Power Repair 21 black 5 min. 50ml (Comp. B)

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

1.1. Product identifier

Trade name/designation:

Power Repair 21 black 5 min. 50ml (Comp. B)

Article No.:
T911205

UFI:
SFT1-7VCP-4JGR-KPV3

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

Use of the substance/mixture:
Adhesive

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (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 *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	
Skin corrosion/irritation *(Skin Corr. 1A)*	H314: Causes severe skin burns and eye damage.	
Respiratory or skin sensitisation *(Skin Sens. 1)*	H317: May cause an allergic skin reaction.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	
STOT-single exposure *(STOT SE 3)*	H335: May cause respiratory irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

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2.2. Label elements

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

Hazard pictograms:

GHS02
Flame

GHS05
Corrosion

GHS07
Exclamation mark

Signal word: Danger

Hazard components for labelling:
methacrylic acid; methyl methacrylate; hydroquinone; Bis-[4-(2,3-epoxipropoxi)phenyl]propan

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

Hazard statements for health hazards	
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapours and spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye protection/face protection.

Precautionary statements Response	
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.
P310	Immediately call a POISON CENTER/doctor.

2.3. Other hazards

Other adverse effects:
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
The product does not contain any substances with endocrine-disrupting properties in concentrations of ≥ 0.1%.
Hazardous vapours, heavier than air.
Re-ignition at distant ignition sources is possible due to distribution near the ground.

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SECTION 3: Composition/information on ingredients

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3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 80-62-6 EC No.: 201-297-1 Index No.: 607-035-00-6 REACH No.: 01-2119452498-28	**methyl methacrylate** Flam. Liq. 2 (H225), STOT SE 3 (H335), Skin Irrit. 2 (H315), Skin Sens. 1 (H317)  Danger **Acute Toxicity Estimate** ATE (oral) > 6,000 mg/kg ATE (dermal) > 5,000 mg/kg ATE (inhalation, vapour) > 29.8 mg/L	50 – 60 Vol-%
CAS No.: 79-41-4 EC No.: 201-204-4 REACH No.: 01-2119463884-26	**methacrylic acid** Acute Tox. 4 (H302, H312), Eye Dam. 1 (H318), Skin Corr. 1A (H314)  Danger **Specific concentration limit (SCL)** STOT SE 3; H335: C ≥ 1% **Acute Toxicity Estimate** ATE (oral) 1,320 – 2,260 mg/kg ATE (dermal) 500 mg/kg ATE (inhalation, vapour) 7.1 mg/L	5 – 10 Vol-%
CAS No.: 80-15-9 EC No.: 201-254-7 Index No.: 617-002-00-8	**α,α-Dimethylbenzylhydroperoxid** Acute Tox. 3 (H331), Acute Tox. 4 (H302, H312), Aquatic Chronic 2 (H411), Eye Dam. 1 (H318), Org. Perox. E (H242), STOT RE 2 (H373), Skin Corr. 1B (H314)  Danger **Specific concentration limit (SCL)** Skin Corr. 1B; H314: C ≥ 10% Skin Irrit. 2; H315: C ≥ 3% Eye Dam. 1; H318: C ≥ 3% Eye Irrit. 2; H319: C ≥ 1% STOT SE 3; H335: C ≥ 1% **Acute Toxicity Estimate** ATE (oral) 382 mg/kg ATE (dermal) 1,200 mg/kg ATE (inhalation, vapour) 220 mg/L	< 1 Vol-%
CAS No.: 128-37-0 EC No.: 204-881-4	**2,6-di-tert-butyl-p-cresol** Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)  Warning M-factor (acute): 1 M-factor (chronic): 1 **Acute Toxicity Estimate** ATE (oral) > 2,930 mg/kg ATE (dermal) > 2,000 mg/kg	< 1 Vol-%
CAS No.: 123-31-9 EC No.: 204-617-8 Index No.: 604-005-00-4	**hydroquinone** Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Carc. 2 (H351), Eye Dam. 1 (H318), Muta. 2 (H341), Skin Sens. 1 (H317)  Danger M-factor (acute): 10 M-factor (chronic): 1 **Acute Toxicity Estimate** ATE (oral) 375 mg/kg ATE (dermal) > 2,000 mg/kg	< 1 Vol-%

Power Repair 21 black 5 min. 50ml (Comp. B)

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 1675-54-3 EC No.: 216-823-5 Index No.: 603-073-00-2 REACH No.: 01-2119456619-26	**Bis-[4-(2,3-epoxipropoxi)phenyl]propan** Aquatic Chronic 2 (H411), Eye Irrit. 2 (H319), Skin Irrit. 2 (H315), Skin Sens. 1 (H317) Warning **Specific concentration limit (SCL)** Skin Irrit. 2; H315: C ≥ 5% Eye Irrit. 2; H319: C ≥ 5% **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg	< 1 Vol-%

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
Never give anything by mouth to an unconscious person!

Following inhalation:
Remove person from danger zone.
Fresh air supply, consult a doctor in case of complaints.

In case of skin contact:
Wash with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. In case of skin irritation, consult a physician. Burns that are not treated lead to wounds that are difficult to heal.

After eye contact:
Remove contact lenses. Rinse thoroughly with plenty of water for several minutes, call a doctor immediately, have data sheet ready. Protect uninjured eye. Follow up with an ophthalmologist.

Following ingestion:
Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink plenty of water. Call a physician immediately.

Self-protection of the first aider:
First aider: Pay attention to self-protection!

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

If applicable, delayed symptoms and effects can be found in section 11. or in the routes of intake under section 4.1.
In certain cases, the symptoms of poisoning may only appear after a longer period of time/after several hours.
Burns of skin and mucous membranes possible. Allergic reaction, risk of serious eye damage, risk of blindness, cough, pain in the mouth and throat, stomach pain, perforation of the oesophagus, stomach perforation.

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, Foam, Carbon dioxide (CO2), Dry extinguishing powder

Unsuitable extinguishing media:
Full water jet

5.2. Special hazards arising from the substance or mixture

Formation of explosive/highly flammable vapour/air mixtures possible.

Hazardous combustion products:
Carbon oxides, toxic gases

5.3. Advice for firefighters

Personal protection equipment: see section 8. Do not inhale explosion and combustion gases. Use suitable breathing apparatus.
Cool endangered containers with water spray. Fire residues and contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Wear personal protection equipment (refer to section 8). Provide adequate ventilation. Remove all sources of ignition. Avoid dust formation with solid or powdery products. Wear protective equipment. Keep unprotected persons away. Avoid contact with skin, eyes and clothes. If necessary, observe the risk of slipping.

Emergency procedures:

Leave the danger zone as far as possible, use existing emergency plans if necessary.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

6.2. Environmental precautions

Contain in case of escape of larger quantities. Stop leak if safe to do so. Do not allow to enter into surface water or drains. Prevent the product from entering waste water, surface water, ground water. In case of spillage into water or sewage system, inform the competent authorities.

6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Pour the collected material into a sealable container. Dispose of waste according to applicable legislation.

6.4. Reference to other sections

See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Ensure good ventilation/extraction at the workplace.
Avoid breathing vapours.
Avoid contact with skin, eyes and clothes.
Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharge.
Handle and open container with care.
Eye wash station and safety shower should be located near the processing area.
Do not eat, drink or smoke when using this product.
Follow the instructions for use on the label.

Advices on general occupational hygiene

The usual precautions when handling chemicals must be observed.
Wash hands before breaks and after work.
Keep away from food, drink and animal feed.
Remove contaminated clothing and protective equipment before entering areas where food will be served.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Prevent access for unauthorised persons.

Requirements for storage rooms and vessels:
Store out of reach of unauthorised persons. Do not store the product in passageways and stairways. Store product only in the original packaging and closed. Observe special instructions for aerosols. Observe special storage conditions. Do not store together with oxidising or spontaneously combustible substances.

Hints on storage assembly:
Do not store together with: Alkalis

Storage class (TRGS 510, Germany): 3 – Flammable liquids

Further information on storage conditions:
Protect from sunlight. Store in a cool dry place. Store in a well-ventilated place.

7.3. Specific end use(s)

Recommendation:
No further relevant information available.

SECTION 8: Exposure controls/personal protection

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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
IOELV (EU)	**methyl methacrylate** CAS No.: 80-62-6 EC No.: 201-297-1	① 50 ppm ② 100 ppm
MAK (AT)	**methyl methacrylate** CAS No.: 80-62-6 EC No.: 201-297-1	② 100 ppm (420 mg/m³) ⑤ (max. 8x5 min./Schicht, Momentanwert) Sh
MAK (AT)	**methyl methacrylate** CAS No.: 80-62-6 EC No.: 201-297-1	① 50 ppm (210 mg/m³) ⑤ Sh
MAK (AT)	**methacrylic acid** CAS No.: 79-41-4 EC No.: 201-204-4	① 20 ppm (70 mg/m³)
MAK (AT)	**2,6-di-tert-butyl-p-cresol** CAS No.: 128-37-0 EC No.: 204-881-4	① 10 mg/m³
MAK (AT)	**hydroquinone** CAS No.: 123-31-9 EC No.: 204-617-8	① 2 mg/m³ ⑤ (einatembare Fraktion) III B, S
MAK (AT)	**hydroquinone** CAS No.: 123-31-9 EC No.: 204-617-8	② 4 mg/m³ ⑤ (einatembare Fraktion max. 8x5 min./Schicht, Momentanwert) III B, S

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	348.4 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	74.3 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	208 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	104 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	416 mg/m³	① DNEL worker ② Acute - inhalation, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	208 mg/m³	① DNEL Consumer ② Acute - inhalation, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	13.67 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	8.2 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	1.5 mg/cm²	① DNEL worker ② Long-term - dermal, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	1.5 mg/cm²	① DNEL Consumer ② Long-term - dermal, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	1.5 mg/cm²	① DNEL worker ② Acute - dermal, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	1.5 mg/cm²	① DNEL Consumer ② Acute - dermal, local effects
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	8.2 mg/kg	① DNEL Consumer ② Long-term - oral, systemic effects
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	6 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	3.5 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.86 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.5 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.25 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.25 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

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Substance name	DNEL value	① DNEL type ② Exposure route
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	1.74 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	7 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.5 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	1 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	128 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	64 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	4.93 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.87 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.75 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.089 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.5 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	0.94 mg/L	① PNEC aquatic, freshwater
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	0.094 mg/L	① PNEC aquatic, marine water
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	10 mg/L	① PNEC sewage treatment plant
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	10.2 mg/kg	① PNEC sediment, freshwater
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	0.102 mg/kg	① PNEC sediment, marine water
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1	1.47 mg/kg	① PNEC soil

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Substance name	PNEC Value	① PNEC type
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.0031 mg/L	① PNEC aquatic, freshwater
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.00031 mg/L	① PNEC aquatic, marine water
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.35 mg/L	① PNEC sewage treatment plant
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.023 mg/kg	① PNEC sediment, freshwater
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.0023 mg/kg	① PNEC sediment, marine water
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.0029 mg/kg	① PNEC soil
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7	0.031 mg/L	① PNEC aquatic, intermittent release
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.199 µg/L	① PNEC aquatic, freshwater
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.17 mg/L	① PNEC sewage treatment plant
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	1.29 mg/kg bw/day	① PNEC sediment, freshwater
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	0.02 µg/L	① PNEC sediment, marine water
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	1.04 mg/kg bw/day	① PNEC soil
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4	1.99 µg/L	① PNEC aquatic, intermittent release
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.114 mg/L	① PNEC aquatic, freshwater
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.0114 mg/L	① PNEC aquatic, marine water
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.71 mg/L	① PNEC sewage treatment plant
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.00098 mg/kg	① PNEC sediment, freshwater
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.000097 mg/kg	① PNEC sediment, marine water
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8	0.000129 mg/kg	① PNEC soil

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Substance name	PNEC Value	① PNEC type
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.006 mg/L	① PNEC aquatic, freshwater
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.001 mg/L	① PNEC aquatic, marine water
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	10 mg/L	① PNEC sewage treatment plant
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.341 mg/kg	① PNEC sediment, freshwater
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.034 mg/kg	① PNEC sediment, marine water
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5	0.065 mg/kg	① PNEC soil

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure good ventilation. This can be achieved by local exhaust ventilation or general exhaust air. If this is not sufficient to keep the concentration below the occupational exposure limits (OEL), suitable respiratory protection must be worn. Applies only if exposure limits are listed here. Appropriate assessment methods for verifying the effectiveness of the protective measures taken include metrological and non-measured methods of determination. Such methods are described by e.g. EN 14042, TRGS 402 (Germany). EN 14042 "Workplace atmospheres. Guidance for the application and use of methods and equipment for the determination of chemical and biological agents". TRGS 402 (Germany) "Determining and assessing the hazards of activities involving hazardous substances - Inhalation exposure".

8.2.2. Personal protection equipment

Eye/face protection:

Safety goggles with side shields (EN 166).

Skin protection:

Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Glove material: Butyl caoutchouc (butyl rubber)
Thickness of the glove material: 0,7mm
Breakthrough time: > 60min.
The determined breakthrough times according to EN 16523-1 were not carried out under practical conditions. A maximum wearing time corresponding to 50% of the breakthrough time is recommended.
Hand protection cream recommended.
Additional information on hand protection - No tests have been carried out. For mixtures, the selection was made to the best of our knowledge and based on the information provided by the ingredients. For substances, the selection was derived from the glove manufacturer's information. Final selection of glove material must be made with consideration of breakthrough times, permeation rates and degradation. The selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer. In the case of mixtures, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use. The exact breakthrough time of the glove material must be obtained from the protective glove manufacturer and must be observed.

Body protection:
Protective work clothing (e.g. safety shoes EN ISO 20345, long-sleeved work clothing).

Respiratory protection:
If the occupational exposure limit value (AGW, Germany) or MAK (Switzerland, Austria) is exceeded. Respiratory protection mask Filter A (EN 14387), identification colour brown. Observe wearing time limits for respirators.

Thermal hazards:
No further relevant information available.

Other protection measures:
The usual precautions when handling chemicals must be observed.
Wash hands before breaks and after work.
Keep away from food, drink and animal feed.
Remove contaminated clothing and protective equipment before entering areas where food will be served.

8.2.3. Environmental exposure controls
No further relevant information available.

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance

Form: Paste
Colour: whitish
Odour: characteristic
flammability: Yes

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	3.5 – 5.5		② 5%
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	101 °C		
Flash point	10 °C		
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	2.1 – 12 Vol-%		
Vapour pressure	28 mm Hg	20 °C	
Vapour density	> 1		
Density	*No data available*		
Relative density	1.03	20 °C	
Bulk density	*not applicable*		
Water solubility	*No data available*		
Dynamic viscosity	40,000 – 60,000 cP	25 °C	
Kinematic viscosity	*No data available*		

9.2. Other information
Formation of explosive/highly flammable vapour/air mixtures possible.

9.2.1. Information with regard to physical hazard classes
Oxidizing liquids:
No.

SECTION 10: Stability and reactivity

10.1. Reactivity
The product has not been tested.

10.2. Chemical stability
Chemically stable under conditions of storage, handling and use.

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10.3. Possibility of hazardous reactions
No dangerous reactions known.

10.4. Conditions to avoid
Strong heating, Heat sources, open flames

10.5. Incompatible materials
Oxidizing agent, Reducing agent, Alkalis

10.6. Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological information

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

Toxicological information

Acute Toxicity Estimate for Mixtures
ATE (oral): calculated.
ATE (dermal): calculated.
ATE (inhalation, gases): calculated.
ATE (inhalation, vapour): 454.55 mg/L calculated.
methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1
LD_{50} oral: >6,000 mg/kg (Rat) OECD 401
LD_{50} dermal: >5,000 mg/kg (Rabbit) OECD 402
LC_{50} Acute inhalation toxicity (vapour): >29.8 mg/L 4 h (Rat)
methacrylic acid CAS No.: 79-41-4 EC No.: 201-204-4
LD_{50} oral: 1,320 – 2,260 mg/kg (Rat)
LD_{50} dermal: 500 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): 7.1 mg/L (Rat)
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7
LD_{50} oral: 382 mg/kg (Rat)
LD_{50} dermal: 1,200 mg/kg (Rat)
LC_{50} Acute inhalation toxicity (vapour): 220 mg/L 4 h (Rat)
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4
LD_{50} oral: >2,930 mg/kg (Rat) OECD 401
LD_{50} dermal: >2,000 mg/kg (Rabbit) OECD 402
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8
LD_{50} oral: 375 mg/kg (Rat) OECD 401
LD_{50} dermal: >2,000 mg/kg (Rabbit) OECD 402
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5
LD_{50} oral: >2,000 mg/kg (Rat) OECD 420
LD_{50} dermal: >2,000 mg/kg (Rat) OECD 402

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

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

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

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

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

Additional information:
No further relevant information available.

11.2. Information on other hazards

Endocrine disrupting properties:
None of the ingredients are included.

SECTION 12: Ecological information

12.1. Toxicity

methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1
LC_{50}: 130 mg/L 4 d (fish, Pimephales promelas) OECD 203
EC_{50}: 69 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
EC_{50}: 37 mg/L 4 d (Algae/water plant, Selenastrum capricornutum) OECD 201
NOEC: 49 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
NOEC: 37 mg/L 21 d (crustaceans, Daphnia magna) OECD 211
methacrylic acid CAS No.: 79-41-4 EC No.: 201-204-4
LC_{50}: 85 mg/L 4 d (fish, Oncorhynchus mykiss) OECD 203
LC_{50}: 100 – 180 mg/L 4 d (fish, Brachydanio rerio) OECD 203
NOEC: 10 mg/L (Brachydanio rerio) OECD 210
EC_{50}: >130 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 53 mg/L 21 d (crustaceans) OECD 202
EC_{50}: 45 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7
LC_{50}: 3.9 mg/L 4 d (Oncorhynchus mykiss) OECD 203
EC_{50}: 18 mg/L 2 d (Daphnia magna) OECD 202
ErC_{50}: 3.1 mg/L 3 d (Pseudokirchnerie lla subcapitata) OECD 201
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4
LC_{50}: >0.57 mg/L 4 d (fish, Brachydanio rerio) 84/449/EEC C.1
NOEC: 0.053 mg/L (Oryzias latipes) OECD 210
EC_{50}: 0.45 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 0.023 mg/L 21 d (crustaceans, Daphnia magna) OECD 202
NOEC: 0.4 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) 84/449/EEC C.3
EC_{50}: >0.4 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) 84/449/EEC C.3
EC_{50}: >10,000 mg/L OECD 209
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8
LC_{50}: 0.638 mg/L 4 d (fish, Oncorhynchus mykiss) OECD 203
EC_{50}: 0.061 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: 0.335 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
EC_{50}: 0.162 – 0.29 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 0.0057 mg/L 21 d (crustaceans, Daphnia magna) OECD 211

Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5
LC_{50}: 1.5 – 2 mg/L 4 d (fish, Oncorhynchus mykiss) OECD 203
EC_{50}: 1.8 – 2.7 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 4.2 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus)
NOEC: 0.3 mg/L 21 d (crustaceans, Daphnia magna) OECD 211
LC_{50}: 9.4 mg/L 3 d (Algae/water plant, Selenastrum capricornutum) U.S. EPA ECOTOX Database

Assessment/classification:
No further relevant information available.

12.2. Persistence and degradability

methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1
Biodegradation: Yes, rapidly
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4
Biodegradation: Yes, slowly
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8
Biodegradation: Yes, rapidly
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5
Biodegradation: Yes, slowly

Additional information:
No further relevant information available.

12.3. Bioaccumulative potential

methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1
Log K_{OW}: 1.38
methacrylic acid CAS No.: 79-41-4 EC No.: 201-204-4
Log K_{OW}: 0.93
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4
Log K_{OW}: 5.1
Bioconcentration factor (BCF): > 2,000
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8
Bioconcentration factor (BCF): 40
Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5
Log K_{OW}: 3.78
Bioconcentration factor (BCF): 31

Accumulation / Evaluation:
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.

12.5. Results of PBT and vPvB assessment

methyl methacrylate CAS No.: 80-62-6 EC No.: 201-297-1
Results of PBT and vPvB assessment: —
methacrylic acid CAS No.: 79-41-4 EC No.: 201-204-4
Results of PBT and vPvB assessment: —
α,α-Dimethylbenzylhydroperoxid CAS No.: 80-15-9 EC No.: 201-254-7
Results of PBT and vPvB assessment: —
2,6-di-tert-butyl-p-cresol CAS No.: 128-37-0 EC No.: 204-881-4
Results of PBT and vPvB assessment: —
hydroquinone CAS No.: 123-31-9 EC No.: 204-617-8
Results of PBT and vPvB assessment: —

Power Repair 21 black 5 min. 50ml (Comp. B)

Bis-[4-(2,3-epoxipropoxi)phenyl]propan CAS No.: 1675-54-3 EC No.: 216-823-5
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 further relevant information available.

12.7. Other adverse effects
No further relevant information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
The waste codes given are recommendations based on the expected use of this product. Due to the specific use and disposal conditions at the user's site, other waste codes may be assigned under certain circumstances. (2014/955/EU)

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

08 04 09 *	Waste adhesives and sealants containing organic solvents or other dangerous substances

**: Evidence for disposal must be provided.*

Waste treatment options

Appropriate disposal / Product:
Disposal via waste water is not recommended. Observe local regulations. For example, suitable incineration plant. Cured product: Can be disposed of with household waste.

Appropriate disposal / Package:
Uncleaned packaging: Observe local regulations. Empty container completely. Non-contaminated packaging can be reused. Packaging that cannot be cleaned must be disposed of in the same way as the substance.

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 2924	UN 2924	UN 2924	UN 2924
14.2. UN proper shipping name			
FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methyl methacrylate, methacrylic acid)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methyl methacrylate, methacrylic acid)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methyl methacrylate, methacrylic acid)	FLAMMABLE LIQUID, CORROSIVE, N.O.S. (methyl methacrylate, methacrylic acid)
14.3. Transport hazard class(es)			
 3 8	 3 8	 3 8	 3 8
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special Provisions: 274 **Limited quantity (LQ):** 1 L	**Special Provisions:** 274 **Limited quantity (LQ):** 1 L	**Special Provisions:** 274 **Limited quantity (LQ):** 1 L	**Special Provisions:** A3 **Limited quantity (LQ):** Y340

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Power Repair 21 black 5 min. 50ml (Comp. B)

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
Excepted Quantities (EQ): E2 **Hazard identification number (Kemler No.):** 338 **Classification code:** FC **Tunnel restriction code:** (D/E) **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Excepted Quantities (EQ):** E2 **Classification code:** FC **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Excepted Quantities (EQ):** E2 **EmS-No.:** F-E, S-C **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Excepted Quantities (EQ):** E2 **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments
not applicable

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:
Observe national regulations/laws on maternity protection (especially the national implementation of Directive 92/85/EEC)! The general hygiene measures for handling chemicals must be applied. Regulation (EU) No. 649/2012 "concerning the export and import of dangerous chemicals" must be observed, as the product contains a substance that falls within the scope of this regulation.

Other regulations (EU):
Hazard categories:
• P5c Flammable liquids of Categories 2 or 3, not covered by P5a and P5b
Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may need to be considered depending on storage, handling etc.):
Quantity threshold (in tonnes) for dangerous substances referred to in Article 3(10) for the application of - Requirements for lower-tier establishments: 5000
Quantity threshold (in tonnes) for dangerous substances referred to in Article 3(10) for the application of - Requirements for upper-tier establishments: 50000

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:
Volatile organic compounds (VOC) content in percent by weight: 65 Vol-%

15.1.2. National regulations
No data available

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out.

SECTION 16: Other information

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16.1. Indication of changes

3.2.	Mixtures
8.1.	Control parameters
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
14.3.	Transport hazard class(es)

16.1.	Indication of changes
16.2.	Abbreviations and acronyms

*
16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AGW	Threshold Limit Value
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DIN	German Institute for Standardization / German Industrial Standard
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
EWC	European Waste Catalogue
IC_{50}	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds

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 *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	
Skin corrosion/irritation *(Skin Corr. 1A)*	H314: Causes severe skin burns and eye damage.	
Respiratory or skin sensitisation *(Skin Sens. 1)*	H317: May cause an allergic skin reaction.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	
STOT-single exposure *(STOT SE 3)*	H335: May cause respiratory irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H225	Highly flammable liquid and vapour.
H242	Heating may cause a fire.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.