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

1.1 Product identifier

Perfect-Fill, Dickschicht Füller – grau
Article number: PFL1045

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

1.2.1 Relevant uses

Fillers
Primer

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Voelkel Industrie Produkte GmbH
Rudolf-Diesel-Strasse 11
86551 Aichach / GERMANY
Phone +49 (0) 8251 9047 5 0
Fax +49 (0) 8251 9047 5 99
Homepage www.vip-gmbh.com
E-mail info@vip-gmbh.com

Address enquiries to

Technical information info@vip-gmbh.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Skin Irrit. 2: H315 Causes skin irritation.
Skin Sens. 1: H317 May cause an allergic skin reaction.
Eye Irrit. 2: H319 Causes serious eye irritation.
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H336 May cause drowsiness or dizziness.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms

Signal word DANGER

Contains: Butanone

Xylene, mixture of isomers

Fatty acids, C14-18 and C16-18-unsatd., maleated

Maleic anhydride

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H336 May cause drowsiness or dizziness.

Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.
P260 Do not breathe spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection / face protection.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national regulation.
ca. 32,27 % of the mixture consists of ingredient(s) of unknown toxicity (inhalative).

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

2.3 Other hazards

Physico-chemical hazards Heat causes increase in pressure and risk of bursting.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
25 - 50	Butanone
	CAS: 78-93-3, EINECS/ELINCS: 201-159-0, EU-INDEX: 606-002-00-3, Reg-No.: 01-2119457290-43-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336 - EUH066
30 - 50	Petroleum gases, liquefied (< 0,1% 1,3-butadiene)
	CAS: 68476-85-7, EINECS/ELINCS: 270-704-2, EU-INDEX: 649-202-00-6
	GHS/CLP: Flam. Gas 1: H220 - Press. Gas (Liquefied gas): H280
5 - 20	Xylene, mixture of isomers
	CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
	GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H332 - Acute Tox. 4: H312 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Asp. Tox. 1: H304 - STOT SE 3: H335 - STOT RE 2: H373
5 - 10	Titanium dioxide (<10µm)
	CAS: 13463-67-7, EINECS/ELINCS: 236-675-5, EU-INDEX: 022-006-002, Reg-No.: 01-2119489379-17-XXXX
	GHS/CLP: Carc. 2: H351
3 - 5	Ethylbenzene
	CAS: 100-41-4, EINECS/ELINCS: 202-849-4, EU-INDEX: 601-023-00-4, Reg-No.: 01-2119489370-35-XXXX
	GHS/CLP: Flam. Liq. 2: H225 - Acute Tox. 4: H332 - Asp. Tox. 1: H304 - STOT RE 2: H373
0,1 - 0,25	Fatty acids, C14-18 and C16-18-unsatd., maleated
	CAS: 85711-46-2, EINECS/ELINCS: 288-306-2, Reg-No.: 01-2119976378-19-XXXX
	GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317
0,001 - < 0,1	Maleic anhydride
	CAS: 108-31-6, EINECS/ELINCS: 203-571-6, EU-INDEX: 607-096-00-9, Reg-No.: 01-2119472428-31-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Corr. 1B: H314 - Eye Dam. 1: H318 - Skin Sens. 1A: H317 - Resp. Sens. 1: H334 - STOT RE 1: H372 - EUH071
	SCL [%]: >=0,001: Skin Sens. 1A: H317

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
If skin irritation or rash occurs: Get medical advice/attention.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Get medical advice.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects
Allergic reactions
Drowsiness
Dizziness

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media foam, dry powder, water spray jet, carbon dioxide

Extinguishing media that must not be used Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Bursting aerosols can be forcibly projected from a fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Cool containers at risk with water spray jet.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.
Wear suitable protective equipment. For personal protection see SECTION 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid spilling or spraying in enclosed areas.
Avoid contact with eyes and skin. Use personal protective equipment.

Keep away from open flames, hot surfaces and sources of ignition.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.
Do not pierce or burn, even after use.
Take precautionary measures against static discharges.
Use explosion-proofed equipment/fittings and non-sparkling tools.

Do not eat, drink, smoke or take drugs at work.
Take off contaminated clothing and wash before reuse.
Wash hands before breaks and after work.
Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep container tightly closed.
Keep container in a well-ventilated place.
Keep away from heat, sparks and open flames.
Protect from sun.
Keep in a cool place, heat causes increase in pressure and risk of bursting.
Recommended storage temperature: < 25 °C

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Xylene, mixture of isomers
CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
Long-term exposure: 50 ppm, 220 mg/m³, Sk, BMGV
Short-term exposure (15-minute): 100 ppm, 441 mg/m³
Titanium dioxide (<10µm)
CAS: 13463-67-7, EINECS/ELINCS: 236-675-5, EU-INDEX: 022-006-002, Reg-No.: 01-2119489379-17-XXXX
Long-term exposure: 4 mg/m³, respirable; total inhalable: TWA=10 mg/m³
Petroleum gases, liquefied (< 0,1% 1,3-butadiene)
CAS: 68476-85-7, EINECS/ELINCS: 270-704-2, EU-INDEX: 649-202-00-6
Long-term exposure: 1000 ppm, 1750 mg/m³, Carc (only applies if LPG contains more than 0.1% of buta-1,3-diene)
Short-term exposure (15-minute): 1250 ppm, 2180 mg/m³
Ethylbenzene
CAS: 100-41-4, EINECS/ELINCS: 202-849-4, EU-INDEX: 601-023-00-4, Reg-No.: 01-2119489370-35-XXXX
Long-term exposure: 100 ppm, 441 mg/m³, Sk
Short-term exposure (15-minute): 125 ppm, 552 mg/m³
Butanone
CAS: 78-93-3, EINECS/ELINCS: 201-159-0, EU-INDEX: 606-002-00-3, Reg-No.: 01-2119457290-43-XXXX
Long-term exposure: 200 ppm, 600 mg/m³, Sk, BmgV
Short-term exposure (15-minute): 300 ppm, 899 mg/m³
Maleic anhydride
CAS: 108-31-6, EINECS/ELINCS: 203-571-6, EU-INDEX: 607-096-00-9, Reg-No.: 01-2119472428-31-XXXX
Long-term exposure: 1 mg/m³, Sen
Short-term exposure (15-minute): 3 mg/m³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Xylene, mixture of isomers
CAS: 1330-20-7, EINECS/ELINCS: 215-535-7, EU-INDEX: 601-022-00-9, Reg-No.: 01-2119488216-32-XXXX
Eight hours: 50 ppm, 221 mg/m³, H
Short-term (15-minute): 100 ppm, 442 mg/m³
Ethylbenzene
CAS: 100-41-4, EINECS/ELINCS: 202-849-4, EU-INDEX: 601-023-00-4, Reg-No.: 01-2119489370-35-XXXX
Eight hours: 100 ppm, 442 mg/m³, H
Short-term (15-minute): 200 ppm, 884 mg/m³
Butanone
CAS: 78-93-3, EINECS/ELINCS: 201-159-0, EU-INDEX: 606-002-00-3, Reg-No.: 01-2119457290-43-XXXX
Eight hours: 600 mg/m³
Short-term (15-minute): 300 ppm, 900 mg/m³

DNEL

Substance
Butanone, CAS: 78-93-3
Industrial, dermal, Long-term - systemic effects, 1161 mg/kg bw/day,
Industrial, inhalative (vapor), Long-term - systemic effects, 600 mg/m³,
general population, oral, Long-term - systemic effects, 31 mg/kg bw/day,
general population, dermal, Long-term - systemic effects, 412 mg/kg bw/day,
general population, inhalative (vapor), Long-term - systemic effects, 106 mg/m³,
Ethylbenzene, CAS: 100-41-4
Industrial, inhalative, Long-term - systemic effects, 77 mg/m³,
Industrial, inhalative, Acute - local effects, 293 mg/m³,
Industrial, dermal, Long-term - systemic effects, 180 mg/kg bw/day,
general population, inhalative, Long-term - systemic effects, 15 mg/m³,
general population, oral, Long-term - systemic effects, 1,6 mg/kg bw/day,
Titanium dioxide (<10µm), CAS: 13463-67-7
Industrial, inhalative (dust), Long-term - local effects, 10 mg/m³,
general population, oral, Long-term - systemic effects, 700 mg/kg/day,
Xylene, mixture of isomers, CAS: 1330-20-7
Industrial, dermal, Long-term - systemic effects, 180 mg/kg bw/d,
Industrial, inhalative, Acute - local effects, 289 mg/m³,
Industrial, inhalative, Long-term - systemic effects, 77 mg/m³,
Industrial, inhalative, Acute - systemic effects, 289 mg/m³,
general population, oral, Long-term - systemic effects, 1,6 mg/kg bw/d,
general population, inhalative, Acute - local effects, 174 mg/m³,
general population, inhalative, Acute - systemic effects, 174 mg/m³,
general population, inhalative, Long-term - systemic effects, 14,8 mg/m³,
general population, dermal, Long-term - systemic effects, 108 mg/kg bw/d,
Maleic anhydride, CAS: 108-31-6
Industrial, inhalative, Long-term - local effects, 320 µg/m³,
Industrial, dermal, Long-term - systemic effects, 200 µg/kg bw/day,
Industrial, dermal, Acute - systemic effects, 200 µg/kg bw/day,
Industrial, inhalative, Acute - systemic effects, 800 µg/m³,
Industrial, inhalative, Long-term - systemic effects, 190 µg/m³,
general population, oral, Long-term - systemic effects, 60 µg/kg bw/day,
general population, inhalative, Long-term - local effects, 80 µg/m³,
general population, dermal, Acute - systemic effects, 100 µg/kg bw/day,
general population, dermal, Long-term - systemic effects, 100 µg/kg bw/day,
general population, oral, Acute - systemic effects, 100 µg/kg bw/day,
general population, inhalative, Long-term - systemic effects, 50 µg/m³,
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
Industrial, dermal, Long-term - systemic effects, 3 mg/kg bw/day,
general population, dermal, Long-term - systemic effects, 1,5 mg/kg bw/day,
general population, oral, Long-term - systemic effects, 1,5 mg/kg bw/day,

PNEC

Substance
Butanone, CAS: 78-93-3
sediment (seawater), 284,74 mg/kg,

freshwater, 55,8 mg/L,
seawater, 55,8 mg/L,
sediment (freshwater), 284,74 mg/kg,
soil, 22,5 mg/kg,
oral (food), 1000 mg/kg,
sewage treatment plants (STP), 709 mg/L,
Ethylbenzene, CAS: 100-41-4
soil, 2,68 mg/kg soil dw,
freshwater, 0,1 mg/l,
sediment, 0,01 mg/l,
sewage treatment plants (STP), 9,6 mg/l,
sediment (freshwater), 13,7 mg/kg sediment dw,
sediment (seawater), 1,37 mg/kg sediment dw,
Titanium dioxide (<10µm), CAS: 13463-67-7
oral (food), 1667 mg/kg,
soil, 100 mg/kg,
sediment (seawater), 100 mg/kg,
sediment (freshwater), 1000 mg/kg,
sewage treatment plants (STP), 100 mg/l,
seawater, 1 mg/l,
freshwater, 0,127 mg/l,
Xylene, mixture of isomers, CAS: 1330-20-7
soil, 2,31 mg/kg dw,
seawater, 0,327 mg/l,
freshwater, 0,327 mg/l,
sewage treatment plants (STP), 6,58 mg/l,
sediment (seawater), 12,46 mg/kg,
sediment (freshwater), 12,46 mg/kg,
Maleic anhydride, CAS: 108-31-6
soil, 10 - 41,5 µg/kg soil dw,
freshwater, 75 - 100 µg/L,
seawater, 7,5 - 10 µg/L,
sewage treatment plants (STP), 4,46 - 44,6 mg/L,
sediment (freshwater), 60 - 334 µg/kg sediment dw,
sediment (seawater), 6 - 33,4 µg/kg sediment dw,
oral (food), 6,67 mg/kg food,

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Tightly fitting goggles. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,11 mm Nitrile rubber, >480 min (EN 374-1/-2/-3). > 0,11 mm Butyl rubber, >480 min (EN 374-1/-2/-3).
Skin protection	Solvent-resistant protective clothing (EN 340)
Other	Do not breathe vapour/spray. Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, filter A. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	aerosol
Color	grey
Odor	characteristic
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	Extremely flammable aerosol.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	0,771 - 0,774
Bulk density [kg/m³]	not applicable
Solubility in water	not applicable
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Auto-ignition temperature	not applicable
Decomposition temperature [°C]	not applicable
Particle characteristics	Titanium dioxide: ≤10µm

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Heat causes increase in pressure and risk of bursting.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

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

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.
In the event of fire: See SECTION 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Product
ATE-mix, oral, > 2000 mg/kg,

Substance
Butanone, CAS: 78-93-3
LD50, oral, Rat, 3300 mg/kg (Lit.),
Ethylbenzene, CAS: 100-41-4
LD50, oral, Rat, 3500 mg/kg,
Titanium dioxide (<10µm), CAS: 13463-67-7
LD50, oral, Rat, > 5000 mg/kg OECD 425,
Xylene, mixture of isomers, CAS: 1330-20-7
LD50, oral, Rat, 4300 mg/kg,
Maleic anhydride, CAS: 108-31-6
LD50, oral, Rat, 1 090 mg/kg bw,
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
LD50, oral, > 2000 mg/kg,

Acute dermal toxicity

Product
ATE-mix, dermal, > 2000 mg/kg,

Substance
Butanone, CAS: 78-93-3
LD50, dermal, Rabbit, > 5000 mg/kg (Lit.),
Ethylbenzene, CAS: 100-41-4
LD50, dermal, Rabbit, 17800 mg/kg,
Titanium dioxide (<10µm), CAS: 13463-67-7
LD50, dermal, Rabbit, > 5000 mg/kg,
Xylene, mixture of isomers, CAS: 1330-20-7
LD50, dermal, Rabbit, 4300 mg/kg,
Maleic anhydride, CAS: 108-31-6
LD50, dermal, Rabbit, 2 620 mg/kg bw,
Fatty acids, C14-18 and C16-18-unsatd., maleated, CAS: 85711-46-2
LD50, dermal, > 2000 mg/kg,

Acute inhalational toxicity

Product
ATE-mix, inhalative, > 20 mg/l/4h,

Substance
Butanone, CAS: 78-93-3
LC50, inhalative, Rat, > 20 mg/l/4h (Lit.),

Petroleum gases, liquefied (< 0,1% 1,3-butadiene), CAS: 68476-85-7
LC50, inhalative, Rat, > 20 mg/l/4h,
Ethylbenzene, CAS: 100-41-4
LC50, inhalative, Rat, 17,2 mg/l (4 h),
Titanium dioxide (<10µm), CAS: 13463-67-7
LC50, inhalativ (dust), Rat, > 6,8 mg/l 4h,
Xylene, mixture of isomers, CAS: 1330-20-7
LC50, inhalative, Rat, 27 - 47 mg/l (4 h),
Maleic anhydride, CAS: 108-31-6
LC50, inhalative, Rat, 4,35 mg/m³ (1 h),

Serious eye damage/irritation
Irritant
Calculation method

Substance
Butanone, CAS: 78-93-3
Rabbit, OECD 405, irritant,

Skin corrosion/irritation
Irritant
Calculation method

Respiratory or skin sensitisation
May cause an allergic skin reaction.
Calculation method
Classification was carried out based on substance-specific concentration limits.

Specific target organ toxicity — single exposure
Vapours may cause drowsiness and dizziness.
Calculation method

Specific target organ toxicity — repeated exposure
May cause damage to organs through prolonged or repeated exposure.
Calculation method

Substance
Butanone, CAS: 78-93-3
NOAEC, inhalation (vapour), Rat, 5041 ppm, OECD 413,
Ethylbenzene, CAS: 100-41-4
NOAEL, oral, Rat, 75 mg/kg bw/day,
NOAEC, inhalative, Rat, 250 - 1000 ppm,
Xylene, mixture of isomers, CAS: 1330-20-7
NOAEL, oral, Rat, 250 mg/kg bw/day,
NOAEC, inhalative, Rat, 3515 mg/m³,

Mutagenicity
Based on the available information, the classification criteria are not fulfilled.

Reproduction toxicity
Based on the available information, the classification criteria are not fulfilled.

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

Substance
Xylene, mixture of isomers, CAS: 1330-20-7
NOAEL, oral, Rat, 500 mg/kg bw/day,

Aspiration hazard
May be fatal if swallowed and enters airways.
Calculation method

General remarks

Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Butanone, CAS: 78-93-3
LC50, (48h), Leuciscus idus, > 100 mg/l (Lit.),
EC50, (48h), Daphnia magna, > 100 mg/l (Lit.),
Ethylbenzene, CAS: 100-41-4
LC50, (96h), Oncorhynchus mykiss, 4,2 mg/l,
LC50, (96h), Carassius auratus, 94,44 mg/l,
LC50, (96h), Pimephales promelas, 12,1 mg/l,
EC50, (48h), Daphnia magna, 1,8 - 2,9 mg/l,
IC50, (72h), Selenastrum capricornutum, 4,6 mg/l,
Titanium dioxide (<10µm), CAS: 13463-67-7
LC50, (96h), Pimephales promelas, > 1000 mg/l,
LC50, (48h), Daphnia magna, > 100 mg/l,
EC50, (72h), Pseudokirchneriella subcapitata, 16 mg/l,
Xylene, mixture of isomers, CAS: 1330-20-7
LC50, (48h), Leuciscus idus, 86 mg/l,
LC50, (96h), Oncorhynchus mykiss, 14 mg/l,
LC50, (96h), Pimephales promelas, 13,4 mg/l,
EC50, (24h), Daphnia magna, 165 mg/l (OECD 202),
EC50, (48h), Daphnia magna, 1,0 - 4,7 mg/l,
EC50, (72h), Selenastrum capricornutum, 2,6 - 7,6 mg/l,
EC50, Bacteria, 1 - 10 mg/l,
Maleic anhydride, CAS: 108-31-6
LC50, (96h), fish, 75 mg/L,
EC50, (72h), Algae, 74,32 - 150 mg/L,
EC50, (48h), Invertebrates, 42,81 - 330 mg/L,

12.2 Persistence and degradability

Behaviour in environment compartments No information available.

Behaviour in sewage plant No information available.

Biological degradability CAS 78-93-3: Biodegradable.
CAS 1330-20-7: Biodegradable.
CAS 100-41-4: Biodegradable.
CAS 108-31-6: Biodegradable.
CAS 13463-67-7: The methods for determining the boilogical degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

CAS 78-93-3: log Pow 0,3
CAS 1330-20-7: log Pow 3,2
CAS 100-41-4: log Pow 3,6
CAS 108-31-6:log Pow -2,61

12.4 Mobility in soil

CAS 78-93-3: log Koc 1,53
CAS 1330-20-7: log Koc 2,73
CAS 100-41-4: log Koc 2,71
CAS 108-31-6: log Koc 1,63

12.5 Results of PBT and vPvB assessment

CAS 78-93-3 / CAS 100-41-4 / CAS 1330-20-7 / CAS 108-31-6 / CAS 13463-67-7: Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Coordinate disposal with the disposal contractor/authorities if necessary.

Waste no. (recommended) 160504* gases in pressure containers (including halons) containing dangerous substances

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	1950
Inland navigation (ADN)	1950
Marine transport in accordance with IMDG	1950
Air transport in accordance with IATA	1950

14.2 UN proper shipping name

Transport by land according to ADR/RID	Aerosols
- Classification Code	5F
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D)
Inland navigation (ADN)	Aerosols
- Classification Code	5F
- Label	
Marine transport in accordance with IMDG	Aerosols
- EMS	F-D, S-U
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	Aerosols, flammable
- Label	

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	2
Inland navigation (ADN)	2
Marine transport in accordance with IMDG	2.1
Air transport in accordance with IATA	2.1

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available.

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for young people. Annex XVII of the REACH Regulation, restriction 3a), 3b), 40. SEVESO III (Directive 2012/18/EU), Hazard categories in accordance with Regulation (EC) No 1272/2008: P3a FLAMMABLE AEROSOLS
- VOC (2010/75/CE)	79,66%; 600 g/l

15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

EUH071 Corrosive to the respiratory tract.
H372 Causes damage to organs through prolonged or repeated exposure.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H226 Flammable liquid and vapour.
EUH066 Repeated exposure may cause skin dryness or cracking.
H336 May cause drowsiness or dizziness.
H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229 Pressurised container: May burst if heated. (Bridging principle "Aerosols")
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (Bridging principle "Aerosols")

Modified position

SECTION 3 been added: Titanium dioxide (<10µm)

SECTION 2 been added: EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

SECTION 9 been added: Titanium dioxide: ≤10µm

SECTION 11 been added: Calculation method

SECTION 11 been added: May be fatal if swallowed and enters airways.

SECTION 11 deleted: Based on the available information, the classification criteria are not fulfilled.

SECTION 11 been added: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

SECTION 11 deleted: Based on the available information, the classification criteria are not fulfilled.

SECTION 12 been added: The methods for determining the boilogical degradability are not applicable to inorganic substances.

SECTION 12 deleted: