Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

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

1.1. **product identifiers**

Article No. (manufacturer/supplier)	369
Trade name/designation	DUROPON 2K-PUR Bodenfarbe DS DD-369 MV: 5/1 mit 908

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

1.3. **Details of the supplier of the safety data sheet**

supplier (manufacturer/importer/downstream user/distributor)
Vismara Unternehmungen CH-5000 Aarau www.farbladen.ch

Department responsible for information:
laboratory Manager

E-mail (competent person)	info@knuchel.ch

1.4. **Emergency telephone number**

Emergency telephone number	145 (+41 (0)44 251 51 51)

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture**

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. **Label elements**

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

Hazard pictograms

Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe vapour.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Xylene
Methyl methacrylate
maleic anhydride
reaction product of sunflower-oil fatty acids, tall-oil fatty acids and maleic anhydride
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)

Supplemental hazard information

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. **Other hazards**

No information available.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**

Description solvent-based acrylic resin, containing the following hazardous substances:

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

EC No. CAS No. Index No.	REACH No. Designation classification // Remark	weight-%
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32 Xylene Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / STOT SE 3 H335 / STOT RE 2 H373 / Asp. Tox. 1 H304 / Flam. Liq. 3 H226	10 - 15
204-658-1 123-86-4 607-025-00-1	01-2119485493-29 n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336 / EUH066	5 - 10
918-668-5	01-2119455851-35 Hydrocarbons, C9, aromatics, <0.1% benzene STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411	5 - 10
202-849-4 100-41-4 601-023-00-4	01-2119489370-35 ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 / STOT RE 2 H373 / Asp. Tox. 1 H304	1 - 5
203-625-9 108-88-3 601-021-00-3	01-2119471310-51 Toluene Flam. Liq. 2 H225 / Repr. 2 H361 / Asp. Tox. 1 H304 / STOT RE 2 H373 / Skin Irrit. 2 H315 / STOT SE 3 H336	1 - 5
915-687-0 1065336-91-5	01-2119491304-40 Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Skin Sens. 1 H317 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	1 - 5

400-830-7 607-176-00-3	01-0000015075-76 reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxy poly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2 H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) Skin Sens. 1 H317 / Aquatic Chronic 2 H411	1 - 5
201-297-1 80-62-6 607-035-00-6	01-2119452498-28 Methyl methacrylate Flam. Liq. 2 H225 / STOT SE 3 H335 / Skin Irrit. 2 H315 / Skin Sens. 1 H317	0.1 - 0.5
288-306-2 85711-46-2	01-2119976378-19 reaction product of sunflower-oil fatty acids, tall-oil fatty acids and maleic anhydride Skin Irrit. 2 H315 / Skin Sens. 1 H317	0.1 - 0.5
203-571-6 108-31-6 607-096-00-9	01-2119463268-32 maleic anhydride Acute Tox. 4 H302 / STOT RE 1 H372 / Skin Corr. 1B H314 / Eye Dam. 1 H318 / Resp. Sens. 1 H334 / Skin Sens. 1A H317 / EUH071 Specific concentration limit (SCL): Skin Sens. 1A H317 >= 0.001	0.001 - 0.005

Additional information
Full text of classification: see section 16

SECTION 4: First aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation
Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact
Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. **Most important symptoms and effects, both acute and delayed**
In all cases of doubt, or when symptoms persist, seek medical advice.

4.3. **Indication of any immediate medical attention and special treatment needed**
First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media
alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media
strong water jet

5.2. **Special hazards arising from the substance or mixture**
Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**
Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**
Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. **Environmental precautions**
Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. **Methods and material for containment and cleaning up**
Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**
Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information
Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. **Conditions for safe storage, including any incompatibilities**

Requirements for storage rooms and vessels
Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

Hints on joint storage
Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions
Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. **Specific end use(s)**
Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**
Occupational exposure limit values:

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7

WEL, TWA: 220 mg/m3; 50 ppm
WEL, STEL: 441 mg/m3; 100 ppm
Remark: (may be absorbed through the skin)

BMGV, TWA: 650 mmol/mol creatinine
Remark: methyl hippuric acid; urine; end of exposure or end of shift

ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4

WEL, TWA: 441 mg/m3; 100 ppm
WEL, STEL: 552 mg/m3; 125 ppm
Remark: (may be absorbed through the skin)

Toluene
Index No. 601-021-00-3 / EC No. 203-625-9 / CAS No. 108-88-3

WEL, TWA: 191 mg/m3; 50 ppm
WEL, STEL: 384 mg/m3; 100 ppm
Remark: (may be absorbed through the skin)

Methyl methacrylate
Index No. 607-035-00-6 / EC No. 201-297-1 / CAS No. 80-62-6

WEL, TWA: 208 mg/m3; 50 ppm
WEL, STEL: 416 mg/m3; 100 ppm

maleic anhydride
Index No. 607-096-00-9 / EC No. 203-571-6 / CAS No. 108-31-6

WEL, TWA: 1 mg/m3
WEL, STEL: 3 mg/m3

Additional information
TWA : Long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

DNEL:

Toluene
Index No. 601-021-00-3 / EC No. 203-625-9 / CAS No. 108-88-3
DNEL long-term dermal (systemic), Workers: 384 mg/kg bw/day
DNEL acute inhalative (local), Workers: 384 mg/m³
DNEL acute inhalative (systemic), Workers: 384 mg/m³
DNEL long-term inhalative (local), Workers: 192 mg/m³
DNEL long-term inhalative (systemic), Workers: 192 mg/m³
DNEL long-term oral (repeated), Consumer: 8,13 mg/kg bw/day
DNEL long-term dermal (systemic), Consumer: 226 mg/kg bw/day
DNEL acute inhalative (local), Consumer: 226 mg/m³
DNEL acute inhalative (systemic), Consumer: 226 mg/m³
DNEL long-term inhalative (local), Consumer: 56,5 mg/m³
DNEL long-term inhalative (systemic), Consumer: 56,5 mg/m³

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
DNEL long-term dermal (systemic), Workers: 212 mg/kg bw/day
DNEL acute inhalative (local), Workers: 442 mg/m³
DNEL acute inhalative (systemic), Workers: 442 mg/m³
DNEL long-term inhalative (local), Workers:
DNEL long-term inhalative (systemic), Workers: 221 mg/m³
DNEL long-term oral (repeated), Consumer: 12,5 mg/kg bw/day
DNEL long-term dermal (systemic), Consumer: 125 mg/kg bw/day
DNEL acute inhalative (local), Consumer: 260 mg/m³
DNEL acute inhalative (systemic), Consumer: 260 mg/m³
DNEL long-term inhalative (local), Consumer: 65,3 mg/m³
DNEL long-term inhalative (systemic), Consumer: 65,3 mg/m³

ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
DNEL long-term dermal (systemic), Workers: 180 mg/kg bw/day
DNEL long-term inhalative (systemic), Workers: 77 mg/m³
DNEL long-term oral (repeated), Consumer: 1,6 mg/kg bw/day
DNEL long-term inhalative (systemic), Consumer: 15 mg/m³

n-butyl acetate
Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
DNEL short-term oral (acute), Workers:
DNEL long-term inhalative (systemic), Workers: 480 mg/m³

DNEL long-term inhalative (systemic), Consumer: 102,34 mg/m³

PNEC:

Toluene
Index No. 601-021-00-3 / EC No. 203-625-9 / CAS No. 108-88-3
PNEC aquatic, freshwater: 0,68 mg/L
PNEC aquatic, marine water: 0,68 mg/L
PNEC sediment, freshwater: 16,39 mg/kg
PNEC sediment, marine water: 16,39 mg/kg
PNEC, soil: 2,89 mg/kg
PNEC sewage treatment plant (STP): 13,61 mg/L
PNEC Waters, sporadic release: 0,68 mg/L

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
PNEC aquatic, freshwater: 0,327 mg/L
PNEC aquatic, marine water: 0,327 mg/L
PNEC sediment, freshwater: 12,46 mg/kg
PNEC sediment, marine water: 12,46 mg/kg
PNEC sewage treatment plant (STP): 6,58 mg/L
soil: 2,31 mg/kg

ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
PNEC aquatic, freshwater: 0,1 mg/L
PNEC aquatic, marine water: 0,01 mg/L
PNEC sediment, freshwater: 13,7 mg/kg
PNEC sediment, marine water: 1,37 mg/kg
PNEC, soil: 2,68 mg/kg
PNEC sewage treatment plant (STP): 9,6 mg/L

n-butyl acetate
Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
PNEC aquatic, freshwater: 0,18 mg/L
PNEC aquatic, marine water: 0,018 mg/L
PNEC aquatic, intermittent release: 0,36 mg/L
PNEC sediment, freshwater: 0,981 mg/kg Sediment dry weight
PNEC sediment, marine water: 0,0981 mg/kg Sediment dry weight
PNEC, soil: 0,0903 mg/kg Sediment dry weight
PNEC sewage treatment plant (STP): 35,6 mg/L

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)
Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. **Information on basic physical and chemical properties**

Physical state:	**Liquid**
Colour:	**refer to label**
Odour:	**characteristic**
Odour threshold:	**not applicable**
Melting point/freezing point:	**not applicable**
Initial boiling point and boiling range:	**126 °C** Source: n-butyl acetate
Flammability:	**Highly flammable liquid and vapour.**
Lower and upper explosion limit:	
Lower explosion limit:	**1 Vol-%**
Upper explosion limit:	**8 Vol-%** Source: Xylene
Flash point:	**22 °C** Method: DIN 53213
Auto-ignition temperature:	**370 °C** Source: n-butyl acetate
Decomposition temperature:	**not applicable**
pH at 20 °C:	**not applicable**
Cinematic viscosity (40°C):	**> 700 mm²/s**
Viscosity at 20 °C:	**45 s 6 mm** Method: DIN 53211
Solubility(ies):	
Water solubility at 20 °C:	**insoluble**
Partition coefficient: n-octanol/water:	**see section 12**
Vapour pressure at 20 °C:	**13 mbar** Source: n-butyl acetate
Density and/or relative density:	
Density at 20 °C:	**1.29 g/cm³**
Relative vapour density:	**not applicable**
particle characteristics:	**not applicable**

9.2. **Other information**

Solid content:	**68 weight-%**
solvent content:	
Organic solvents:	**32 weight-%**
Water:	**0 weight-%**

SECTION 10: Stability and reactivity

10.1. **Reactivity**
No information available.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**
Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**
not applicable

10.6. **Hazardous decomposition products**

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity

Toluene
oral, LD50, Rat: 636 mg/kg
Neurotoxicology. Vol. 2, Pg. 567, 1981
dermal, LD50, Rat: 12200 mg/kg
American Industrial Hygiene Association Journal. Vol. 30, Pg. 470, 1969
inhalative (vapours), LC50, Rat: 28,1 mg/L (4 h)
Method: OECD 403
oral, LD50, Rat, male: 5580 mg/kg
Method: EU Test B.1
dermal, LD50, Rabbit, male: > 5000

Xylene
oral, LD50, Rat, male: 5,523 mg/kg
Method: EU Test B.1
inhalative (vapours), LC50, Rat, male: 6700 ppm (4 h)

ethylbenzene
oral, LD50, Rat: 3,5 mg/kg
dermal, LD50, Rabbit: 15,4 mg/kg

n-butyl acetate
oral, LD50, Rat: 10760 mg/kg
Method: OECD 423
dermal, LD50, Rabbit: 14112 mg/kg
Method: OECD 402
inhalative (dust and mist), LC50, Rat: 23,4 mg/L (4 h)
Method: OECD 403

Hydrocarbons, C9, aromatics, <0.1% benzene
oral, LD50, Rat: 3492 mg/kg
dermal, LD50, Rabbit: > 3160 mg/kg
inhalative (vapours), LC50, Rat: 6 mg/m³ 10 (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

ethylbenzene
Skin, Rabbit (24 h)
Causes mild skin irritation.
eyes, Rabbit
Causes slight eye irritation

n-butyl acetate
Skin, Rabbit (4 h)
Method: OECD 404
No skin irritation
eyes
Method: OECD 405
No eye irritation

Hydrocarbons, C9, aromatics, <0.1% benzene
Skin (4 h)
Method: OECD 404
Not to be classified as skin etching/irritant.
eyes
Method: OECD 405
Not to be classified as severe eye damage or eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

n-butyl acetate
Skin, Guinea pig: ; Evaluation not sensitising.
Method: OECD 406
Mouse mouse ear swelling test (MEST)

Hydrocarbons, C9, aromatics, <0.1% benzene
Skin:
Method: OECD 406
Not to be classified as skin sensitising.
Respiratory system:
No data available

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

ethylbenzene
Germ cell mutagenicity; Evaluation negative
Hamster; Mouse; ovaries
Carcinogenicity; Evaluation Carc. Cat. 2
Method: Group II B (IARC): Possible carcinogenic to humans (ethylbenzene)
human

n-butyl acetate
Germ cell mutagenicity; Evaluation Ames test negative.

Hydrocarbons, C9, aromatics, <0.1% benzene
Germ cell mutagenicity
Not to be classified as germ cell mutagen (mutagen).
Carcinogenicity
There are in vivo studies that indicate positive results of kidney cancer.
Reproductive toxicity
Does not qualify as a carcinogen.
In vitro mutagenicity; Evaluation positive

STOT-single exposure; STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Xylene
Specific target organ toxicity (repeated exposure)
Liver and kidney damage; central nervous system
Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Liver and kidney damage; central nervous system; hearing organs

ethylbenzene
Repeated dose toxicity, Rat: 75 mg/kg
Method OECD 407
RTECS-no.:; DA0700000
Depression of central nervous system
movement disorders; headache; Vomiting

n-butyl acetate
Specific target organ toxicity (single exposure)
central nervous system; May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)
human; Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).; Steam in high concentration leads to unconsciousness.

Hydrocarbons, C9, aromatics, <0.1% benzene
Specific target organ toxicity (single exposure)
May cause respiratory irritation and depression of central nervous system with drowsiness, dizziness, weakness, loss of consciousness, nausea and headache.
Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

n-butyl acetate
Aspiration hazard; Evaluation No classification for aspiration toxicity

Hydrocarbons, C9, aromatics, <0.1% benzene
Aspiration hazard
May be fatal if swallowed and enters airways.

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

11.2. **Information on other hazards**

Endocrine disrupting properties
No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
Do not allow to enter into surface water or drains.

12.1. **Toxicity**

Toluene
Fish toxicity, LC50, Oncorhynchus kisutch (silver salmon): 5,5 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia pulex (water flea): 3,78 mg/L (48 h)
Algae toxicity, EC50, Chlamydomonas angulosa: 134 mg/L (3 h)
Bacteria toxicity, EC50, Nitrosomonas sp: 84 mg/L (24 h)

Xylene
Fish toxicity, LC50, fish: 2,6 mg/L (96 h)
Method: OECD 203
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4,6 mg/L (72 h)
Method: OECD 201
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 4,6 mg/L (72 h)
Method: OECD 201
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout) (96 h)
Method: OECD 203
Daphnia toxicity, IC50, Daphnia magna: 1 mg/L (24 h)
Method: OECD 202
Algae toxicity, EC50, Selenastrum capricornutum: 2,2 mg/L (73 h)
Method: OECD 201
Daphnia toxicity, growth test (Eb-Cx) 10%“ , Daphnia magna: 1,91 mg/L (21 d)
Method: OECD 211
Bacteria toxicity, NOEC, Activated sludge: 16 mg/L (28 t)
Method: OECD 301 F

ethylbenzene
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 4,2 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea) 1,8 - 2,4 mg/L (48 h)
Algae toxicity, EC50, Skeletonema costatum: 4,9 mg/L (72 h)
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 7,2 mg/L (48 h)
Shellfish Toxicity, LC50, Mysidopsis bahia: > 5,2 mg/L (48 h)
Toxicity of Microoganisms, EC50, microorganisms: 96 mg/L (24 h)

n-butyl acetate
Fish toxicity, LC50, Pimephales promelas (fathead minnow): 18 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 44 mg/L (48 h)

Algae toxicity, ErC50
Algae toxicity, EC50, Desmodesmus subspicatus: 647,7 mg/L (72 h)
(Growth inhibition)
Algae toxicity, NOEC, Desmodesmus subspicatus: 200 mg/L
Bacteria toxicity, IC50, Tetrahymena: 356 mg/L (40 h)

Hydrocarbons, C9, aromatics, <0.1% benzene
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 9,2 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna: 1,6 mg/L (48 h)

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Fish toxicity, LC50 (96 h)

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Toluene
Fish toxicity, NOEC, Oncorhynchus kisutch (silver salmon): 1,39 mg/L (40 d)
Daphnia toxicity, NOEC, Daphnia pulex (water flea): 0,74 mg/L (7 d)
Fish toxicity, LOEC:, Oncorhynchus kisutch (silver salmon): 2,77 mg/L (40 d)

Xylene
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4,36 mg/L (73 h)
Method: OECD 201
Fish toxicity, NOEC, fish: > 1,3 mg/L (56 d)
Daphnia toxicity, NOEC, Daphnia pulex (water flea): 1,17 mg/L (7 d)
Method: US EPA 600/4-91-003
Daphnia toxicity, EL50, Daphnia magna: 2,9 mg/L (21 d)
Method: OECD 211
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 2,2 mg/L (73 h)
Method: OECD 201
Daphnia toxicity, LOEC:, Daphnia magna (Big water flea): 3,16 mg/L (21 d)
Method: OECD 211
Algae toxicity, growth test (Eb-Cx) 10%“ , Pseudokirchneriella subcapitata: 0,72 mg/L (73 h)
Method: OECD 201

ethylbenzene
Daphnia toxicity, NOEC, Ceriodaphnia dubia (Wasserfloh): 0,96 mg/L (7 d)
Daphnia toxicity, LC50, Ceriodaphnia dubia (Wasserfloh): 3,6 mg/L (7 d)
Bacteria toxicity, EC50, Nitrosomonas sp: 96 mg/L (24 h)
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 3,4 mg/L (96 h)
Daphnia toxicity, LOEC:, Ceriodaphnia dubia (Wasserfloh): 1,7 mg/L (7 d)

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate
Fish toxicity, LC50 (96 h)

12.2. **Persistence and degradability**

Toluene
Persistence and degradability: Evaluation Rapid photochemical oxidation in air
Biodegradation: 86 percent (20 d)
Readily biodegradable (according to OECD criteria)

Xylene
Persistence and degradability:
Method: Rapid photochemical oxidation in air
Biodegradation: 98 percent (28 d)
Readily biodegradable (according to OECD criteria)

ethylbenzene
Biodegradation, aerobic: 70 - 80 percent (28 d); Evaluation Readily biodegradable (according to OECD criteria)

n-butyl acetate
Persistence and degradability: Evaluation No data available
Biodegradation: 83 percent (28 d); Evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301D
aerobic.

Hydrocarbons, C9, aromatics, <0.1% benzene
Biodegradation: Evaluation Readily biodegradable (according to OECD criteria).

12.3. **Bioaccumulative potential**

Toluene
Distribution coefficient n-octanol/water (log KOW): 2,65
Method: BCF: 90
The product has a low bioaccumulation potential

Xylene
Distribution coefficient n-octanol/water (log KOW): 3,49

ethylbenzene
Distribution coefficient n-octanol/water (log KOW): 3,6

n-butyl acetate
Distribution coefficient n-octanol/water (log KOW):
No data available

Hydrocarbons, C9, aromatics, <0.1% benzene
Distribution coefficient n-octanol/water (log KOW): 3,7 - 4,5

Bioconcentration factor (BCF)

Toluene
Bioconcentration factor (BCF): 90 ; Evaluation The product has a low bioaccumulation potential

12.4. **Mobility in soil**

Toluene
Water: Evaluation Floats on the water
soil: Evaluation Mobile in the ground

Xylene
soil: Evaluation Absorbs slowly into the soil
Water: Evaluation Floats on the water

n-butyl acetate
:
No data available

Hydrocarbons, C9, aromatics, <0.1% benzene
soil:
No data available

12.5. **Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. **Endocrine disrupting properties**
No information available.

12.7. **Other adverse effects**
No information available.

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

Appropriate disposal / Product
Recommendation
Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

List of proposed waste codes/waste designations in accordance with EWC
080111* Waste paint and varnish containing organic solvents or other dangerous substances
*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package
Recommendation
Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. **UN number or ID number**

UN 1263

14.2. **UN proper shipping name**

Land transport (ADR/RID):	Paint
Sea transport (IMDG):	PAINT
Air transport (ICAO-TI / IATA-DGR):	Paint

14.3. **Transport hazard class(es)**

3

14.4. **Packing group**

Land transport (ADR/RID):	III
for packages > 450 litres:	II
Sea transport (IMDG):	III
for packages > 450 litres:	II
Air transport (ICAO-TI / IATA-DGR):	III
for packages > 30 litres:	II

14.5. **Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

14.6. **Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code	E
for packages > 450 litres:	D/E

Sea transport (IMDG)

EmS-No.	F-E, S-E

14.7. **Maritime transport in bulk according to IMO instruments**

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]
VOC-value (in g/L): 416

National regulations

Restrictions of occupation
Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

15.2. **Chemical Safety Assessment**
For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
215-535-7 1330-20-7	Xylene	01-2119488216-32
204-658-1 123-86-4	n-butyl acetate	01-2119485493-29
918-668-5	Hydrocarbons, C9, aromatics, <0.1% benzene	01-2119455851-35
202-849-4 100-41-4	ethylbenzene	01-2119489370-35
203-625-9 108-88-3	Toluene	01-2119471310-51
915-687-0 1065336-91-5	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	01-2119491304-40

400-830-7	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)	01-0000015075-76
201-297-1 80-62-6	Methyl methacrylate	01-2119452498-28
288-306-2 85711-46-2	reaction product of sunflower-oil fatty acids, tall-oil fatty acids and maleic anhydride	01-2119976378-19
203-571-6 108-31-6	maleic anhydride	01-2119463268-32

SECTION 16: Other information

Full text of classification in section 3

Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Repr. 2 / H361	Reproductive toxicity	Suspected of damaging the unborn child.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
STOT RE 1 / H372	STOT-repeated exposure	Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Skin Corr. 1B / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Resp. Sens. 1 / H334	Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1A / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 2	Flammable liquids	On basis of test data.
Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Irrit. 2	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
STOT RE 2	STOT-repeated exposure	Calculation method.
Aquatic Chronic 3	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic

DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.