

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 17 Mar 2022

Print date: 19 Aug 2022

Version: 0.2



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REDOCOL Spray Coating (opaque)

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

* 1.1. Product identifier

Trade name/designation:

REDOCOL Spray Coating (opaque)

Article No.:

SD83000

UFI:

1XUD-G7F6-G00G-CF0W

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

Use of the substance/mixture:

Coatings and paints, thinners, paint removers

Relevant identified uses:

Sector of uses [SU]

SU 18: Manufacture of furniture

Product Categories [PC]

PC 9: Coatings and paints, fillers, putties, thinners

Article categories [AC]

AC 11: Wood articles: furniture

1.3. Details of the supplier of the safety data sheet

distributor:

Ostermann UK Ltd

Stonebridge Cross Business Park

Unit 104 Pointon Way

WR9 0LW Droitwich

United Kingdom

Telephone: UK +44 (0) 1905 793 550, Ireland +44 (0) 1905 793 552

Telefax: +44 (0) 1905 793 559

E-mail: UK sales.uk@ostermann.eu, Ireland sales.ie@ostermann.eu

Website: www.ostermann.eu

E-mail (competent person): j.bruns@ostermann.eu

1.4. Emergency telephone number

UK: Mr. J. Bruns +44 1905 793 550

IR: Mr. J. Bruns +44 1905 793 552, 24h: +49 30 - 30 68 67 00 (National Poison Inform. Centre Berlin) , UK +44 1905 793 550/ IR +44 (0)1905 793 552 (Only available during office hours.)

SECTION 2: Hazards identification

* 2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids (<i>Flam. Liq. 2</i>)	H225: Highly flammable liquid and vapour.	
Acute toxicity (oral) (<i>Acute Tox. 4</i>)	H302: Harmful if swallowed.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-single exposure (<i>STOT SE 3</i>)	H336: May cause drowsiness or dizziness.	
Germ cell mutagenicity (<i>Muta. 1B</i>)	H340: May cause genetic defects.	
Carcinogenicity (<i>Carc. 1B</i>)	H350: May cause cancer.	
Reproductive toxicity (<i>Repr. 1B</i>)	H360D: May damage the unborn child.	

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Hazard classes and hazard categories	Hazard statements	Classification procedure
STOT-repeated exposure (STOT RE 2)	H373: May cause damage to organs through prolonged or repeated exposure. (central nervous system)	
Hazardous to the aquatic environment (Aquatic Chronic 2)	H411: Toxic to aquatic life with long lasting effects.	

* 2.2. Label elements

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

Hazard pictograms:



GHS02
Flame



GHS07
Exclamation mark



GHS08
Health hazard



GHS09
Environment

Signal word: Danger

Hazard statements for physical hazards	
H225	Highly flammable liquid and vapour.

Hazard statements for health hazards	
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H360D	May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure. (central nervous system)

Hazard statements for environmental hazards	
H411	Toxic to aquatic life with long lasting effects.

Supplemental hazard information: none

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.

Precautionary statements Response	
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor/First aider/ if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special rules for supplemental label elements for certain mixtures:

- 22,2 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (oral).
- 24,5 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (dermal).
- 31,6 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalative).

2.3. Other hazards

No data available

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description:

Mixture of following listed substances with nonhazardous additions.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 123-86-4 EC No.: 204-658-1 Index No.: 607-025-00-1 REACH No.: 01-2119485493-29-0007	n-butyl acetate Flam. Liq. 3 (H226), STOT SE 3 (H336) Warning EUH066	16 - < 26.79 weight-%
CAS No.: 67-64-1 EC No.: 200-662-2 Index No.: 606-001-00-8 REACH No.: 01-2119471330-49	acetone Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336) Danger EUH066	9 - ≤ 15 weight-%
CAS No.: 108-10-1 EC No.: 203-550-1 Index No.: 606-004-00-4 REACH No.: 01-2119473980-30	4-methylpentan-2-one Acute Tox. 4 (H332), Carc. 2 (H351), Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336) Danger EUH066 Acute Toxicity Estimate ATE (inhalation, vapour): 11 mg/L	8 - < 14.55 weight-%
CAS No.: 74-98-6 EC No.: 200-827-9 REACH No.: 01-2119486944-21-XXXX	propane Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) Danger	4 - ≤ 7.5 weight-%
CAS No.: 78-93-3 EC No.: 201-159-0 Index No.: 606-002-00-3	butanone Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336) Danger EUH066	4 - ≤ 7.5 weight-%
CAS No.: 106-97-8 EC No.: 203-448-7 REACH No.: 01-2119474691-32	butane Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) Danger	3 - ≤ 5 weight-%
CAS No.: 111-76-2 EC No.: 203-905-0 Index No.: 603-014-00-0 REACH No.: 01-2119475108-36	2-butoxyethanol Acute Tox. 4 (H332, H302), Eye Irrit. 2 (H319), Skin Irrit. 2 (H315) Warning Acute Toxicity Estimate ATE (oral): 1,200 mg/kg	1 - ≤ 2.5 weight-%
CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5	ethanol Flam. Liq. 2 (H225) Danger	1 - < 2.34 weight-%
CAS No.: 108-65-6 EC No.: 203-603-9 Index No.: 607-195-00-7	2-methoxy-1-methylethyl acetate Flam. Liq. 3 (H226) Warning	1 - < 1.95 weight-%
CAS No.: 64742-82-1 EC No.: 927-241-2 Index No.: 649-330-00-2 REACH No.: 01-2119471843-32-0000	Hydrocarbons, C9-C10, containing n-alkanes, isoalkanes, cyclics, with <2% aromatics Asp. Tox. 1 (H304), Carc. 1B (H350), Muta. 1B (H340), STOT RE 1 (H372) Danger	0 - < 1.55 weight-%
CAS No.: 70657-70-4 EC No.: 274-724-2 Index No.: 607-251-00-0	2-methoxypropyl acetate Flam. Liq. 3 (H226), Repr. 1B (H360D***), STOT SE 3 (H335) Danger	0 - < 0.51 weight-%
CAS No.: 75-28-5 EC No.: 200-857-2	isobutane Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) Danger	0 - ≤ 0.5 weight-%

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Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 13463-67-7 EC No.: 236-675-5 Index No.: 022-006-00-2 REACH No.: 01-2119489379-17-0000	titanium dioxide Carc. 2 (H351) Warning	0 - < 0.36 weight-%
CAS No.: 64742-95-6 EC No.: 918-668-5 Index No.: 649-356-00-4 REACH No.: 01-2119455851-35	Hydrocarbons, C9, aromatics Asp. Tox. 1 (H304), Carc. 1B (H350), Muta. 1B (H340) Danger	0 - < 0.21 weight-%
CAS No.: 78-83-1 EC No.: 201-148-0 Index No.: 603-108-00-1 REACH No.: 01-2119484609-23	2-methylpropan-1-ol Eye Dam. 1 (H318), Flam. Liq. 3 (H226), STOT SE 3 (H335, H336), Skin Irrit. 2 (H315) Danger	0 - < 0.05 weight-%
CAS No.: 1330-20-7 EC No.: 215-535-7 Index No.: 601-022-00-9 REACH No.: 01-2119488216-32	xylene Acute Tox. 4 (H332, H312), Flam. Liq. 3 (H226), Skin Irrit. 2 (H315) Warning	0 - < 0.03 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician. Get medical advice/attention if you feel unwell.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing.

After eye contact:

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

Following ingestion:

Rinse mouth. Let water be drunk in little sips (dilution effect). Get medical advice/attention if you feel unwell.

Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

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

Serious eye damage/eye irritation, Dizziness, Dizziness.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jet alcohol resistant foam Extinguishing powder Carbon dioxide (CO₂).
Fire extinguishers Fire class B.

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Unsuitable extinguishing media:

Full water jet.

5.2. Special hazards arising from the substance or mixture

Highly flammable, Combustible.

Hazardous combustion products:

In case of fire may be liberated: Carbon monoxide, Carbon dioxide, Pyrolysis products, toxic, carbon black.

In case of fire: Gases/vapours, toxic.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Discharge into the environment must be avoided. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Soak up inert absorbent and dispose as waste requiring special attention. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Clean with detergents. Avoid solvent cleaners. Water (with cleaning agent).

Other information:

Provide adequate ventilation.

6.4. Reference to other sections

Safe handling: see section 7.

Personal protection equipment: see section 8.

Disposal: see section 13.

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Special danger of slipping by leaking/spilling product. Wear personal protection equipment (refer to section 8). Avoid contact during pregnancy/while nursing.

Fire prevent measures:

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Take precautionary measures against static discharge. Keep away from sources of ignition - No smoking.

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Environmental precautions:

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Advices on general occupational hygiene

Wash hands before breaks and after work. After cleaning apply high-fat content skin care cream. When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

Packaging materials:

Keep only in the original container in a cool, well-ventilated place away from highly flammable substances.

Requirements for storage rooms and vessels:

AEROSOLS, flammable

Hints on storage assembly:

Do not store together with: Strong acid, Base.

Storage class (TRGS 510, Germany): 2B - Aerosol dispensers and lighters

Further information on storage conditions:

Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

Industrial sector specific solutions:

Solvent-based varnishes/wood glazes, aromatics removed

GISCODE:

M-KH02

SECTION 8: Exposure controls/personal protection

* 8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
IE	n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	① 50 ppm (241 mg/m ³) ② 150 ppm (723 mg/m ³) ⑤ IOELV
IOELV (EU)	n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	① 50 ppm (241 mg/m ³) ② 150 ppm (723 mg/m ³)
IE	acetone CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,210 mg/m ³) ⑤ IOELV
IOELV (EU)	acetone CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,210 mg/m ³)
WEL (GB)	acetone CAS No.: 67-64-1 EC No.: 200-662-2	① 500 ppm (1,210 mg/m ³) ② 1,500 ppm (3,620 mg/m ³)
IE	4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	① 20 ppm (83 mg/m ³) ② 50 ppm (208 mg/m ³) ⑤ (may be absorbed through the skin) Sk, IOELV
IOELV (EU)	4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	① 20 ppm (83 mg/m ³) ② 50 ppm (208 mg/m ³)

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Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
WEL (GB)	4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	① 50 ppm (208 mg/m ³) ② 100 ppm (416 mg/m ³) ⑤ (may be absorbed through the skin)
IE	butanone CAS No.: 78-93-3 EC No.: 201-159-0	① 200 ppm (600 mg/m ³) ② 300 ppm (900 mg/m ³) ⑤ (may be absorbed through the skin) Sk, IOELV
IOELV (EU)	butanone CAS No.: 78-93-3 EC No.: 201-159-0	① 200 ppm (600 mg/m ³) ② 300 ppm (900 mg/m ³)
WEL (GB)	butanone CAS No.: 78-93-3 EC No.: 201-159-0	① 200 ppm (600 mg/m ³) ② 300 ppm (899 mg/m ³)
IE	butane CAS No.: 106-97-8 EC No.: 203-448-7	① 1,000 ppm
WEL (GB)	butane CAS No.: 106-97-8 EC No.: 203-448-7	① 600 ppm (1,450 mg/m ³) ② 750 ppm (1,810 mg/m ³)
WEL (GB)	2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	① 25 ppm (123 mg/m ³) ② 50 ppm (246 mg/m ³) ⑤ (may be absorbed through the skin)
IE	2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	① 20 ppm (98 mg/m ³) ② 50 ppm (246 mg/m ³) ⑤ (may be absorbed through the skin) SK, IOELV
IOELV (EU)	2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	① 20 ppm (98 mg/m ³) ② 50 ppm (246 mg/m ³) ⑤ (may be absorbed through the skin)
IE	ethanol CAS No.: 64-17-5 EC No.: 200-578-6	② 1,000 ppm
WEL (GB)	ethanol CAS No.: 64-17-5 EC No.: 200-578-6	① 1,000 ppm (1,920 mg/m ³)
IE	2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	① 50 ppm (275 mg/m ³) ② 100 ppm (550 mg/m ³) ⑤ (may be absorbed through the skin) SK, IOELV
IOELV (EU)	2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	① 50 ppm (275 mg/m ³) ② 100 ppm (550 mg/m ³) ⑤ (may be absorbed through the skin)
WEL (GB)	2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	① 50 ppm (274 mg/m ³) ② 100 ppm (548 mg/m ³) ⑤ (may be absorbed through the skin)
WEL (GB)	Hydrocarbons, C9-C10, containing n-alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2	① 500 mg/m ³ ⑤ (Aromatics)

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Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
IE	isobutane CAS No.: 75-28-5 EC No.: 200-857-2	② 1,000 ppm
IE	titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	① 10 mg/m ³ ⑤ (inhalable fraction)
IE	titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	① 4 mg/m ³ ⑤ (respirable fraction)
WEL (GB)	titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	① 10 mg/m ³ ⑤ (inhalable fraction)
WEL (GB)	titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	① 4 mg/m ³ ⑤ (respirable fraction)
WEL (GB)	Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5	① 500 mg/m ³ ⑤ (Aromatics)
IE	2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	① 50 ppm (150 mg/m ³) ② 75 ppm (225 mg/m ³)
WEL (GB)	2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	① 50 ppm (154 mg/m ³) ② 75 ppm (231 mg/m ³)
IE	xylene CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (221 mg/m ³) ② 100 ppm (442 mg/m ³) ⑤ (may be absorbed through the skin) Sk, IOELV
IOELV (EU)	xylene CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (221 mg/m ³) ② 100 ppm (442 mg/m ³) ⑤ (may be absorbed through the skin)
WEL (GB)	xylene CAS No.: 1330-20-7 EC No.: 215-535-7	① 50 ppm (220 mg/m ³) ② 100 ppm (441 mg/m ³) ⑤ (may be absorbed through the skin)

8.1.2. Biological limit values

Limit value type (country of origin)	Substance name	Limit value	① Parameter ② Test material ③ Time of sampling: ④ Remark
BMGV (GB)	4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	20 µmol/L	① 4-methylpentan - 2-one ② urine ③ end of exposure or end of shift
BMGV (GB)	2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	240 mmol/mol creatinine	① Butoxyacetic acid ② urine ③ end of exposure or end of shift
BMGV (GB)	xylene CAS No.: 1330-20-7 EC No.: 215-535-7	650 mmol/mol creatinine	① methyl hippuric acid ② urine ③ end of exposure or end of shift

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8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	48 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	102.34 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	859.7 mg/m ³	① DNEL Consumer ② Acute - inhalation, systemic effects
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	480 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	600 mg/m ³	① DNEL worker ② Acute - inhalation, local effects
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	7 mg/kg bw/ day	① DNEL worker ② Long-term - dermal, systemic effects
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	11 mg/kg bw/ day	① DNEL worker ② Acute - dermal, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	1,210 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	200 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	2,420 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	186 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	62 mg/kg	① DNEL Consumer ② Long-term - dermal, systemic effects
acetone CAS No.: 67-64-1 EC No.: 200-662-2	62 mg/kg	① DNEL Consumer ② Long-term - oral, systemic effects
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	83 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	14.7 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	208 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	11.8 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	4.2 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	4.2 mg/m ³	① DNEL worker ② Long-term - oral, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
butanone CAS No.: 78-93-3 EC No.: 201-159-0	600 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	106 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	1,161 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	412 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
butanone CAS No.: 78-93-3 EC No.: 201-159-0	31 mg/kg bw/day	① DNEL worker ② Long-term - oral, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	98 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	59 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	1,091 mg/m ³	① DNEL worker ② Acute - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	426 mg/m ³	① DNEL Consumer ② Acute - inhalation, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	246 mg/m ³	① DNEL worker ② Acute - inhalation, local effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	147 mg/m ³	① DNEL Consumer ② Acute - inhalation, local effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	6.3 mg/kg bw/day	① DNEL worker ② Long-term - oral, systemic effects
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	26.7 mg/kg bw/day	① DNEL worker ② Acute - oral, systemic effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	950 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	114 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	1,900 mg/m ³	① DNEL worker ② Acute - inhalation, local effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	950 mg/m ³	① DNEL Consumer ② Acute - inhalation, local effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	343 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	206 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	87 mg/kg bw/ day	① DNEL worker ② Long-term - oral, systemic effects
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	87 mg/kg bw/ day	① DNEL worker ② Acute - oral, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	275 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	33 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	33 mg/m ³	① DNEL Consumer ② Acute - inhalation, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	500 mg/m ³	① DNEL worker ② Acute - inhalation, local effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	796 mg/kg bw/ day	① DNEL worker ② Long-term - dermal, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	320 mg/kg bw/ day	① DNEL Consumer ② Long-term - dermal, systemic effects
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	36 mg/kg bw/ day	① DNEL worker ② Long-term - oral, systemic effects
Hydrocarbons, C9-C10, containing n- alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2	900 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Hydrocarbons, C9-C10, containing n- alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2	300 mg/kg bw/ day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C9-C10, containing n- alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2	1,500 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C9-C10, containing n- alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2	300 mg/kg bw/ day	① DNEL worker ② Long-term - oral, systemic effects
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	10 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	700 mg/kg bw/ day	① DNEL Consumer ② Long-term - oral, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5	150 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5	32 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects

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Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5	25 mg/kg bw/ day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5	11 mg/kg bw/ day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5	11 mg/kg bw/ day	① DNEL Consumer ② Long-term - oral, systemic effects
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	310 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	55 mg/m ³	① DNEL Consumer ② Long-term - inhalation, local effects

Substance name	PNEC Value	① PNEC type
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	0.18 mg/L	① PNEC aquatic, freshwater
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	0.018 mg/L	① PNEC aquatic, marine water
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	35.6 mg/L	① PNEC sewage treatment plant
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	0.981 mg/L	① PNEC sediment, freshwater
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	0.0981 mg/L	① PNEC sediment, marine water
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	0.36 mg/L	① PNEC aquatic, intermittent release
n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1	0.0903 mg/L	① PNEC soil, freshwater
acetone CAS No.: 67-64-1 EC No.: 200-662-2	10.6 mg/L	① PNEC aquatic, freshwater
acetone CAS No.: 67-64-1 EC No.: 200-662-2	1.06 mg/L	① PNEC aquatic, marine water
acetone CAS No.: 67-64-1 EC No.: 200-662-2	100 mg/L	① PNEC sewage treatment plant
acetone CAS No.: 67-64-1 EC No.: 200-662-2	30.4 mg/kg	① PNEC sediment, freshwater
acetone CAS No.: 67-64-1 EC No.: 200-662-2	3.04 mg/kg	① PNEC sediment, marine water
acetone CAS No.: 67-64-1 EC No.: 200-662-2	21 mg/L	① PNEC aquatic, intermittent release
acetone CAS No.: 67-64-1 EC No.: 200-662-2	29.5 mg/kg	① PNEC soil, freshwater

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Substance name	PNEC Value	① PNEC type
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	600 µg/L	① PNEC aquatic, freshwater
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	60 µg/L	① PNEC aquatic, marine water
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	27.5 mg/L	① PNEC sewage treatment plant
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	8.27 mg/kg	① PNEC sediment, freshwater
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	0.83 mg/kg	① PNEC sediment, marine water
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	1.3 mg/kg	① PNEC soil
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1	1.5 mg/L	① PNEC aquatic, intermittent release
butanone CAS No.: 78-93-3 EC No.: 201-159-0	55.8 mg/L	① PNEC aquatic, freshwater
butanone CAS No.: 78-93-3 EC No.: 201-159-0	55.8 mg/L	① PNEC aquatic, marine water
butanone CAS No.: 78-93-3 EC No.: 201-159-0	709 mg/L	① PNEC sewage treatment plant
butanone CAS No.: 78-93-3 EC No.: 201-159-0	284.74 mg/kg	① PNEC sediment, freshwater
butanone CAS No.: 78-93-3 EC No.: 201-159-0	284.7 mg/kg	① PNEC sediment, marine water
butanone CAS No.: 78-93-3 EC No.: 201-159-0	1 g/kg	① PNEC secondary poisoning
butanone CAS No.: 78-93-3 EC No.: 201-159-0	55.8 mg/L	① PNEC aquatic, intermittent release
butanone CAS No.: 78-93-3 EC No.: 201-159-0	22.5 mg/kg	① PNEC soil, freshwater
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	8.8 mg/L	① PNEC aquatic, freshwater
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	880 µg/L	① PNEC aquatic, marine water
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	463 mg/L	① PNEC sewage treatment plant
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	34.6 mg/kg	① PNEC sediment, freshwater
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	3.46 mg/kg	① PNEC sediment, marine water

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Substance name	PNEC Value	① PNEC type
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	2.33 mg/kg	① PNEC soil
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	20 mg/kg	① PNEC secondary poisoning
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0	26.4 mg/L	① PNEC aquatic, intermittent release
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	0.96 mg/L	① PNEC aquatic, freshwater
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	0.76 mg/L	① PNEC aquatic, marine water
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	580 mg/L	① PNEC sewage treatment plant
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	3.6 mg/kg	① PNEC sediment, freshwater
ethanol CAS No.: 64-17-5 EC No.: 200-578-6	0.63 mg/kg	① PNEC soil, freshwater
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	635 µg/L	① PNEC aquatic, marine water
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	63.5 µg/L	① PNEC aquatic, marine water
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	100 mg/L	① PNEC sewage treatment plant
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	3.29 mg/kg	① PNEC sediment, freshwater
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	0.329 mg/kg	① PNEC sediment, marine water
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	0.29 mg/kg	① PNEC soil
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9	6.35 mg/L	① PNEC aquatic, intermittent release
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	0.127 mg/L	① PNEC aquatic, freshwater
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	1 mg/L	① PNEC aquatic, marine water
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	100 mg/L	① PNEC sewage treatment plant
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	1,000 mg/kg	① PNEC sediment, freshwater
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	100 mg/kg	① PNEC sediment, marine water

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Substance name	PNEC Value	① PNEC type
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	1,667 mg/kg	① PNEC secondary poisoning
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	0.61 mg/L	① PNEC aquatic, intermittent release
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	100 mg/kg	① PNEC soil, freshwater
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	400 µg/L	① PNEC aquatic, freshwater
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	40 µg/L	① PNEC aquatic, marine water
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	10 mg/L	① PNEC sewage treatment plant
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	1.56 mg/kg bw/day	① PNEC sediment, freshwater
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	156 mg/kg bw/ day	① PNEC sediment, marine water
2-methylpropan-1-ol CAS No.: 78-83-1 EC No.: 201-148-0	11 mg/L	① PNEC aquatic, intermittent release

* 8.2. Exposure controls

8.2.1. Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. generation/formation of aerosols: Technical ventilation of workplace

8.2.2. Personal protection equipment



Eye/face protection:

Eye glasses with side protection EN 166.

Skin protection:

In full contact: Suitable material: Butyl caoutchouc (butyl rubber) >0,7 mm, Breakthrough time: >480 min.

In splash contact: Suitable material: Butyl caoutchouc (butyl rubber), NBR (Nitrile rubber) >0,4 mm, Breakthrough time: >120 min.

Tested protective gloves must be worn EN ISO 374.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

Breakthrough times and swelling properties of the material must be taken into consideration.

Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Thermal hazards:

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Other protection measures:

Wear suitable protective clothing.

8.2.3. Environmental exposure controls

no restriction.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: various

Odour: Acetone

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	<i>not applicable</i>		
Melting point	<i>not determined</i>		
Freezing point	<i>not determined</i>		
Initial boiling point and boiling range	114 - 128 °C		
Decomposition temperature	<i>not determined</i>		
Flash point	14 °C		
Evaporation rate	<i>not determined</i>		
Auto-ignition temperature	226 °C		② calculated.
Upper/lower flammability or explosive limits	<i>not determined</i>		
Vapour pressure	4,259 mbar	20 °C	② calculated.
Vapour density	<i>not determined</i>		
Density	<i>not determined</i>		
Relative density	<i>not determined</i>		
Bulk density	<i>not determined</i>		
Water solubility	partially miscible		
Partition coefficient: n-octanol/water	<i>not determined</i>		
Dynamic viscosity	<i>not determined</i>		
Kinematic viscosity	<i>not determined</i>		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable. Highly flammable liquid and vapour.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Oxidizing agent.

10.4. Conditions to avoid

Strong acid, Base.

10.5. Incompatible materials

Oxidising agent, strong.

10.6. Hazardous decomposition products

In case of warming: Flammable solvent vapor mixtures are possible. Contains gas under pressure; may explode if heated. Gases/vapours, toxic.

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SECTION 11: Toxicological information

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

n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1
LD ₅₀ oral: 10,760 mg/kg (Ratte) OECD Prüfrichtlinie 423
LD ₅₀ dermal: >14,112 mg/kg (Rabbit) OECD Prüfrichtlinie 402
LC ₅₀ Acute inhalation toxicity (dust/mist): 23.4 mg/L 4 h (Rat) OECD Prüfrichtlinie 403
acetone CAS No.: 67-64-1 EC No.: 200-662-2
LD ₅₀ oral: 5,800 mg/kg (Rat) Journal of Toxicology and Environmental Health. Vol. 15, Pg. 609, 1985.
LD ₅₀ dermal: >7,426 mg/kg (Rabbit)
LC ₅₀ Acute inhalation toxicity (vapour): 50.1 mg/L (Rat) Am Ind Hyg Assoc J 20: 364-369
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1
ATE (inhalation, vapour) ¹ : 11 mg/L
LD ₅₀ oral: >2,000 - ≤5,000 mg/kg (Rat) MSDS Distributor
LD ₅₀ dermal: >5,000 mg/kg (Rabbit) MSDS Distributor
LC ₅₀ Acute inhalation toxicity (vapour): >10 - ≤20 mg/L 4 h (Rat)
butanone CAS No.: 78-93-3 EC No.: 201-159-0
LD ₅₀ oral: 2,740 mg/kg (Rat) Toxicology and Applied Pharmacology. Vol. 19, Pg. 699, 1971.
LD ₅₀ dermal: 6,480 mg/kg (Rabbit) Shell Chemical Company. Vol. MSDS-5390-4,
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
ATE (oral) ¹ : 1,200 mg/kg
LD ₅₀ oral: 470 mg/kg (Rat) GESTIS
LD ₅₀ dermal: 220 mg/kg (Rabbit) GESTIS
LC ₅₀ Acute inhalation toxicity (dust/mist): 2.17 mg/L 4 h (Rat) GESTIS
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9
LD ₅₀ oral: 8,530 mg/kg (Ratte) Dow Chemical Company Reports. Vol. MSD-1582
LD ₅₀ dermal: >5,000 mg/kg (Kaninchen) Dow Chemical Company Reports. Vol. MSD-1582
Hydrocarbons, C9-C10, containing n-alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2
LD ₅₀ oral: >5,000 mg/kg (Rat) MSDS Distributor
LD ₅₀ dermal: >5,000 mg/kg (Rabbit) MSDS Distributor
LC ₅₀ Acute inhalation toxicity (dust/mist): >4.951 mg/L (Rat) MSDS Distributor
2-methoxypropyl acetate CAS No.: 70657-70-4 EC No.: 274-724-2
LD ₅₀ oral: >5,000 mg/kg (Rat)
LD ₅₀ dermal: >2,000 mg/kg (Rabbit)
LC ₅₀ Acute inhalation toxicity (gas): >400 ppmV 6 h (Rabbit)
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5
LD ₅₀ oral: >2,000 - 25,000 mg/kg (Rat) OECD 425
LD ₅₀ dermal: >5,000 mg/kg (Rabbit)
LC ₅₀ Acute inhalation toxicity (dust/mist): 3.43 - 6.82 mg/L 4 h (Rat) ECHA
Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5
LD ₅₀ oral: 4 - 8 mg/kg (Rat)
LD ₅₀ dermal: 3,160 mg/kg (Rabbit) OECD402
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
LD ₅₀ oral: 4,300 mg/kg (Rat) AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956.
LD ₅₀ dermal: >1,700 mg/kg (Rabbit) Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974.
LC ₅₀ Acute inhalation toxicity (dust/mist): 21.7 mg/L 4 h (Rat) Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974.

¹: Acute Toxicity Estimate. Harmonised (legal) classification.

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Acute oral toxicity:

Harmful if swallowed.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

May cause genetic defects.

Carcinogenicity:

May cause cancer.

Reproductive toxicity:

Based on available data, the classification criteria are not met. May damage the unborn child.

STOT-single exposure:

May cause drowsiness or dizziness.

STOT-repeated exposure:

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard:

Based on available data, the classification criteria are not met.

Additional information:

No data available

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

* 12.1. Toxicity

n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1

LC₅₀: 18 mg/L 4 d (fish, *Pimephales promelas*) OECD Prüfrichtlinie 203

EC₅₀: 32 - 44 mg/L 2 d (crustaceans, *Daphnia magna*)

EC₅₀: 246 - 647.7 mg/L 3 d (Algae/water plant, *Desmodesmus subspicatus*) Wachstumshemmung

NOEC: 105 - 196 mg/L 3 d (Algae/water plant, *Desmodesmus subspicatus*) Wachstumshemmung

NOEC: 23.2 mg/L 21 d (crustaceans)

IC₅₀: 356 mg/L 2 d (*Tetrahymena*)

acetone CAS No.: 67-64-1 EC No.: 200-662-2

LC₅₀: 4,350 - 11,000 mg/L 4 d (fish, *Pimephales promelas* (fathead minnow)) OECD Guideline 203 (Fish, Acute Toxicity Test)

LC₅₀: 10 - 30,600 mg/L 2 d (crustaceans, *Daphnia pulex* (water flea)) Cowgill, U.M., and D.P. Milazzo 1991. The Sensitivity of *Ceriodaphnia dubia* and *Daphnia magna* to Seven Chemicals Utilizing the Three-Brood Test. *Arch. Environ. Contam. Toxicol.* 20(2):211-217; Canton, J.H., and D.M.M. Adema 1978. Reproducibility of Short-Term and Reproduction Toxicity Experiments with *Daphnia magna* and Comparison of the Sensitivity of *Daphnia magna* with *Daphnia pulex* and *Daphnia cucullata* in Short-Term Experiments. *Hydrobiologia* 59(2):135-140 (Used Reference 2018)

EC₅₀: 13,500 - 23,500 mg/L 2 d (crustaceans) Randall, T.L., and P.V. Knopp 1980. Detoxification of Specific Organic Substances by Wet Oxidation. *J. Water Pollut. Control Fed.* 52(8):2117-2130; Barera, Y., and W.J. Adams 1983. Resolving Some Practical Questions About *Daphnia* Acute Toxicity Tests. In: W.E. Bishop (Ed.), *Aquatic Toxicology and Hazard Assessment*, 6th Symposium, ASTM STP 802, Philadelphia, PA :509-518

EC₅₀: 7,200 - 7,200 mg/L 4 d (Algae/water plant, *Microcystis aeruginosa*) Slooff, W. 1982. A Comparative Study on the Short-Term Effects of 15 Chemicals on Fresh Water Organisms of Different Tropic Levels. *Natl. Tech. Inf. Serv.*, Springfield, VA :25 p. (DUT) (ENG ABS) (NTIS/PB83-200386)

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4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1

LC₅₀: >100 mg/L (fish) MSDS Distributor

LC₅₀: >100 mg/L (crustaceans) MSDS Distributor

LC₅₀: ≤100 mg/L (Algae/water plant) MSDS Distributor

EC₅₀: >100 mg/L (fish) MSDS Distributor

EC₅₀: >100 mg/L (crustaceans) MSDS Distributor

EC₅₀: ≤100 mg/L (Algae/water plant) MSDS Distributor

IC₅₀: >100 mg/L (fish) MSDS Distributor

IC₅₀: >100 mg/L (crustaceans) MSDS Distributor

IC₅₀: ≤100 mg/L (Algae/water plant) MSDS Distributor

butanone CAS No.: 78-93-3 EC No.: 201-159-0

LC₅₀: 3,220 - 3,220 mg/L 4 d (fish, Pimephales promelas) Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984
Acute Toxicities of Organic Chemicals to Fathead Minnows (Pimephales promelas), Vol. 1. Center for Lake Superior
Environmental Stud., Univ. of Wisconsin-Superior, Superior, WI :414

EC₅₀: 5,090 - 5,090 mg/L 2 d (crustaceans) Randall, T.L., and P.V. Knopp 1980. Detoxification of Specific Organic
Substances by Wet Oxidation. J. Water Pollut. Control Fed. 52(8):2117-2130

EC₅₀: 2,029 mg/L 4 d (Algae/water plant) ECHA

NOEC: 68 mg/L 2 d (crustaceans) ECHA

2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0

LC₅₀: 1,250 - 1,490 mg/L 4 d (fish) GESTIS

EC₅₀: 1,550 - 1,800 mg/L 2 d (crustaceans) ECHA

EC₅₀: 623 - 1,840 mg/L 3 d (Algae/water plant) ECHA

2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9

LC₅₀: 100 - 180 mg/L 4 d (fish)

EC₅₀: 500 mg/L 2 d (crustaceans)

NOEC: 100 mg/L 4 d (fish)

NOEC: 63.5 mg/L 12 d (fish)

NOEC: 100 mg/L 21 d (crustaceans)

NOEC: 1,000 mg/L 4 d (Algae/water plant)

Hydrocarbons, C9-C10, containing n-alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2

LC₅₀: 10 - ≤100 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) MSDS Distributor

LC₅₀: 10 - ≤100 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) MSDS Distributor

LC₅₀: >100 mg/L (Algae/water plant) MSDS Distributor

LC₅₀: >1,000 mg/L (Mikroorganismen) MSDS Distributor

LC₅₀: >10 - <30 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout))

EC₅₀: >1,000 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) EL 50 SDB BR

EC₅₀: >22 - <46 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) EL 50 SDB BR

NOEC: <1 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) NOELR SDB BR

titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5

LC₅₀: >0.87 - 1.1 mg/L 4 d (fish, Pimephales promelas) ECHA

LC₅₀: >100 mg/L 2 d (crustaceans, Daphnia magna) ECHA

EC₅₀: 100 mg/L 3 d (Algae/water plant, Pseudokirchnerella subcapitata) ECHA

NOEC: ≥100 mg/L -∞ h (crustaceans, Hyalella azteca) ECHA

NOEC: 0.87 - 1.1 mg/L 12 d (fish) ECHA

NOEC: 0.004 - 0.08 mg/L 28 d (fish) ECHA

NOEC: 100 mg/L 3 d (Algae/water plant) ECHA

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Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5
LC₅₀: 5.491 - 9.2 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout))
EC₅₀: 3.2 - 9.586 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))
EC₅₀: 0.29 - 0.42 mg/L 3 d (Algae/water plant)
NOEC: 1.228 mg/L 28 d (fish)
NOEC: 2.144 mg/L 21 d (crustaceans)
NOEC: 0.7 mg/L 3 d (Algae/water plant)
xylene CAS No.: 1330-20-7 EC No.: 215-535-7
LC₅₀: 3.3 - 780 mg/L 4 d (fish) Bailey, H.C., D.H.W. Liu, and H.A. Javitz 1985. Time/Toxicity Relationships in Short-Term Static, Dynamic, and Plug-Flow Bioassays. In: R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212
LC₅₀: 8.5 - 8.5 mg/L 2 d (crustaceans)

Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

* 12.2. Persistence and degradability

n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1
Biodegradation: Yes, rapidly
Remark: 83 % (aerob; Expositionsdauer: 28 d)(OECD Prüfrichtlinie 301D)
acetone CAS No.: 67-64-1 EC No.: 200-662-2
Biodegradation: Yes, rapidly
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1
Biodegradation: Yes, rapidly
butanone CAS No.: 78-93-3 EC No.: 201-159-0
Biodegradation: Yes, rapidly
2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0
Biodegradation: Yes, rapidly
2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9
Biodegradation: Yes, rapidly
Remark: in Water
Hydrocarbons, C9-C10, containing n-alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1 EC No.: 927-241-2
Biodegradation: Yes, rapidly
Remark: Bioakkumulation potentiell möglich, Schädlich für Fische.
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5
Biodegradation: Yes, slowly
Remark: Bei diesem Pigment handelt es sich um einen anorganischen Stoff. Aufgrund seiner sehr geringen Wasserlöslichkeit und seines interten Charakters wird der Stoff als nicht bioverfügbar für Sediment und terrestrische Organismen betrachtet.
Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5
Biodegradation: Yes, rapidly

12.3. Bioaccumulative potential

n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1
Log K_{ow}: 2.3
acetone CAS No.: 67-64-1 EC No.: 200-662-2
Log K_{ow}: -0.24
Bioconcentration factor (BCF): 3
4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1
Log K_{ow}: 1.31
butanone CAS No.: 78-93-3 EC No.: 201-159-0
Log K_{ow}: 0.29

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2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0

Log K_{ow}: 0.81

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

n-butyl acetate CAS No.: 123-86-4 EC No.: 204-658-1

Results of PBT and vPvB assessment: —

acetone CAS No.: 67-64-1 EC No.: 200-662-2

Results of PBT and vPvB assessment: —

4-methylpentan-2-one CAS No.: 108-10-1 EC No.: 203-550-1

Results of PBT and vPvB assessment: —

butanone CAS No.: 78-93-3 EC No.: 201-159-0

Results of PBT and vPvB assessment: —

2-butoxyethanol CAS No.: 111-76-2 EC No.: 203-905-0

Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

2-methoxy-1-methylethyl acetate CAS No.: 108-65-6 EC No.: 203-603-9

Results of PBT and vPvB assessment: —

Hydrocarbons, C9-C10, containing n-alkanes, isoalkanes, cyclics, with <2% aromatics CAS No.: 64742-82-1
EC No.: 927-241-2

Results of PBT and vPvB assessment: —

2-methoxypropyl acetate CAS No.: 70657-70-4 EC No.: 274-724-2

Results of PBT and vPvB assessment: —

titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5

Results of PBT and vPvB assessment: —

Hydrocarbons, C9, aromatics CAS No.: 64742-95-6 EC No.: 918-668-5

Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

xylene CAS No.: 1330-20-7 EC No.: 215-535-7

Results of PBT and vPvB assessment: —

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

08 01 11 * Waste paint and varnish containing organic solvents or other dangerous substances

*: Evidence for disposal must be provided.

Directive 2008/98/EC (Waste Framework Directive)

HP 1 Explosive

HP 3 Flammable

Waste code packaging

15 01 05 composite packaging

Directive 2008/98/EC (Waste Framework Directive)

HP 1 Explosive

Remark:

AEROSOLS, FLAMMABLE

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Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.









Appropriate disposal / Package:

Non-contaminated packages may be recycled.

13.2. Additional information

Return to Distributor..

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS Aerosols (n-Butyl acetate)	AEROSOLS Aerosols (n-Butyl acetate)	AEROSOLS Aerosols (n-Butyl acetate)	AEROSOLS Aerosols (n-Butyl acetate)
14.3. Transport hazard class(es)			
 2.1	 2.1	 2.1	 2.1
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
		 MARINE POLLUTANT	
14.6. Special precautions for user			
Special Provisions: 190, 327, 344, 625 Limited quantity (LQ): 1 L Classification code: 5F Tunnel restriction code: (D)	Special Provisions: 190, 327, 344, 625 Limited quantity (LQ): 1 L Classification code: 5F	Special Provisions: 190, 327, 344, 625 Limited quantity (LQ): 1 L EmS-No.: F-D, S-U	Special Provisions: 190, 327, 344, 625 Limited quantity (LQ): 1 L

14.7. Maritime transport in bulk according to IMO instruments

not determined

Additional information:

-

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented. Aerosol Directive (75/324/)

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:

- P5a Flammable Liquids, Category 1 or 2

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- P5b Flammable liquids
- P5c Flammable liquids of Categories 2 or 3, not covered by P5a and P5b
- E2 Hazardous to the Aquatic Environment in Category Chronic 2

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 72.9 weight-%

15.1.2. National regulations

[GB] National regulations

Other regulations, restrictions and prohibition regulations

Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)

Regulation 850/2004/EC on persistent organic pollutants (POP)

Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

* 16.1. Indication of changes

1.1.	Product identifier
2.1.	Classification of the substance or mixture
2.2.	Label elements
8.1.	Control parameters
8.2.	Exposure controls
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.2.	Persistence and degradability
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes

16.2. Abbreviations and acronyms

For abbreviations and acronyms, see ECHA: Guidance on information requirements and chemical safety assessment, Chapter R.20 (list of terms and abbreviations).

16.3. Key literature references and sources for data

No data available

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids (<i>Flam. Liq. 2</i>)	H225: Highly flammable liquid and vapour.	
Acute toxicity (oral) (<i>Acute Tox. 4</i>)	H302: Harmful if swallowed.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
STOT-single exposure (<i>STOT SE 3</i>)	H336: May cause drowsiness or dizziness.	
Germ cell mutagenicity (<i>Muta. 1B</i>)	H340: May cause genetic defects.	
Carcinogenicity (<i>Carc. 1B</i>)	H350: May cause cancer.	
Reproductive toxicity (<i>Repr. 1B</i>)	H360D: May damage the unborn child.	
STOT-repeated exposure (<i>STOT RE 2</i>)	H373: May cause damage to organs through prolonged or repeated exposure. (central nervous system)	
Hazardous to the aquatic environment (<i>Aquatic Chronic 2</i>)	H411: Toxic to aquatic life with long lasting effects.	

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16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6. Training advice

No data available

16.7. Additional information

The information provided in this safety data sheet is correct to the best of our knowledge at the time of going to press. This information is intended to provide guidance for the safe handling, storage, processing, transport and disposal of the product mentioned in this safety data sheet. The information is not transferable to other products. If the product is mixed with other materials, mixed or processed, or subjected to processing, the data contained in this safety data sheet can not be transferred to the new material thus produced unless otherwise expressly stated otherwise.

* Data changed compared with the previous version.