CECCHI GUSTAVO & C.
Via M. Coppino 253 - 55049 Viareggio (LU) ITALY
tel. +39 0584 383694
www.cecchi.it info@cecchi.it

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

1.1. Product identifier

Identification of the mixture:

Name: SPINNAKER POLYURETHANE

UFI: 2800-F0GF-400H-NN81

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

Recommended use: Coatings and paints, thinners, paint strippers
Colorless transparent varnish. Liquid solution.
Professional use

Uses advised against: NA

1.3 Details of the supplier of the safety data sheet

Company name CECCHI GUSTAVO & C. SRL.
Address: Via M. Coppino, 253
City and Country: 55049 VIAREGGIO (LU) ITALY
TEL. +39 0584 383694

e-mail of the competent person responsible for the safety data sheet: info@cecchi.it
Responsible for placing on the market: CECCHI GUSTAVO & C. srl

1.4 Emergency telephone number

For urgent information, contact: +39 0584/383694 office hours 8.30-12.30, 14.00-18.30 from Monday to Friday

University of Foggia Hospital ..... 800183459 - Niguarda Ca' Grandadi Hospital Milan .... 0266101029 - "A. Cardarelli" Hospital of Naples..... 0817472870 - CAV Policlinico "Umberto I" of Rome. ..... 0649978000 - CAV Policlinico "A. Gemelli" of Rome..... .....063054343 - Company Osp. "Careggi" Toxicological Unit of Florence .....0557947819 - CAV National Center of Toxic. Information. of Pavia ..... 038224444 - Pope John XXIII Hospital of Bergamo .....800883300 - Integrated Hospital of Verona ....800011858 -

SECTION 2: hazard identification

2.1. Substance or mixture classification

Regulation (EC) no. 1272/2008 (CLP)

Flam. Liq. 3	Flammable liquid and vapour. Causes
Eye Irrit. 2	serious eye irritation.
Skin Sens. 1A	May cause an allergic skin reaction. May cause
STOT IF 3	drowsiness or dizziness.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects: No other hazards

2.2. Label elements

Regulation (EC) no. 1272/2008 (CLP)

Hazard and warning pictograms

Flammable Attention

Warning notices

H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction. Causes serious
H319	eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Cautionary advice

P210	Keep away from heat, hot surfaces, sparks, open flames or other ignition sources. Not smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray. Do not disperse in the
P273	environment.
P280	Wear gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish.
P403+P235	Keep in a cool and well-ventilated place.

Special provisions:

EUH066	Repeated exposure may cause skin dryness or cracking.

Dangerous content:

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

mixture of α-3-(3-(2H-benzotriazol-2-yl)-5- tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2Hbenzotriazol- 2- il)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2Hbenzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Hydrocarbons, C9, butan-1-ol

aromatics

Reaction product of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Special provisions according to Annex XVII of REACH and subsequent amendments: Nobody

2.3. Other dangers

Results of PBT and vPvB assessment According to the criteria of the REACH regulation no substance as PBT,

vPvB. Endocrine Disrupting Properties-Toxicity

The substance/mixture does not contain any components considered to have endocrine disrupting properties within the meaning of Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Endocrine disrupting properties-Ecotoxicity

The substance/mixture does not contain any components considered to have endocrine disrupting properties within the meaning of Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

NA

3.2. Blends

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

Amount	First name	Number of Identification	Classification	Number of registration
≥25 - ≤30 %	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	EC:919-857-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT IF 3, H336, DECLP(*)	01-2119463258-33
≥3 - ≤5 %	Hydrocarbons, C9, aromatics	EC:918-668-5	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT IF 3, H335; STOT SE 3, H336, EUH066, DECLP(*)	01-2119455851-35
≥2.5 - ≤3 %	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	EC:918-481-9	Asp. Tox. 1, H304, DECLP(*)	01-2119457273-39
≥1 - ≤2.5 %	xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Acute Tox. 4, H312; Skins irritated. 2, H315; Eye Irrit. 2, H319; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 3, H412; STOT IF 3, H335	01-2119488216-32 H332; Acute
≥1 - ≤2.5 %	butan-1-ol	CAS:71-36-3 EC:200-751-6 Index:603-004-00-6	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Flam. Liq. 3, H226; STOT IF 3, H335; STOT IF 3, H336	01-2119484630-38
≥1 - ≤2.5 %	1-methoxy-2-propanol	CAS:107-98-2 EC:203-539-1 Index:603-064-00-3	Flam. Liq. 3, H226; STOT IF 3, H336	01-2119457435-35
≥1 - ≤2.5 %	mixture 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-tertbutyl-4-hydroxyphenyl) propionyl-ω-3- (3-(2H-benzotriazol-2-yl)-5 -tertbutyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	CAS:104810-47-1 04810-48-2 EC:400-830-7 Index:607-176-00-3	Skin Sens. 1A, H317; Aquatic 1, Chronic 2, H411	01-0000015075-76
≥0.5 - ≤1 %	2-ethylhexanoic acid and its salts, with the exception of those expressly indicated in this annex	CAS:22464-99-9 EC:245-018-1 Index:607-230-00-6	Repr. 2, H361d	01-2119979088-21
≥0.5 - ≤1 %	2-ethylhexanoic acid and its salts, with the exception of those expressly indicated in this annex	CAS:136-51-6 EC:205-249-0 Index:607-230-00-6	Eye Dam. 1, H318; Repr. 2, H361d	01-2119978297-19
≥0.5 - ≤1 %	Reaction product of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS:1065336-91-5 EC:915-687-0	Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Repr. 2, H361f, M-Acute:1	01-2119491304-40-0000
≥0.3 - ≤0.5%	ethylbenzene	CAS:100-41-4 EC:202-849-4 Index:601-023-00-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373	01-2119489370-35
≥0.1 - ≤0.25%	2-ethylhexanoic acid and its salts, with the exception of those expressly indicated in this annex	CAS:85203-81-2 EC:286-272-3 Index:607-230-00-6	Eye Irrit. 2, H319; Repr. 2, H361d; Aquatic Chronic 3, H412	01-2119979093-30
< 0.1%	n-butyl acetate	CAS:123-86-4 EC:204-658-1 Index:607-025-00-1	Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119485493-29
< 0.1%	(methyl-2-methoxyethoxy)propanol	CAS:34590-94-8 EC:252-104-2	Substance with a limit of workplace exposure set at Union level.	01-2119450011-60

(*)DECLP Substance classified in accordance with note P of annex VI of EC regulation 1272/2008.

The harmonized classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0.1% w/w benzene (EINECS No 200-753-7), in which case a classification is made in accordance with Title II of this Regulation also for these hazard classes. If the substance is not classified as carcinogenic or mutagenic, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 must be included.

SECTION 4: first aid measures

4.1. Description of first aid measures In case of skin contact:

Immediately take off all contaminated clothing.

Immediately wash the areas of the body that have come into contact with the product, even if only suspected, with plenty of running water and possibly soap.

Thoroughly wash the body (shower or bath).

Immediately remove contaminated clothing and dispose of it safely.

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

In case of eye contact:

In case of contact with the eyes, rinse them with water for an appropriate time interval and keeping the eyelids open, then immediately consult an ophthalmologist.

Protect the uninjured eye.

In case of ingestion:

Do not induce vomiting, seek medical assistance by showing this SDS and danger labelling.

In case of inhalation:

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

4.2. Most important symptoms and effects, both acute and delayed Eye irritation Eye damage

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

In the event of an accident or if you feel unwell, consult a doctor immediately (show the instructions for use or the safety data sheet if possible).

SECTION 5: Fire fighting measures

5.1. Fire fighting Suitable extinguishing media:

In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish. Extinguishing media which must not be used for safety reasons:

No one in particular.

5.2. Special hazards arising from the substance or mixture Do not inhale gases produced by explosion and combustion. Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable respiratory equipment.

Collect contaminated water used to extinguish the fire separately. Do not discharge it into the sewer system. If it is safe to do so, move undamaged containers out of the immediate danger area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures Wear personal protective equipment. Remove all sources of ignition. Move people to a safe place.

Consult the protective measures set out in points 7 and 8.

6.2. Environmental precautions

Prevent penetration into soil/subsoil. Prevent runoff to surface water or sewer system. Retain contaminated washing water and dispose of it.

In case of gas escape or of entry into water courses, soil or sewage system, inform the responsible authorities. Material suitable for collection: absorbent material, organic, sand

6.3. Methods and materials for containment and cleaning up Suitable material for collection: absorbent material, organic, sand Wash with plenty of water.

6.4. Reference to other sections

See also paragraph 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for Safe Handling

Avoid contact with skin and eyes, inhalation of vapors and mists. Do not use empty containers before they have been cleaned.

Before transfer operations, make sure that there are no incompatible materials left in the containers. Contaminated clothing must be changed before entering dining areas.

At work do not eat or drink.

Please also refer to paragraph 8 for the recommended protective devices.

7.2. Conditions for safe storage, including any incompatibilities Always keep in well-ventilated areas.

Store at temperatures below 20 °C. Keep away from open flames and heat sources. Avoid direct exposure to the sun. Keep away from open flames, sparks and heat sources. Avoid direct exposure to the sun.

Incompatible materials:

None in particular.

Indication for locals:

Fresh and adequately ventilated.

7.3. Particular end uses

Recommendations

No particular use

Specific solutions for the industrial sector

No particular use

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components contained in the formula with an OEL value

	Guy OEL extension	Village	Occupational exposure limits
Hydrocarbons, C9-C11, nalkanes, isoalkanes, cyclics, <2% aromatics	SUVA	SWITZERLAN	Long term 300 mg/m3 - 50 ppm; Short Term 600 mg/m3 - 100 ppm D
Hydrocarbons, C9, aromatics CAS: 107-98-2	ACGI extension		Long term 200 mg/m3 Damage to the central nervous system
Hydrocarbons, C10-C13, nalkanes, isoalkanes, cyclics, <2% aromatics			
xylene CAS: 1330-20-7			
butan-1-ol CAS: 71-36-3			
1-methoxy-2-propanol			

	SUVA	m Indicative behavior 2000/39/CE
SWITZERLAN Long term 300 mg/m3 - 50ppm; Brief Term 600 mg/m3 - 100ppm d	EU	Identifies the possibility of significant absorption through the skin
	SUVA	SWITZERLAN Long term 435 mg/m3 - 100 ppm D Possibility of intoxication by transcutaneous resorption. Certain substances enter the body not only through the airways
	SUVA	SWITZERLAN Short Term 870 mg/m3 - 200 ppm D Institut National de Recherche et de Sécurité pour la prévention des accidents du travail et des maladies professionnelles
	VLEP extension ITALY	Long term 221 mg/m3 - 50 ppm; Short Term 442 mg/m3 - 100 ppm The 'Skin' notation attributed to the exposure limit values indicates the possibility of significant absorption through the skin
	SUVA	SWITZERLAN Short Term 310 mg/m3 - 100 ppm D If the occupational exposure limit value is respected, injury to the fetus is unlikely.
ACGI extension Long term 20ppm A4, EIB - URT and eye irr; hematologic eff; CNS impair	SUVA	SWITZERLAN Long term 310 mg/m3 - 100 ppm D National Institute for Occupational Safety and Health
	ACGI extension	Long term 20ppm Eye and URT irr
	EU	Long term 375 mg/m3 - 100 ppm; Short Term 568 mg/m3 - 150 ppm Indicative behaviour 2000/39/EC
	EU	Long term 221 mg/m3 - 50 ppm; Short Term 442 mg/m3 - 100 ppm Indicative behaviour 2000/39/EC

	EU		Identifies the possibility of significant absorption through the skin
	SUVA	SWITZERLAN	Long term 360 mg/m3 - 100 ppm; Short Term 720 mg/m3 - 200 ppm D If the occupational exposure limit value is respected, injury to the fetus is unlikely.
VLEP extension		ITALY	Long term 375 mg/m3 - 100 ppm; Short Term 568 mg/m3 - 150 ppm The 'Skin' notation attributed to the exposure limit values indicates the possibility of significant absorption through the skin
	ACGI extension		Long term 50ppm; Short Term 100ppm A4 - Eye and URT irr
2-ethylhexanoic acid and its salts, excluding those expressly indicated in this annex CAS: 22464-99-9	SUVA	SWITZERLAN	Long term 5mg/m3 D Occupational Safety and Health Administration
	ACGI extension		Long term 5 mg/m3; Short Term 10mg/m3 Respiratory tract irritation
ethylbenzene CAS: 100-41-4	VLEP extension	ITALY	Long term 442 mg/m3 - 100 ppm; Short Term 884 mg/m3 - 200 ppm The 'Skin' notation attributed to the exposure limit values indicates the possibility of significant absorption through the skin
	SUVA	SWITZERLAN	Long term 220 mg/m3 - 50 ppm; Short Term 220 mg/m3 - 50 ppm D National Institute for Occupational Safety and Health
	EU		Long term 442 mg/m3 - 100 ppm; Short Term 884 mg/m3 - 200 ppm Indicative behaviour 2000/39/EC
	EU		Identifies the possibility of significant absorption through the skin
	ACGI extension		Long term 20ppm OTO; A3, BEI - URT & eye irr; ototoxicity; kidney effect; CNS impair
n-butyl acetate CAS: 123-86-4	SUVA	SWITZERLAN	Long term 480 mg/m3 - 100 ppm; Short Term 960 mg/m3 - 200 ppm D If the occupational exposure limit value is respected, injury to the fetus is unlikely.
	EU		Long term 241 mg/m3 - 50 ppm; Short Term 723 mg/m3 - 150 ppm Indicative behaviour 2019/1831/EU
	ACGI extension		Long term 50ppm; Short Term 150ppm Eye and URT irr
(methyl-2-methoxyethoxy)propanol CAS: 34590-94-8	EU		Long term 308 mg/m3 - 50ppm Indicative behaviour 2000/39/EC
	EU		Identifies the possibility of significant absorption through the skin
	VLEP extension	ITALY	Long term 308 mg/m3 - 50 ppm The notation 'Skin' attributed to the exposure limit values indicates the possibility of significant absorption through the skin
	SUVA	SWITZERLAN	Long term 300 mg/m3 - 50 ppm; Short Term 300 mg/m3 - 50ppm D National Institute for Occupational Safety and Health
	ACGI extension		Long term 50ppm Liver & CNS eff

Biological Exposure Index

xylene CAS: 1330-20-7	Biological Indicator: xylene; Withdrawal period: End of shift Value: 1.5 mg/L; Via: Blood Notes: Croatia. Biological Exposure Limits
	Biological Indicator: Methylhippuric acid; Withdrawal period: End of shift Value: 1.5 g/l; Via: Urine Notes: New Zealand. Biological Exposure Indices
	Biological Indicator: xylene; Withdrawal period: End of shift Value: 1.5 mg/L; Via: Blood Notes: Slovakia. biological limit values
	Biological Indicator: sum of 2,3,4-methylhippuric acid; Withdrawal period: End of shift Value: 2000 mg/L; Via: Urine

Notes: Slovakia. biological limit values

Biological Indicator: methylhypuric acid; Withdrawal period: End of shift Value: 3 g/
l; Via: Urine
Notes: Romania. Biological limit values

Biological Indicator: methylhippuric acid (all isomers); Withdrawal period: End of shift Value: 2 g/l;
Via: Urine
Notes: Slovenia. BAT-values

Biological Indicator: xylene; Withdrawal Period: Immediately after exposure or after working hours Value: 1.5 mg/L;
Via: Blood
Notes: TRGS 903 - Biological limit values

Biological Indicator: methylhippuric acid (all isomers); Withdrawal Period: Immediately after exposure or after working
hours
Value: 2 g/l; Via: Urine
Notes: TRGS 903 - Biological limit values

Biological Indicator: Methylhippuric acid; Withdrawal Period: Last 4 hours of shift Value: 2 mg/
L; Via: Urine
Notes: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: total (o-, m-, p-)methylhippuric acid; Withdrawal period: End of shift; Working weekend

Value: 800mg/L; Via: Urine
Notes: Occupational exposure limits based on biological monitoring (JSOH).

Biological Indicator: methyl hippuric acid; Withdrawal Period: At the end of a work week / at the end of a work day / at the
end of a shift
Value: 1.5 g/l; Via: Urine
Notes: Austria. Regulation on health surveillance in the workplace 2014

Biological Indicator: xylene; Withdrawal Period: End of workday Value: 1
mg/L; Via: Blood
Notes: Austria. Regulation on health surveillance in the workplace 2014

Biological Indicator: Methylhippuric acid; Withdrawal Period: At the end of exposure, in 4 hours Value: 2 mg/L;
Via: Urine
Notes: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: methyl hippuric acid; Withdrawal Period: After shift Value: 5
Millimoles per liter; Via: Urine
Notes: Finland. Biological limit values

Biological Indicator: methyl hippuric acid; Withdrawal Period: Immediately after exposure or after working hours

Value: 2 g/l; Via: Urine Notes:
Switzerland. List of BAT values

butan-1-ol
CAS: 71-36-3

Biological Indicator: 1-butanol; Withdrawal Period: Before next shift Value: 2
mg/g Creatinine; Via: Urine
Notes: TRGS 903 - Biological limit values

Biological Indicator: 1-butanol; Withdrawal Period: Immediately after exposure or after working hours Value: 10 mg/g
Creatinine; Via: Urine
Notes: TRGS 903 - Biological limit values

Biological Indicator: n-butyl alcohol; Withdrawal Period: Beginning of next shift Value: 2 mg/
g Creatinine; Via: Urine
Notes: Slovakia. biological limit values

Biological Indicator: n-butyl alcohol; Withdrawal Period: Beginning of next shift Value: 313
micromoles per millimole creatinine; Via: Urine
Notes: Slovakia. biological limit values

Biological Indicator: n-butyl alcohol; Withdrawal period: End of shift Value: 10
mg/g Creatinine; Via: Urine
Notes: Slovakia. biological limit values

Biological Indicator: n-butyl alcohol; Withdrawal period: End of shift Value:
1534 micromoles per millimole creatinine; Via: Urine
Notes: Slovakia. biological limit values

Biological Indicator: 1-butanol Value: 2 mg/
g Creatinine; Via: Urine Notes: Slovenia.
BAT-values

Biological Indicator: 1-butanol; Withdrawal period: End of shift

	Value: 10 mg/g Creatinine; Via: Urine Notes: Slovenia. BAT-values Biological Indicator: n-butanol; Withdrawal Period: Immediately after exposure or after working hours Value: 10 mg/g Creatinine; Via: Urine Notes: Switzerland. List of BAT values Biological Indicator: n-butanol; Withdrawal Period: Before next shift or 16 hours after last shift Value: 2 mg/g Creatinine; Via: Urine Notes: Switzerland. List of BAT values
1-methoxy-2-propanol CAS: 107-98-2	Biological Indicator: 1-Methoxypropan-2-ol; Withdrawal Period: Immediately after exposure or after working hours Value: 15mg/L; Via: Urine Notes: TRGS 903 - Biological limit values Biological Indicator: 1-methoyxypropane-2-ol; Withdrawal period: End of shift Value: 15 mg/L; Via: Urine Notes: Slovenia. BAT-values Biological Indicator: 1-methoxypropanol-2; Withdrawal Period: Immediately after exposure or after working hours Value: 2219 micromol per litre; Via: Urine Notes: Switzerland. List of BAT values Biological Indicator: 1-methoxypropanol-2; Withdrawal Period: Immediately after exposure or after working hours Value: 20mg/L; Via: Urine Notes: Switzerland. List of valuesBAT
ethylbenzene CAS: 100-41-4	Biological Indicator: mandelic acid; Withdrawal Period: after the last shift of the last day of the work week Value: 15 g/g creatinine; Via: Urine Notes: Argentina. Biological Exposure Indices Biological Indicator: Ethylbenzene; Withdrawal Period: after the last shift of the last day of the work week Value: 15 g/g creatinine; Via: End-expiratory air Notes: Argentina. Biological Exposure Indices Biological Indicator: mandelic acid; Withdrawal period: End of shift; Working weekend Value: 15 g/g creatinine; Via: Urine Notes: Brazil. NR7. Parameters for Biological Control of Occupational Exposure to Some Chemical Agents Biological Indicator: total mandelic acid plus phenylglyoxylic acid; Withdrawal period: End of shift Value: 2000 mg/g Creatinine; Via: Urine Notes: Bulgaria. Biological limit values Biological Indicator: mandelic acid; Withdrawal period: End of shift Value: 1500 mg/g Creatinine; Via: Urine Notes: Chile. biological limit values Biological Indicator: Sum of mandelic acid and phenyl glyoxylic acid; Withdrawal period: End of shift Value: 15 g/g creatinine; Via: Urine Notes: Maximum allowable occupational exposure limits in the workplace - Table 3. Adopted Biological Exposu Biological Indicator: Ethylbenzene; Period of Sampling: during exposure Value: 141 micromol per litre; Via: Blood Notes: Croatia. Biological Exposure Limits Biological Indicator: Ethylbenzene; Period of Collection: during exposure Value: 1.5 mg/L; Via: Blood Notes: Croatia. Biological Exposure Limits Biological Indicator: mandelic acid; Withdrawal period: End of shift; Working weekend Value: 112 mol/mol creatinine; Via: Urine Notes: Croatia. Biological Exposure Limits Biological Indicator: mandelic acid; Withdrawal period: End of shift; Working weekend Value: 15 g/g creatinine; Via: Urine Notes: Croatia. Biological Exposure Limits Biological Indicator: mandelic acid; Withdrawal period: End of shift Value: 1500 mg/g Creatinine; Via: Urine Notes: Czech Republic. Biological Exposure Indices Biological Indicator: mandelic acid; Withdrawal period: End of shift Value: 1100 micromoles per millimole creatinine; Via: Urine Notes: Czech Republic. Biological Exposure Indices Biological Indicator: mandelic acid; Withdrawal Period: After the work shift at the end of the week or exposure

period
Value: 5.2 Millimoles per liter; Via: Urine Notes:
Finland. Biological limit values

Biological Indicator: mandelic acid + phenylglyoxylic acid; Withdrawal Period: Immediately after exposure or after working hours
Value: 250 mg/g Creatinine; Via: Urine Notes:
TRGS 903 - Biological limit values

Biological Indicator: mandelic acid; Withdrawal Period: After shift Value:
1500 mg/g Creatinine; Via: Urine
Notes: Hungary. Permissible limit values of biological exposure (effect) indices

Biological Indicator: mandelic acid; Withdrawal period: After shift Value:
1110 micromoles per millimole creatinine; Via: Urine
Notes: Hungary. Permissible limit values of biological exposure (effect) indices

Biological Indicator: Mandelic acid; Withdrawal period: End of shift; Working weekend Value: 15 g/g creatinine; Via: Urine
Notes: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: Ethylbenzene Via:
End-expiratory air
Notes: Kenya. Occupational Safety and Health Act (CAP.514), Schedule I, Table 3 Biological Exposure Limits

Biological Indicator: Sum of Mandelic acid plus phenylglyoxylic acid; Withdrawal period: End of shift; Working weekend

Value: 7 g/g creatinine; Via: Urine
Notes: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Ethylbenzene; Withdrawal Period: Non-critical Via:
exhaled air
Notes: Official Mexican Norm NOM-047-SSA1-2011, Environmental Health - Biological exposure indices for work

Biological Indicator: Sum of mandelic acid and phenylglyoxylic acids; Withdrawal period: End of shift Value: 25 g/g creatinine; Via: Urine
Notes: New Zealand. Biological Exposure Indices

Biological Indicator: Sum of mandelic acid and phenyl glyoxylic acid; Withdrawal period: End of shift Value: 7 g/g creatinine; Via: Urine
Notes: Portuguese Norm 1796 - Biological Exposure Indices

Biological Indicator: mandelic acid; Withdrawal Period: Working weekend Value: 15 g/g creatinine; Via: Urine
Notes: Romania. Biological limit values

Biological Indicator: 2- and 4-ethylphenol; Withdrawal period: End of shift Value: 12 mg/L; Via: Blood
Notes: Slovakia. biological limit values

Biological Indicator: Mandelic acid and phenylglyoxylic; Withdrawal Period: In case of long-term exposure: after more than one shift
Value: 1600mg/L; Via: Urine Notes: Slovakia.
biological limit values

Biological Indicator: 2- and 4-ethylphenol; Withdrawal Period: In case of long-term exposure: after more than one shift

Value: 986 micromol per litre; Via: Blood Notes:
Slovakia. biological limit values

Biological Indicator: Mandelic acid and phenylglyoxylic; Withdrawal Period: In case of long-term exposure: after more than one shift
Value: 10590 micromol per litre; Via: Urine Notes:
Slovakia. biological limit values

Biological Indicator: Mandelic acid and phenylglyoxylic; Withdrawal period: End of shift Value: 1067 mg/g Creatinine; Via: Urine
Notes: Slovakia. biological limit values

Biological Indicator: Mandelic acid and phenylglyoxylic; Withdrawal period: End of shift Value: 799 micromoles per millimole creatinine; Via: Urine
Notes: Slovakia. biological limit values

Biological Indicator: 2- and 4-ethylphenol; Withdrawal Period: In case of long-term exposure: after more than one shift

Value: 803 mg/g Creatinine; Via: Urine Notes:
Slovakia. biological limit values

Biological Indicator: 2- and 4-ethylphenol; Withdrawal Period: In case of long-term exposure: after more than one shift

Value: 744 micromoles per millimole creatinine; Via: Urine Notes:
Slovakia. biological limit values

Biological Indicator: Mandelic acid and phenylglyoxylic; Withdrawal period: End of shift Value: 250 mg/g Creatinine; Via: Urine
Notes: Slovenia. BAT-values

Biological Indicator: Mandelic acid; Withdrawal period: End of shift; Working weekend Value: 15 g/g creatinine; Via: Urine
Notes: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: Ethylbenzene Via:
End-expiratory air
Notes: South Africa. Hazardous Chemical Substances Regulations, Biological Exposure Indices.

Biological Indicator: sum of mandelic acid and phenylglyoxilic acid; Withdrawal Period: FSL Value: 700 mg/g Creatinine; Via: Urine
Notes: Occupational Exposure Limits for Chemical Agents in Spain - Biological Exposure Values

Biological Indicator: Mandelic acid and phenylglyoxylic; Withdrawal Period: Immediately after exposure or after working hours
Value: 600 mg/g Creatinine; Via: Urine Notes:
Switzerland. List of BAT values

Biological Indicator: Sum of mandelic acid and phenyl glyoxylic acid; Withdrawal period: End of shift Value: 15 g/g creatinine; Via: Urine
Notes: ACGIH - Biological Exposure Indicators (BEI)

Biological Indicator: Mandelic acid; Withdrawal Period: End of workday at end of workweek Value: 7 g/g creatinine; Via: Urine
Notes: VE. Biological Exposure Limits

Biological Indicator: Ethylbenzene; Withdrawal Period: At your discretion. Via: in exhaled air
Notes: VE. Biological Exposure Limits

PNEC values

xylene CAS: 1330-20-7	Route of exposure: Fresh water; PNEC limit: 0.32 mg/l
	Route of exposure: Intermittent releases (fresh water); PNEC limit: 0.32 mg/l
	Route of exposure: Sea water; PNEC limit: 0.32 mg/l
	Route of Exposure: Freshwater sediments; PNEC limit: 12.46 mg/kg Exposure routes:
	Marine water sediments; PNEC limit: 12.46 mg/kg
	Route of exposure: soil; PNEC limit: 2.31 mg/kg
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 6.58 mg/l
butan-1-ol CAS: 71-36-3	Route of exposure: Fresh water; PNEC limit: 0.08 mg/l
	Route of exposure: Intermittent releases (fresh water); PNEC limit: 2.25 mg/l
	Route of exposure: Sea water; PNEC limit: 0.008 mg/l
	Route of Exposure: Freshwater sediments; PNEC limit: 0.0324 mg/kg Exposure
	routes: Marine water sediments; PNEC limit: 0.032 mg/kg
	Route of exposure: soil; PNEC limit: 0.01 mg/kg
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 2476 mg/l
mixture of α-3-(3-(2H-benzotriazol-2-yl)-5-tertbutyl-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) CAS: 104810-47-1, 104810-48-2	Route of exposure: Fresh water; PNEC limit: 0.0023 mg/l

	Route of exposure: Sea water; PNEC limit: 0.00023 mg/l
	Route of exposure: Intermittent releases (fresh water); PNEC limit: 0.028 mg/l
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 10 mg/l Exposure route:
	Freshwater sediments; PNEC limit: 3.06 mg/kg
	Route of exposure: Seawater sediments; PNEC limit: 0.306 mg/kg
	Route of exposure: soil; PNEC limit: 2 mg/kg Exposure routes:
2-ethylhexanoic acid and its salts, excluding those expressly indicated in this annex CAS: 22464-99-9	Fresh water; PNEC limit: 0.36 mg/l
	Route of exposure: Sea water; PNEC limit: 0.036 mg/l
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 71.7 mg/l Exposure route:
	Freshwater sediments; PNEC limit: 6.37 mg/kg
	Route of exposure: Seawater sediments; PNEC limit: 0.637 mg/kg Route of exposure:
	soil; PNEC limit: 1.06 mg/kg
Reaction product of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5	Route of exposure: Fresh water; PNEC limit: 0.002 mg/l
	Route of exposure: Sea water; PNEC limit: 0 mg/l
	Route of exposure: Intermittent releases (fresh water); PNEC limit: 0.009 mg/l
	Route of Exposure: Freshwater sediments; PNEC limit: 1.05 mg/kg
	Route of exposure: Seawater sediments; PNEC limit: 0.11 mg/kg Route of exposure:
	soil; PNEC limit: 0.21 mg/kg
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 1 mg/l
n-butyl acetate CAS: 123-86-4	Route of exposure: Fresh water; PNEC limit: 0.18 mg/l
	Route of exposure: Intermittent releases (fresh water); PNEC limit: 0.36 mg/l
	Route of exposure: Sea water; PNEC limit: 0.01 mg/l
	Route of Exposure: Freshwater sediments; PNEC limit: 0.98 mg/kg Exposure routes:
	Marine water sediments; PNEC limit: 0.09 mg/kg
	Route of exposure: soil; PNEC limit: 0.09 mg/kg
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 35.6 mg/l
(methyl-2-methoxyethoxy)propanol CAS: 34590-94-8	Route of exposure: Fresh water; PNEC limit: 19 mg/l
	Route of exposure: Intermittent releases (fresh water); PNEC limit: 190 mg/l
	Route of exposure: Sea water; PNEC limit: 1.9 mg/l
	Route of Exposure: Freshwater sediments; PNEC limit: 70.2 mg/kg
	Route of exposure: Seawater sediments; PNEC limit: 7.02 mg/kg Route of exposure:
	soil; PNEC limit: 2.74 mg/kg
	Route of exposure: Microorganisms in wastewater treatment; PNEC limit: 4168 mg/l

Derived level with no effect. (DNEL)

Hydrocarbons, C9-C11, nalkanes, isoalkanes, cyclics, < 2% aromatics	Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Professional worker: 208 mg/kg
	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Professional worker: 871 mg/m3
	Route of Exposure: Human Dermal; Frequency of exposure: Long term, systemic effects Consumer: 125 mg/kg
	Route of Exposure: Human Inhalation; Exposure frequency: Long term, systemic effects Consumer: 185 mg/m3
	Route of Exposure: Oral Human; Frequency of exposure: Long term, systemic effects

	Consumer: 125 mg/kg
Hydrocarbons, C9, aromatics	Exposure routes: Oral; Frequency of exposure: Long term, systemic effects Consumer: 11 mg/kg Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Consumer: 32 mg/m3 Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Consumer: 11 mg/kg Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Professional worker: 150 mg/m3 Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Professional worker: 25 mg/kg
xylene CAS: 1330-20-7	Route of Exposure: Human Inhalation; Exposure frequency: Long term, systemic effects Consumer: 65.3 mg/m3 Route of Exposure: Oral; Frequency of exposure: Long term, systemic effects Consumer: 12.5 mg/kg Route of Exposure: Human Inhalation; Frequency of exposure: Short term, local effects Professional worker: 442 mg/kg Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Professional worker: 212 mg/kg Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Professional worker: 221 mg/m3
butan-1-ol CAS: 71-36-3	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, local effects Consumer: 55 mg/m3 Route of Exposure: Oral; Exposure frequency: Long term, systemic effects Consumer: 3125 mg/kg Route of Exposure: Human Inhalation; Frequency of exposure: Long term, local effects Professional worker: 310 mg/m3
mixture 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) CAS: 104810-47-1, 104810-48-2	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Professional worker: 0.35 mg/m3 Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Professional worker: 0.5 mg/kg Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Consumer: 0.085 mg/m3 Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Consumer: 0.25 mg/kg Route of Exposure: Oral; Exposure frequency: Long term, systemic effects Consumer: 0.025 mg/kg
2-ethylhexanoic acid and its salts, excluding those expressly indicated in this annex CAS: 22464-99-9	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Industrial worker: 32.97 mg/m3 Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Industrial worker: 6.49 mg/kg Route of Exposure: Oral; Exposure frequency: Long term, systemic effects Consumer: 4.51 mg/kg

	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Consumer: 8.13 mg/m3
	Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Consumer: 3.25 mg/kg
Reaction product of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Industrial worker: 1.27 mg/m3
	Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Industrial worker: 1.8 mg/kg
	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Consumer: 0.31 mg/m3
	Route of Exposure: Human Dermal; Frequency of exposure: Long term, systemic effects Consumer: 0.9 mg/kg
	Route of Exposure: Oral Human; Exposure frequency: Long term, systemic effects Consumer: 0.18 mg/kg
n-butyl acetate CAS: 123-86-4	Route of Exposure: Human Inhalation; Exposure frequency: Long term, systemic effects Industrial worker: 300 mg/m3
	Route of Exposure: Human Inhalation; Frequency of exposure: Short term, systemic effects Industrial worker: 600 mg/m3
	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, local effects Industrial worker: 300 mg/m3
	Route of Exposure: Human Inhalation; Frequency of exposure: Short term, local effects Industrial worker: 600 mg/m3
	Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Industrial worker: 11 mg/kg dry weight (dw)
	Route of Exposure: Human Dermal; Exposure frequency: Short term, systemic effects Industrial worker: 11 mg/kg dry weight (dw)
	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Consumer: 35.7 mg/m3
	Route of Exposure: Human Inhalation; Frequency of exposure: Short term, systemic effects Consumer: 300 mg/m3
	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, local effects Consumer: 35.7 mg/m3
	Route of Exposure: Human Inhalation; Frequency of exposure: Short term, local effects Consumer: 300 mg/m3
	Route of Exposure: Human Dermal; Exposure frequency: Long term, systemic effects Consumer: 6 mg/kg dry weight (dw)
	Route of Exposure: Human Dermal; Exposure frequency: Short term, systemic effects Consumer: 6 mg/kg dry weight (dw)
	Route of Exposure: Oral Human; Exposure frequency: Long term, systemic effects Consumer: 2 mg/kg dry weight (dw)
	Route of Exposure: Oral Human; Frequency of exposure: Short term, systemic effects Consumer: 2 mg/kg dry weight (dw)
(methyl-2-methoxyethoxy)propanol CAS: 34590-94-8	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Consumer: 37.2 mg/m3
	Route of Exposure: Human Dermal; Frequency of Exposure: Long term, systemic effects Route of Exposure: Oral; Frequency of exposure: Long term, systemic effects
	Route of Exposure: Human Inhalation; Frequency of exposure: Long term, systemic effects Professional worker: 308 mg/m3
	Route of Exposure: Human Dermal; Frequency of exposure: Long term, systemic effects

8.2. Exposure controls

Eye protection:

Use closed safety goggles, do not use eye lenses.

Skin protection:

Wear clothing that guarantees total protection for the skin, e.g. in cotton, rubber, PVC or viton.

Hand protection:

Use protective gloves that guarantee total protection, e.g. in PVC, neoprene or rubber.

Respiratory protection:

Use a suitable respiratory protection device. Thermal risks:

NA

Environmental Exposure Controls:

NA

Technical and Hygiene Measures

NA

SECTION 9: physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colorless
Smell: NA
pH: Not Relevant
Kinematic viscosity: > 20.5 mm2/sec (40 °C) Melting/
freezing point: NA
Initial Boiling Point and Boiling Range: NA Flash Point: 36.5°C
(97.7°F)
Upper/lower flammability or explosive limits: NA Vapor density: NA

Vapor pressure: NA Relative
density: 0.93 g/cm3 Solubility in
water: NA
Solubility in oil: NA
Partition coefficient (n-octanol/water): NA Auto-ignition
temperature: NA
Decomposition temperature: NA
Flammability: The product is classified as Flam. Liq. 3 H226
Kinematic viscosity: > 20.5 mm2/sec (40 °C)
Viscosity: = 95.00 s - Method: ASTM D 1200 82 - Section: 4.00 mm

Particle characteristics: Particle size:
NA

9.2. More info

Evaporation rate: NA Miscibility:
NA
Conductivity: NA
No other relevant information

SECTION 10: stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability Date not
available.

10.3. Possibility of hazardous reactions

Nobody.

10.4. Conditions to avoid Stable under
normal conditions.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products Nobody.

SECTION 11: toxicological information

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

Toxicological information concerning the product:

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met. STAmix - Oral : 52666.7 mg/kg of bw
	ATEmix - Dermal : 66525.6 mg/kg of bw ATEmix -
	Inhalation (Vapours) : 665.256 mg/l Not classified
b) skin corrosion/irritation	
	Based on available data, the classification criteria are not met. The product is classified:
c) serious eye damage/irritation	Eye Irrit. 2(H319)
d) respiratory sensitizationo	The product is classified: Skin Sens. 1A(H317) dermal
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met.
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met. Not classified
g) reproductive toxicity	
	Based on available data, the classification criteria are not met.
h) specific target organ toxicity (STOT) —single exposure	The product is classified: STOT SE 3(H336)
i) specific target organ toxicity (STOT) —repeated exposure	Not classified
	Based on available data, the classification criteria are not met.
j) danger in case of aspiration	Not classified
	Based on available data, the classification criteria are not met.

The toxicological information concerning the main substances present in the mixture are shown below:

Hydrocarbons, C9-C11, nalkanes, isoalkanes, cyclics, < 2% aromatics	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg	OECD Test Guideline 401
		LC50 Inhalation Rat > 5000mg/l 4h LD50	OECD Test Guideline 403
		Skin Rabbit > 5000 mg/kg	OECD Test Guideline 402
	f) carcinogenicity	Carcinogenicity - Not classified - Substance classified in accordance with note P of annex VI of EC regulation 1272/2008.	
Hydrocarbons, C9, aromatics	a) acute toxicity	LD50 Oral Rat = 3592 mg/kg	OECD Test Guideline 401
		LD50 Rabbit Skin > 3160 mg/kg	OECD Test Guideline 402
	f) carcinogenicity	Carcinogenicity - Not classified - Substance classified in accordance with note P of annex VI of EC regulation 1272/2008.	
Hydrocarbons, C10-C13, nalkanes, isoalkanes, cyclics, < 2% aromatics	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg	OECD Test Guideline 401
		LC50 Inhalation Rat > 5 mg/l 4h	OECD Test Guideline 403
		LD50 Rabbit Skin > 5000 mg/kg	OECD Test Guideline 402
	f) carcinogenicity	Carcinogenicity - Not classified - Substance classified in accordance with note P of annex VI of EC regulation 1272/2008.	
xylene	a) acute toxicity	Oral LD50 Mouse = 5627 mg/kg	
		LC50 Inhalation Rat = 6700 Ppm 4h	

		LD50 Rabbit Skin > 5000 mg/kg	
butan-1-ol	a) acute toxicity	LD50 Oral Rat = 790 mg/kg LC50 Inhalation Rat > 18 mg/l 4h LD50 Skin Rabbit = 3400 mg/kg	
1-methoxy-2-propanol	a) acute toxicity	LD50 Oral Rat = 4016 mg/kg LC0 Inhalation Rat > 7000 Ppm 6h LD50 Skin Rat > 2000 mg/kg	OECD Test Guideline 403
mixture of α-3-(3-(2H-benzotriazol-2-yl)-5-tertbutyl-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)	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg	OECD Test Guideline 401
		LC50 Inhalation Rat = 5.8mg/l 4h LD50	OECD Test Guideline 403
		Skin > 2000 mg/kg	OECD Test Guideline 402
Reaction product of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	a) acute toxicity	LD50 Oral Rat = 3230mg/kg	
		LD50 Skin Rat = 3170, mg/kg	
ethylbenzene	a) acute toxicity	LD50 Oral Rat = 3500, mg/kg LD50 Rabbit Skin > 5000, mg/kg	
n-butyl acetate	a) acute toxicity	LD50 Oral Rat = 10760 mg/kg LC50 Inhalation > 20, mg/l 4h	OECD Test Guideline 423
		LD50 Skin Rabbit > 14112, mg/kg	OECD Test Guideline 402
(methyl-2-methoxyethoxy)propanol	a) acute toxicity	LD50 Oral Rat = 5350 mg/kg	
		LD50 Rabbit Skin > 2000 mg/kg	

11.2. Information about other hazards

Endocrine Disrupting Properties:

The substance/mixture does not contain any components considered to have endocrine disrupting properties within the meaning of Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: ecological information

12.1. Toxicity

Use according to good working practices, avoiding dispersal of the product in the environment. Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects. **List of Eco-Toxicological Properties of the product**

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Number of Identification	Eco-Toxicological Information
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	EINECS: 919-857-5	a) Acute aquatic toxicity : LL50 Fish Oncorhynchus mykiss (rainbow trout) > 1000 mg/L 96H
		e) Toxicity for plants : NOELR Algae Pseudokirchneriella subcapitata (green algae) = 100 mg/L 72 H
		e) Toxicity for plants : EL50 Algae Pseudokirchneriella subcapitata (green algae) > 1000 mg/L 72 H
		a) Acute aquatic toxicity : EL50 Invertebrates Daphnia magna Straus > 1000 mg/kg 48h
Hydrocarbons, C9, aromatics	EINECS: 918-668-5	a) Acute aquatic toxicity : LC50 Fish Oncorhynchus mykiss (rainbow trout) = 9.2 mg/L 96 H
		a) Acute aquatic toxicity : EC50 Invertebrates Daphnia magna (Water flea) = 3.2 mg/L 48 H
		e) Toxicity for plants : Algae algae = 2,9 mg/L 72 H
xylene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Acute aquatic toxicity : LC50 Fish Oncorhynchus mykiss (rainbow trout) = 2.6 mg/L 96 H
		a) Acute aquatic toxicity : IC50 Invertebrates Daphnia magna (Water flea) = 1 mg/L 24 H
		e) Toxicity for plants : EC0 Algae Pseudokirchneriella subcapitata (green algae) = 0,44 mg/L 72 H
		b) Chronic aquatic toxicity : NOEC Fish Oncorhynchus mykiss (rainbow trout) > 1,3 mg/L 56 D
		e) Toxicity for plants : Algae Pseudokirchneriella subcapitata (green algae) = 4,36 mg/L 72 H
1-methoxy-2-propanol	CAS: 107-98-2 - EINECS: 203-539-1 - INDEX: 603-064-00-3	a) Aquatic acute toxicity : EC50 Invertebrates Daphnia magna (Water flea) 25900 mg/L 48 H
		e) Toxicity for plants : EC50 Algae Selenastrum capricornutum (green algae) > 1000 mg/L 7 D
mixture 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-tertbutyl-4-hydroxyphenyl) propionyl-ω-3- (3-(2H-benzotriazol-2-yl)-5 -tertbutyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	CAS: 104810-47-1, 104810-48-2 - EINECS: 400-830-7 - INDEX: 607-176-00-3	a) Acute aquatic toxicity : LC50 Fish Oncorhynchus mykiss (rainbow trout) = 2.8 mg/L 96 H
		a) Acute aquatic toxicity : EC50 Invertebrates Daphnia magna (Water flea) = 4 mg/L 48 H
		e) Toxicity for plants : EC50 Algae Pseudokirchneriella subcapitata (green algae) > 100 mg/L 72 H
		e) Toxicity for plants : EC10 Algae Pseudokirchneriella subcapitata (green algae) = 10 mg/L 72 H
Reaction product of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 1065336-91-5 - EINECS: 915-687-0	e) Toxicity for plants : EC50 Algae Desmodesmus subspicatus (green algae) = 1,68 mg/L 72 H
		a) Acute aquatic toxicity : LC50 Fish Brachydanio rerio (zebrafish) = 0.9 mg/L 96 H
		a) Acute aquatic toxicity : NOEC Invertebrates Daphnia magna = 1 mg/L 21 Days

n-butyl acetate	CAS: 123-86-4 - a) Aquatic acute toxicity : LC50 Fish Pimephales promelas (fathead minnow) = 18 mg/L 96 H OECD Test Guideline 203 658-1 - INDEX: 607-025-00-1	EINECS: 204-
		a) Acute aquatic toxicity : EC50 Invertebrates Daphnia magna (Water flea) = 44 mg/L 48 H OECD Test Guideline 202 e) Toxicity for plants : EC50 Algae Selenastrum capricornutum (green algae) = 397 mg/L 72 H OECD Test Guideline 201 c) Toxicity for bacteria : IC50 Microorganisms Tetrahymena pyriformis = 356 mg/L 40 H
(methyl-2-methoxyethoxy)propanol	CAS: 34590-94-8 - EINECS: 252-104-2	a) Acute aquatic toxicity : LC50 Fish > 10000 mg/L 96 H a) Acute aquatic toxicity : EC50 Invertebrates Daphnia (water flea) > 85000 mg/L 48 H

12.2. Persistence and degradability

NA

12.3. Bioaccumulative potential

NA

12.4. Mobility in soil

NA

12.5. Results of PBT and vPvB assessment

No PBT, vPvB substance present in concentration >= 0.1%

12.6. Endocrine disrupting properties

The substance/mixture does not contain any components considered to have endocrine disrupting properties within the meaning of Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

NA

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. Send to authorized disposal plants or for incineration under controlled conditions. Operate according to local and national regulations.

SECTION 14: transport information

14.1. UN number or ID number 1263

14.2. UN proper shipping name ADR-Shipping name:
PAINTS IATA-Technical name: PAINTS IMDG-
Technical name: PAINTS

14.3. Transport hazard classes ADR-Class:
3
IATA-Class: 3
IMDG-Class: 3

14.4. Packing group ADR-Packing group: III
IATA-Packing group: III IMDG-Packing
group: III

14.5. Dangers to the environment

Amount of Toxic components: 0.00 Amount of Highly
Toxic components: 0.00 Marine pollutant: No

Environmental pollutant: No

IMDG-EMS: FE, SE

14.6. Special precautions for user Road and Rail (ADR-RID) :

ADR-exempt:

ADR-Label: 3

ADR - Hazard Identification Number: -

ADR-Special provisions: 163 367 650 ADR-Transport category (Tunnel restriction code): 3 (E) Air (IATA) :

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Secondary Hazard: -

IATA-Erg: 3L

IATA-Special Provisions: A3 A72 A192 Sea (IMDG) :

IMDG-Stowage Code: Category A IMDG-Stowage Note: -

IMDG-Secondary Hazard: -

IMDG-Special Provisions: 163 223 367 955

14.7. Shipping in bulk in accordance with IMO acts

NA

SECTION 15: Regulatory information

15.1. Safety, health and environmental laws and regulations specific to the substance or mixture

Legislative Decree 04/09/2008 n. 81

DM Work 26/02/2004 (Professional exposure limits) Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) no. 1272/2008 (CLP)

Regulation (EC) no. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) no. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Regulation (EU) n. 2021/849 (ATP 17 CLP) Regulation (EU) n. 2020/878

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

Restrictions relating to the product: 3, 40 Restrictions relating to the substances contained: 75 **Provisions relating to EU directive 2012/18 (Seveso III):**

Seveso III category according to Annex 1, part 1	Lower threshold requirements (tonnes)	Upper tier requirements (tonnes)
The product belongs to the categories: P5c	5000	50000

Regulation (EU) no. 649/2012 (PIC Regulation)

No substances listed

Water hazard class (Germany).

2: Hazards to waters

SVHC substances:

No data available

Dir. 2010/75/CE (VOC Directive)

Volatile Organic Compounds - VOC = 43.38 % Volatile

Organic Compounds - VOC = 401.24 g/L

Estimated Total Content of Water 0.00 %

Estimated Total Solid Content 56.62 % **Storage**

Class (TRGS 510)

Storage Class (TRGS 510) Flammable liquid substances

Classification in accordance with VbF

Classification in accordance with VbF Exempt

Mal-Code (Denmark)

Mal-Code (Denmark)	Mal Factor	Unit of Measure	Revision Status / Number	Regulatory Base
1 - 6	234	m3 air/10g	1993	Administrative determined MAL-Factors

Biocides

REGULATION (EC) No. 528/2012

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out for the mixture

SECTION 16: other information

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking. Highly flammable liquid
H225	and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways. Harmful in contact with skin.
H312	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage. Causes
H319	serious eye irritation.
H332	Harmful if inhaled.
H335	May irritate the respiratory tract.
H336	May cause drowsiness or dizziness. Suspected
H361d	of damaging the unborn child.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure. Very toxic to
H400	aquatic organisms.
H410	Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with
H411	long lasting effects. Harmful to aquatic life with long lasting effects.
H412	

Code	**Hazard class and category** Flam.	Description
2.6/2	Liq. 2	Flammable liquid, Category2
2.6/3	Flam. Liq. 3	Flammable liquid, Category3 Acute toxicity (dermal),
3.1/4/Dermal	Acute Tox. 4	Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4 Acute
3.1/4/Oral	Acute Tox. 4	toxicity (oral), Category4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1 Skin irritation,
3.2 /2	Skin Irrit. 2	Category 2
3.3 /1	Eye Dam. 1	Serious Eye Damage, Category 1 Eye Irritation,
3.3/2	Eye Irrit. 2	Category 2 Skin Sensitization, Category 1A
3.4.2/1A	Skin Sens. 1A	

3.7/2	Repr. 2	Reproductive toxicity, Category 2
3.8/3	STOT IF 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/A1	Aquatic Acute 1	Acute hazard to the aquatic environment, Category 1
4.1/C1	Aquatic Chronic 1	Chronic (long-term) hazard to the aquatic environment, Category 1
4.1/C2	Aquatic Chronic 2	Chronic (long-term) hazard to the aquatic environment, Category 2
4.1/C3	Aquatic Chronic 3	Chronic (long-term) hazard to the aquatic environment, Category 3

Classification and procedure used to derive it according to Regulation (EC) 1272/2008 [CLP] in relation to mixtures:

Classification according to Regulation (EC) No. 1272/2008	Classification procedure
2.6/3	Based on experimental evidence
3.3/2	Calculation method
3.4.2/1A	Calculation method
3.8/3	Calculation method
4.1/C3	Calculation method

This document has been written by a competent SDS technician who has received adequate training. Main bibliographic sources:

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

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

The information contained herein is based on our knowledge at the above date. They refer only to the product indicated and do not constitute a guarantee of particular qualities.

The user is required to ensure the suitability and completeness of such information in relation to the specific use to be made of it. This sheet supersedes any previous edition.

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

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ATE: Acute Toxicity Estimate
ATEmix: Acute Toxicity Estimate (Mixtures BCF: Biological Concentration Factor
BEI: Biological Exposure Index BOD: Biochemical Oxygen Demand
CAS: Chemical Abstracts Service (division of the American Chemical Society. CAV: Poison Control Center
EC: European Community
CLP: Classification, Labelling, Packaging. CMR: Carcinogenic, Mutagenic, Reproductive Toxic COD: Chemical Oxygen Demand
VOC: Volatile Organic Compound CSA: Chemical Safety Assessment CSR: Chemical Safety Report DMEL: Derived Minimal Effect Level DNEL: Derived No Effect Level. DPD: Dangerous Products Directive

DSD: Dangerous Substances Directive EC50: Median Effective Concentration ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances in Europe. ES: Exposure Scenario
GefStoffVO: Hazardous Substances Ordinance in Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals. IARC: International Center for Cancer Research
IATA: International Air Transport Association (IATA)

IATA-DGR: Dangerous Goods Regulation of the "International Air Transport Association" (IATA). IC50: Median Inhibition Concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical instructions of the "International Civil Aviation Organization" (ICAO). IMDG: International Maritime Dangerous Goods Code.
INCI: International nomenclature of cosmetic ingredients. IRCCS: Scientific Hospitalization and Treatment Institutes KAFH: KAFH

KSt: Explosion coefficient.
LC50: Lethal concentration for 50 percent of the test population. LD50: Lethal dose for 50 percent of the test population.
LDLo: Minimum Lethal Dose
NA: Not Applicable
N/A: Not Applicable
N/D: Not determined / not available NA: Not available
NIOSH: National Institute for Occupational Safety and Hygiene NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Agency PBT: Persistent, bioaccumulative and toxic
PGK: INSTR Packing Instructions PNEC: Predicted No Effect Concentration. PSG: Passengers

RID: Regulation concerning the international transport of dangerous goods by rail. STEL: Short Term Exposure Limit.
STOT: Organ-specific toxicity. TLV: Threshold Limit Value.
TWATLV: Threshold Limit Value for 8-hour weighted average. (ACGIH Standards). vPvB: Very persistent and very bioaccumulative
WGK: Water hazard class (Germany).

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: identification of hazards
- SECTION 3: Composition/information on ingredients
- SECTION 4: first aid measures
- SECTION 5: Fire fighting measures
- SECTION 6: Accidental release measures
- SECTION 7: handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: physical and chemical properties
- SECTION 10: stability and reactivity
- SECTION 11: toxicological information
- SECTION 12: ecological information
- SECTION 13: Disposal considerations
- SECTION 14: transport information
- SECTION 15: Regulatory information