw/day
Acute - systemic effects, inhalation	300 mg/m³
Acute - systemic effects, oral	2 mg/kg bw/day
Acute - local effects, inhalation	300 mg/m³
Long-term - systemic effects,oral	2 mg/kg bw/day
Long-term - systemic effects, inhalation	35.7 mg/m³
Long-term - systemic effects, dermal	6 mg/kg bw/day
Long-term - local effects, inhalation	35.7 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.18 mg/l
PNEC aqua (marine water)	0.018 mg/l
PNEC aqua (intermittent, freshwater)	0.36 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.981 mg/kg dwt
PNEC sediment (marine water)	0.0981 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0903 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	35.6 mg/l

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	208 mg/m³
Acute - local effects, inhalation	208 mg/m³
Long-term - systemic effects, dermal	11.8 mg/kg bodyweight/day

Long-term - systemic effects, inhalation	83 mg/m³
Long-term - local effects, inhalation	83 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	155.2 mg/m³
Acute - local effects, inhalation	155.2 mg/m³
Long-term - systemic effects,oral	4.2 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	14.7 mg/m³
Long-term - systemic effects, dermal	4.2 mg/kg bodyweight/day
Long-term - local effects, inhalation	14.7 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.6 mg/l
PNEC aqua (marine water)	0.06 mg/l
PNEC aqua (intermittent, freshwater)	1.5 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	8.27 mg/kg dwt
PNEC sediment (marine water)	0.83 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.3 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	27.5 mg/l

2-methoxy-1-methylethyl acetate (108-65-6)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	550 mg/m³
Long-term - systemic effects, dermal	796 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	275 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	36 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	33 mg/m³
Long-term - systemic effects, dermal	320 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.635 mg/l
PNEC aqua (marine water)	0.0635 mg/l
PNEC aqua (intermittent, freshwater)	6.35 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.29 mg/kg dwt
PNEC sediment (marine water)	0.329 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.29 mg/kg dwt

PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.05 mg/kg bw/day
Long-term - systemic effects, inhalation	0.35 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.025 mg/kg bw/day
Long-term - systemic effects, inhalation	0.085 mg/m³
Long-term - systemic effects, dermal	0.25 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0023 mg/l
PNEC aqua (marine water)	0.00023 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.37 mg/kg dwt
PNEC sediment (marine water)	0.337 mg/kg dwt
PNEC (Soil)	
PNEC soil	2 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	0.68 mg/m³ (DGUV DNEL List 2019)

Xylene (1330-20-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	289 mg/m³
Acute - local effects, inhalation	289 mg/m³
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	77 mg/m³
Long-term - local effects, inhalation	77 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	174 mg/m³
Acute - local effects, inhalation	174 mg/m³
Long-term - systemic effects,oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	14.8 mg/m³
Long-term - systemic effects, dermal	108 mg/kg bodyweight/day
Long-term - local effects, inhalation	65.3 mg/m³

PNEC (Water)	
PNEC aqua (freshwater)	0.327 mg/l
PNEC aqua (marine water)	0.327 mg/l
PNEC aqua (intermittent, freshwater)	0.327 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	12.46 mg/kg dwt
PNEC sediment (marine water)	12.46 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.31 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	6.58 mg/l

hydrocarbons, C9, aromatics (64742-95-6)	
DNEL/DMEL (Workers)	
Long-term - local effects, dermal	25 mg/kg bw/day
Long-term - systemic effects, inhalation	150 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	11 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	32 mg/m³
Long-term - systemic effects, dermal	11 mg/kg bodyweight/day

Ethylbenzene (100-41-4)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	293 mg/m³
Long-term - systemic effects, dermal	180 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	77 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	1.6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	15 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	0.1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13.7 mg/kg dwt
PNEC sediment (marine water)	1.37 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.68 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.02 g/kg food
PNEC (STP)	
PNEC sewage treatment plant	9.6 mg/l

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:
Gas mask. Gloves. Protective clothing. Safety glasses.
Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Other skin protection **Materials for protective clothing:**
Impermeable clothing

8.2.2.3. Respiratory protection

Respiratory protection:
Air-fed respiratory protective equipment should be worn when this product is sprayed

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	:	Colourless.
Appearance	:	Liquid.
Odour	:	aromatic.
Odour threshold	:	Not available
Melting point	:	Not available

Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	27 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	> 20.5 mm²/s
Solubility	:	insoluble in water. soluble in most organic solvents.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	0.97 (0.96 – 0.98) g/cm³
Relative density	:	Not available
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

9.2. Other information

VOC content : 527 g/l

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 527 g/l

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) : Not classified

n-butyl acetate (123-86-4)	
LD50 oral rat	10760 – 12789 mg/kg bodyweight (Equivalent or similar to OECD 423, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	14112 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat [ppm]	390 ppm/4h
LC50 Inhalation - Rat (Vapours)	> 21 mg/l/4h (4 h, OECD Test Guideline 403, rat, vapours)

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
LD50 oral rat	2080 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1,91 - 2,27
LD50 dermal rat	≥ 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat (Vapours)	10 – 20 mg/l/4h

2-methoxy-1-methylethyl acetate (108-65-6)	
LD50 oral rat	6190 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat [ppm]	1728 ppm/4h (4 h, OECD Guideline 403 (Acute Inhalation Toxicity), rat, male/female, Inhalation, vapours)

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	
LD50 oral rat	> 5000 mg/kg (OECD Guideline No. 401 (equivalent to Annex V), limit test, rat, male/female)
LD50 dermal rat	> 2000 mg/kg (OECD Guideline No. 402 (equivalent to Annex V), limit test, rat, male/female)
LC50 Inhalation - Rat	5800 mg/l (OECD Guideline 403, 14d, rat)

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)	
LD50 oral rat	3230 mg/kg (OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), rat, male/female)
LD50 dermal rat	> 3170 mg/kg (OECD Guideline 402 (Acute Dermal Toxicity), read-across,

dibutyltin dilaurate (77-58-7)	
LD50 oral rat	2071 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1207 - 5106
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

reaction mass of ethylbenzene, m-xylene and p-xylene	
LD50 oral rat	3523 mg/kg (EU Method B.1 (Acute Toxicity (Oral), rat, male)
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat [ppm]	6350 ppm/4h (4 h, EU Method B.2 (Acute Toxicity (Inhalation)), rat, male, Inhalation, vapours)

Xylene (1330-20-7)	
LD50 oral rat	3523 mg/kg bodyweight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	12126 mg/kg (Non-GLP, read-across from supporting substance, single dermal dose under occlusion followed by observation for 14 days)
LD50 dermal rabbit	12126 mg/kg bodyweight Animal: rabbit, Animal sex: male
LC50 Inhalation - Rat [ppm]	6700 ppm/4h (EU Method B.2 (Acute Toxicity (Inhalation)), 4h, rat, male)

cellulose acetate butyrate (9004-36-8)	
LD50 oral rat	> 3200 mg/kg
LD50 dermal	> 1000 mg/kg (Guinea pig)

hydrocarbons, C9, aromatics (64742-95-6)	
LD50 oral rat	8400 ml/kg
LD50 dermal rabbit	3160 mg/kg bodyweight (OECD Guideline 402 (Acute Dermal Toxicity), rat, male/female
LC50 Inhalation - Rat [ppm]	3400 ppm/4h
LC50 Inhalation - Rat (Vapours)	> 5 mg/l/4h

Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	15432 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal)
LC50 Inhalation - Rat	17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours))

octamethylcyclotetrasiloxane (556-67-2)	
LD50 oral rat	> 4800 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2400 mg/kg bodyweight (Equivalent or similar to OECD 402, Rat, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	36 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

decamethylcyclopentasiloxane (541-02-6)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	8.67 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EPA OTS 798.1150 (Acute inhalation toxicity), 95% CL: 7,3 - 10,32

Dodecamethylcyclohexasiloxane (540-97-6)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Unknown acute toxicity (CLP) - SDS : 0.22% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

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

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
IARC group	2B - Possibly carcinogenic to humans

reaction mass of ethylbenzene, m-xylene and p-xylene	
IARC group	2B - Possibly carcinogenic to humans

Xylene (1330-20-7)	
IARC group	3 - Not classifiable

Ethylbenzene (100-41-4)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

dibutyltin dilaurate (77-58-7)	
NOAEL (animal/male, F0/P)	1.9 – 2.3 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)
NOAEL (animal/female, F0/P)	1.7 – 2.4 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

hydrocarbons, C9, aromatics (64742-95-6)	
NOAEL (animal/male, F0/P)	7500 mg/kg
NOAEL (animal/female, F0/P)	7500 mg/kg

STOT-single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.

n-butyl acetate (123-86-4)	
STOT-single exposure	May cause drowsiness or dizziness.

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
STOT-single exposure	May cause respiratory irritation.

2-methoxypropyl acetate (70657-70-4)	
STOT-single exposure	May cause respiratory irritation.

dibutyltin dilaurate (77-58-7)	
STOT-single exposure	Causes damage to organs (thymus).

reaction mass of ethylbenzene, m-xylene and p-xylene	
STOT-single exposure	May cause respiratory irritation.

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

hydrocarbons, C9, aromatics (64742-95-6)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

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

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	4.106 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

2-methoxy-1-methylethyl acetate (108-65-6)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

dibutyltin dilaurate (77-58-7)	
STOT-repeated exposure	Causes damage to organs (thymus) through prolonged or repeated exposure.

reaction mass of ethylbenzene, m-xylene and p-xylene	
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)
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day (OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), female)
STOT-repeated exposure	May cause damage to 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.

hydrocarbons, C9, aromatics (64742-95-6)	
NOAEL (oral, rat, 90 days)	600 mg/kg bodyweight/day
NOAEC (inhalation, rat, vapour, 90 days)	900 – 1800 mg/m³

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 sense) through prolonged or repeated exposure.

decamethylcyclopentasiloxane (541-02-6)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≥ 1600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Dodecamethylcyclohexasiloxane (540-97-6)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Aspiration hazard : Not classified

SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1)	
Viscosity, kinematic	> 20.5 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
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.

n-butyl acetate (123-86-4)	
LC50 - Fish [1]	18 mg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	62 mg/l (Leuciscus idus, static system)
EC50 - Crustacea [1]	44 mg/l Test organisms (species): Daphnia sp.
EC50 72h - Algae [1]	674.7 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

NOEC (chronic)	23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	23 mg/l

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
LC50 - Fish [1]	> 179 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 200 mg/l Test organisms (species): Daphnia magna

2-methoxy-1-methylethyl acetate (108-65-6)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 500 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
NOEC (chronic)	≥ 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	47.5 mg/l Test organisms (species): Oryzias latipes Duration: '14 d'

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	
LC50 - Fish [1]	2.8 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	4 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 algae	> 100 mg/l (72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)

reaction mass of ethylbenzene, m-xylene and p-xylene	
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]	1.3 mg/l
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 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
ErC50 algae	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

hydrocarbons, C9, aromatics (64742-95-6)	
LC50 - Fish [1]	9.22 mg/l (Oncorhynchus mykiss)
EC50 - Crustacea [1]	6.14 mg/l 48 h, Daphnia magna
ErC50 algae	2.9 mg/l

Ethylbenzene (100-41-4)	
LC50 - Fish [1]	5.1 mg/l Test organisms (species): Menidia menidia
EC50 - Crustacea [1]	1.8 – 2.4 mg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
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'

12.2. Persistence and degradability

n-butyl acetate (123-86-4)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.21 g O_2/g substance
BOD (% of ThOD)	0.46

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.06 g O_2/g substance
Chemical oxygen demand (COD)	2.16 g O_2/g substance
ThOD	2.72 g O_2/g substance

2-methoxy-1-methylethyl acetate (108-65-6)	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.

Xylene (1330-20-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.

hydrocarbons, C9, aromatics (64742-95-6)	
Persistence and degradability	Readily biodegradable in water.

Ethylbenzene (100-41-4)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.44 g O_2/g substance
Chemical oxygen demand (COD)	2.1 g O_2/g substance

ThOD	3.17 g O_2/g substance

12.3. Bioaccumulative potential

n-butyl acetate (123-86-4)	
BCF - Fish [1]	15.3 (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	2.3 (Test data, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
Partition coefficient n-octanol/water (Log Pow)	1.9 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

2-methoxy-1-methylethyl acetate (108-65-6)	
Partition coefficient n-octanol/water (Log Pow)	1.2 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	
BCF - Fish [1]	2658 – 3430 (502 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	4.6 (Experimental value, Equivalent or similar to OECD 117, 25 °C)

Xylene (1330-20-7)	
BCF - Fish [1]	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	3.2 (Read-across, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Ethylbenzene (100-41-4)	
BCF - Fish [1]	1 (6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

n-butyl acetate (123-86-4)	
Surface tension	0.0163 N/m (20 °C)
Partition coefficient n-octanol/water (Log Koc)	1.268 – 1.844 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for adsorption in soil.

4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	
Partition coefficient n-octanol/water (Log Koc)	2.008 (log Koc, Weight of evidence, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

2-methoxy-1-methylethyl acetate (108-65-6)	
Surface tension	29.4 mN/m (20 °C, 100 vol %, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Koc)	0.264 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.

Xylene (1330-20-7)	
Surface tension	28.01 – 29.76 mN/m (25 °C)
Partition coefficient n-octanol/water (Log Koc)	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

Ethylbenzene (100-41-4)	
Surface tension	71.2 mN/m (23 °C, 0.058 g/l, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Koc)	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Ecology - soil	Low potential for adsorption in soil. Toxic to soil organisms.

12.5. Results of PBT and vPvB assessment

Component	
n-butyl acetate (123-86-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Xylene (1330-20-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
4-methylpentan-2-one; isobutyl methyl ketone (108-10-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-methoxy-1-methylethyl acetate (108-65-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Ethylbenzene (100-41-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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

Regional legislation (waste) : Disposal must be done according to official regulations.
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 / ADN / RID

14.1. UN number or ID number

UN-No. (ADR)	:	UN 1263
UN-No. (IMDG)	:	UN 1263
UN-No. (IATA)	:	UN 1263
UN-No. (ADN)	:	UN 1263
UN-No. (RID)	:	UN 1263

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	PAINT
Proper Shipping Name (IMDG)	:	PAINT
Proper Shipping Name (IATA)	:	Paint
Proper Shipping Name (ADN)	:	PAINT
Proper Shipping Name (RID)	:	PAINT
Transport document description (ADR)	:	UN 1263 PAINT, 3, III, (D/E)
Transport document description (IMDG)	:	UN 1263 PAINT, 3, III
Transport document description (IATA)	:	UN 1263 Paint, 3, III
Transport document description (ADN)	:	UN 1263 PAINT, 3, III
Transport document description (RID)	:	UN 1263 PAINT, 3, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3

Danger labels (ADR) : 3

:

IMDG

Transport hazard class(es) (IMDG) : 3

Danger labels (IMDG) : 3

:

IATA

Transport hazard class(es) (IATA) : 3

Danger labels (IATA) : 3

:

ADN

Transport hazard class(es) (ADN) : 3

Danger labels (ADN) : 3

:

RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3

: 

14.4. Packing group

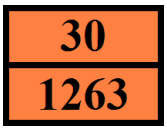
Packing group (ADR)	:	III
Packing group (IMDG)	:	III
Packing group (IATA)	:	III
Packing group (ADN)	:	III
Packing group (RID)	:	III

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	F1
Special provisions (ADR)	:	163, 367, 650
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T2
Portable tank and bulk container special provisions (ADR)	:	TP1, TP29
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Operation (ADR)	:	S2
Hazard identification number (Kemler No.)	:	30
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•3YE

Transport by sea

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

Air transport

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

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

Inland waterway transport

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

Rail transport

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

14.7. 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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on	Entry title or description
3(a)	SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1) ; 2-methoxy-1-methylethyl acetate ; Xylene ; Ethylbenzene ; isobutyl methyl ketone ; reaction mass of ethylbenzene, m-xylene and p-xylene ; n-butyl acetate ; hydrocarbons, C9, aromatics	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

3(b)	SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1) ; Xylene ; Ethylbenzene ; isobutyl methyl ketone ; reaction mass of ethylbenzene, m-xylene and p-xylene ; n-butyl acetate ; hydrocarbons, C9, aromatics ; reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate ; reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1) ; hydrocarbons, C9, aromatics ; reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate ; reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	SYSTEM 20 SUPERIOR HS CLEARCOAT (2:1) ; 2-methoxy-1-methylethyl acetate ; Xylene ; Ethylbenzene ; isobutyl methyl ketone ; reaction mass of ethylbenzene, m-xylene and p-xylene ; n-butyl acetate ; hydrocarbons, C9, aromatics	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

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

VOC content : 527 g/l

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
	Revision date	Modified	
1.1	Name	Modified	

1.2	Industrial/Professional use spec	Added	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

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
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic 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 Irrit. 2	Serious eye damage/eye irritation, Category 2

Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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