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

according to Regulation (EU) 2020/878

BRICAFEU Graphitfarbe 500°C. Article No.: 479

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

product identifiers

<u>1.3</u>.

Article No. (manufacturer/supplier) 479

Trade name/designation BRICAFEU Graphitfarbe 500°C.

schwarz

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

Relevant identified uses:

Coating material to protecting surfaces

Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

Vismara Unternehmungen CH-5000 Aarau www.farbladen.ch

Department responsible for information:

laboratory Manager

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

Emergency telephone number

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

SECTION 2: Hazards identification

Classification of the substance or mixture

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

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

Flam. Liq. 3 / H226 Flammable liquids Flammable liquid and vapour.

Skin Irrit. 2 / H315 Skin corrosion/irritation Causes skin irritation.

Repr. 2 / H361 Reproductive toxicity Suspected of damaging the unborn child. STOT SE 3 / H336 STOT-single exposure May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects. Aquatic Chronic 3 / H412 Hazardous to the aquatic environment

2.2. Label elements

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

Hazard pictograms







Warning

Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H361 Suspected of damaging the unborn child. H336 May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects. H412

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground and bond container and receiving equipment.

Use explosion-proof electrical equipment. P241

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing vapours.

P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face protection.

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

according to Regulation (EU) 2020/676

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P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Keep locked up.

P501 Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

Toluene

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Supplemental hazard information

not applicable

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

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

| EC No. CAS No. Index No. | REACH No. Designation classification // Remark | weight-% |
|--|---|-----------|
| 919-446-0 | 01-2119458049-33 Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411 / Flam. Liq. 3 H226 | 15 - 25 |
| 203-625-9 108-88-3 601-021-00-3 | 01-2119471310-51 Toluene Flam. Liq. 2 H225 / Repr. 2 H361 / Asp. Tox. 1 H304 / STOT RE 2 H373 / Skin Irrit. 2 H315 / STOT SE 3 H336 | 5 - 10 |
| 215-535-7 1330-20-7 601-022-00-9 | 01-2119488216-32 Xylene Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / STOT SE 3 H335 / STOT RE 2 H373 / Asp. Tox. 1 H304 / Flam. Liq. 3 H226 | 1 - 5 |
| 918-668-5 | 01-2119455851-35 Hydrocarbons, C9, aromatics, <0.1% benzene STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411 | 1 - 5 |
| 202-849-4 100-41-4 601-023-00-4 | 01-2119489370-35 ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 / STOT RE 2 H373 / Asp. Tox. 1 H304 | 1 - 5 |
| 245-018-1 22464-99-9 | Fatty acid C6-C19, zirconium Repr. 2 H361 | 0.1 - 0.5 |

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

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

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In case of inhalation

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

Following skin contact

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

After eye contact

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

Following ingestion

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

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

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

Further information

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

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

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

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

Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limit values:

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

WEL, TWA: 191 mg/m3; 50 ppm WEL, STEL: 384 mg/m3; 100 ppm

Remark: (may be absorbed through the skin)

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

WEL, TWA: 220 mg/m3; 50 ppm WEL, STEL: 441 mg/m3; 100 ppm

Remark: (may be absorbed through the skin)

BMGV, TWA: 650 mmol/mol creatinine

Remark: methyl hippuric acid; urine; end of exposure or end of shift

ethylbenzene

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

WEL, TWA: 441 mg/m3; 100 ppm WEL, STEL: 552 mg/m3; 125 ppm

Remark: (may be absorbed through the skin)

Additional information

TWA: Long-term occupational exposure limit value STEL: short-term occupational exposure limit value

Ceiling: peak limitation

DNEL:

Toluene

Index No. 601-021-00-3 / EC No. 203-625-9 / CAS No. 108-88-3 DNEL long-term dermal (systemic), Workers: 384 mg/kg bw/day

DNEL acute inhalative (local), Workers: 384 mg/m³ DNEL acute inhalative (systemic), Workers: 384 mg/m³

DNEL long-term inhalative (local), Workers: 192 mg/m³

DNEL long-term inhalative (systemic), Workers: 192 mg/m³ DNEL long-term oral (repeated), Consumer: 8,13 mg/kg bw/day

DNEL long-term dermal (systemic), Consumer: 226 mg/kg bw/day

DNEL acute inhalative (local), Consumer: 226 mg/m³

DNEL acute inhalative (systemic), Consumer: 226 mg/m3 DNEL long-term inhalative (local), Consumer: 56,5 mg/m³

DNEL long-term inhalative (systemic), Consumer: 56,5 mg/m3

Xvlene

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

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DNEL long-term dermal (systemic), Workers: 212 mg/kg bw/day

DNEL acute inhalative (local), Workers: 442 mg/m³ DNEL acute inhalative (systemic), Workers: 442 mg/m³

DNEL long-term inhalative (local), Workers:

DNEL long-term inhalative (systemic), Workers: 221 mg/m³ DNEL long-term oral (repeated), Consumer: 12,5 mg/kg bw/day DNEL long-term dermal (systemic), Consumer: 125 mg/kg bw/day

DNEL acute inhalative (local), Consumer: 260 mg/m³ DNEL acute inhalative (systemic), Consumer: 260 mg/m³ DNEL long-term inhalative (local), Consumer: 65,3 mg/m³ DNEL long-term inhalative (systemic), Consumer: 65,3 mg/m³

ethylbenzene

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

DNEL long-term inhalative (systemic), Consumer: 15 mg/m³

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

EC No. 919-446-0

DNEL long-term dermal (local), Workers: 44 mg/kg
DNEL long-term dermal (systemic), Workers: 44 mg/kg
DNEL acute inhalative (local), Workers: 570 mg/m³
DNEL acute inhalative (systemic), Workers: 570 mg/m³
DNEL long-term inhalative (local), Workers: 330 mg/m³
DNEL long-term inhalative (systemic), Workers: 330 mg/m³
DNEL long-term oral (repeated), Consumer: 26 mg/kg
DNEL long-term dermal (local), Consumer: 26 mg/kg
DNEL long-term dermal (systemic), Consumer: 26 mg/kg
DNEL acute inhalative (local), Consumer: 570 mg/m³

DNEL long-term inhalative (local), Consumer: 71 mg/m³ DNEL long-term inhalative (systemic), Consumer: 71 mg/m³

PNEC:

Toluene

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

PNEC aquatic, freshwater: 0,68 mg/L PNEC aquatic, marine water: 0,68 mg/L PNEC sediment, freshwater: 16,39 mg/kg PNEC sediment, marine water: 16,39 mg/kg

PNEC, soil: 2,89 mg/kg

PNEC sewage treatment plant (STP): 13,61 mg/L PNEC Waters, sporadic release: 0,68 mg/L

Xylene

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

PNEC aquatic, freshwater: 0,327 mg/L PNEC aquatic, marine water: 0,327 mg/L PNEC sediment, freshwater: 12,46 mg/kg PNEC sediment, marine water: 12,46 mg/kg PNEC sewage treatment plant (STP): 6,58 mg/L soil: 2,31 mg/kg

ethylbenzene

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

PNEC aquatic, freshwater: 0,1 mg/L PNEC aquatic, marine water: 0,01 mg/L PNEC sediment, freshwater: 13,7 mg/kg PNEC sediment, marine water: 1,37 mg/kg

PNEC, soil: 2,68 mg/kg

PNEC sewage treatment plant (STP): 9,6 mg/L

8.2. Exposure controls

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

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Personal protection equipment

Respiratory protection

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

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eve/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

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

Protective measures

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

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

Colour:

Colour:

Characteristic

Codour threshold:

Melting point/freezing point:

Liquid

refer to label

characteristic

not applicable

not applicable

Initial boiling point and boiling range: 111 °C

Source: Toluene

Flammability: Flammable liquid and vapour.

Lower and upper explosion limit:

Lower explosion limit: 0.8 Vol-% Upper explosion limit: 8 Vol-%

Source: Xylene

Flash point: 25 °C

Method: DIN 53213

Auto-ignition temperature: 270 °C

Source: Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics

(2-25%)

Decomposition temperature: not applicable pH at 20 °C: not applicable Cinematic viscosity (40°C): < 400 mm²/s

Viscosity at 20 °C: 1200 - 1400 mPas

Solubility(ies):

Water solubility at 20 °C: insoluble

Partition coefficient: n-octanol/water: see section 12

Vapour pressure at 20 °C: 29 mbar

Source: Toluene

Density and/or relative density:

Density at 20 °C: 1.14 g/cm³
Relative vapour density: not applicable particle characteristics: not applicable

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

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9.2. Other information

Solid content: 66 weight-%

solvent content:

Organic solvents: 34 weight-% Water: 0 weight-%

Solvent separation test: < 3 weight-% (ADR/RID)

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Acute toxicity

Toluene

oral, LD50, Rat: 636 mg/kg

Neurotoxicology. Vol. 2, Pg. 567, 1981 dermal, LD50, Rat: 12200 mg/kg

American Industrial Hygiene Association Journal. Vol. 30, Pg. 470, 1969

inhalative (vapours), LC50, Rat: 28,1 mg/L (4 h)

Method: OECD 403

oral, LD50, Rat, male: 5580 mg/kg

Method: EU Test B.1

dermal, LD50, Rabbit, male: > 5000

Xylene

oral, LD50, Rat, male: 5,523 mg/kg

Method: EU Test B.1

inhalative (vapours), LC50, Rat, male: 6700 ppm (4 h)

ethylbenzene

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

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

oral, LD50, Rat: 15000 mg/kg

Method: OECD 401

dermal, LD50, Rat: > 2000 mg/kg dermal, LD50, Rabbit: > 4 mg/kg

inhalative (vapours), LC50, Rat: 13,1 mg/L (4 h)

Hydrocarbons, C9, aromatics, <0.1% benzene

oral, LD50, Rat: 3492 mg/kg

dermal, LD50, Rabbit: > 3160 mg/kg

inhalative (vapours), LC50, Rat: 6 mg/m3 10 (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

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ethylbenzene

Skin, Rabbit (24 h)

Causes mild skin irritation.

eves, Rabbit

Causes slight eye irritation

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Skin (4 h)

Causes skin irritation.

eyes

Causes serious eye irritation.

Hydrocarbons, C9, aromatics, <0.1% benzene

Skin (4 h)

Method: OECD 404

Not to be classified as skin etching/irritant.

eyes

Method: OECD 405

Not to be classified as severe eye damage or eye irritation.

Respiratory or skin sensitisation

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Skin:

No data available (human)

Respiratory system:

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Skin:

Method: OECD 406

Not to be classified as skin sensitising.

Respiratory system: No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Suspected of damaging the unborn child.

ethylbenzene

Germ cell mutagenicity; Evaluation negative

Hamster; Mouse; ovaries

Carcinogenicity; Evaluation Carc. Cat. 2

Method: Group II B (IARC): Possible carcinogenic to humans (ethylbenzene)

human

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Lactation

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Germ cell mutagenicity

Not to be classified as germ cell mutagen (mutagen).

Carcinogenicity

There are in vivo studies that indicate positive results of kidney cancer.

Reproductive toxicity

Does not qualify as a carcinogen.

In vitro mutagenicity; Evaluation positive

STOT-single exposure; STOT-repeated exposure

May cause drowsiness or dizziness.

Xylene

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Specific target organ toxicity (repeated exposure)

Liver and kidney damage; central nervous system

Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Liver and kidney damage; central nervous system; hearing organs

ethylbenzene

Repeated dose toxicity, Rat: 75 mg/kg

Method OECD 407 RTECS-no.:; DA0700000

Depression of central nervous system movement disorders; headache; Vomiting

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Specific target organ toxicity (single exposure)

May cause respiratory irritation.; May cause drowsiness or dizziness.

Hydrocarbons, C9, aromatics, <0.1% benzene

Specific target organ toxicity (single exposure)

May cause respiratory irritation and depression of central nervous system with drowsiness, dizziness, weakness, loss of consciousness, nausea and headache.

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Aspiration hazard

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

Hydrocarbons, C9, aromatics, <0.1% benzene

Aspiration hazard

May be fatal if swallowed and enters airways.

Practical experience/human evidence

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

Overall assessment on CMR properties

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

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

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

Do not allow to enter into surface water or drains.

12.1. Toxicity

Toluene

Fish toxicity, LC50, Oncorhynchus kisutch (silver salmon): 5,5 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia pulex (water flea): 3,78 mg/L (48 h)

Algae toxicity, EC50, Chlamydomonas angulosa: 134 mg/L (3 h)

Bacteria toxicity, EC50, Nitrosomonas sp: 84 mg/L (24 h)

Xylene

Fish toxicity, LC50, fish: 2,6 mg/L (96 h)

Method: OECD 203

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4,6 mg/L (72 h)

Method: OECD 201

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 4,6 mg/L (72 h)

Method: OECD 201

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout) (96 h)

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Method: OECD 203

Daphnia toxicity, IC50, Daphnia magna: 1 mg/L (24 h)

Method: OECD 202

Algae toxicity, EC50, Selenastrum capricornutum: 2,2 mg/L (73 h)

Method: OECD 201

Daphnia toxicity, growth test (Eb-Cx) 10%", Daphnia magna: 1,91 mg/L (21 d)

Method: OECD 211

Bacteria toxicity, NOEC, Activated sludge: 16 mg/L (28 t)

Method: OECD 301 F

ethylbenzene

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 4,2 mg/L (96 h) Daphnia toxicity, EC50, Daphnia magna (Big water flea) 1.8 - 2.4 mg/L (48 h)

Algae toxicity, EC50, Skeletonema costatum: 4,9 mg/L (72 h)

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 7,2 mg/L (48 h)

Shellfish Toxicity, LC50, Mysidopsis bahia: > 5,2 mg/L (48 h) Toxicity of Microoganisms, EC50, microorganisms: 96 mg/L (24 h)

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Fish toxicity, LL50:, Oncorhynchus mykiss (Rainbow trout) 10 - 30 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EL50, Daphnia magna (Big water flea) 10 - 22 mg/L (48 h)

Method: OECD 202

Algae toxicity, ELb50, Pseudokirchneriella subcapitata 4,1 - 4,6 mg/L (72 h)

Method: OECD 201

Hydrocarbons, C9, aromatics, <0.1% benzene

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 9,2 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna: 1,6 mg/L (48 h)

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Toluene

Fish toxicity, NOEC, Oncorhynchus kisutch (silver salmon): 1,39 mg/L (40 d)

Daphnia toxicity, NOEC, Daphnia pulex (water flea): 0,74 mg/L (7 d)

Fish toxicity, LOEC:, Oncorhynchus kisutch (silver salmon): 2,77 mg/L (40 d)

Xylene

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4,36 mg/L (73 h)

Method: OECD 201

Fish toxicity, NOEC, fish: > 1,3 mg/L (56 d)

Daphnia toxicity, NOEC, Daphnia pulex (water flea): 1,17 mg/L (7 d)

Method: US EPA 600/4-91-003

Daphnia toxicity, EL50, Daphnia magna: 2,9 mg/L (21 d)

Method: OECD 211

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 2,2 mg/L (73 h)

Method: OECD 201

Daphnia toxicity, LOEC:, Daphnia magna (Big water flea): 3,16 mg/L (21 d)

Method: OECD 211

Algae toxicity, growth test (Eb-Cx) 10%", Pseudokirchneriella subcapitata: 0,72 mg/L (73 h)

Method: OECD 201

ethylbenzene

Daphnia toxicity, NOEC, Ceriodaphnia dubia (Wasserfloh): 0,96 mg/L (7 d)

Daphnia toxicity, LC50, Ceriodaphnia dubia (Wasserfloh): 3,6 mg/L (7 d)

Bacteria toxicity, EC50, Nitrosomonas sp: 96 mg/L (24 h)

Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 3,4 mg/L (96 h)

Daphnia toxicity, LOEC:, Ceriodaphnia dubia (Wasserfloh): 1,7 mg/L (7 d)

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Daphnia toxicity, EC50: 9 mg/L (48 h)

12.2. Persistence and degradability

Toluene

Persistence and degradability: Evaluation Rapid photochemical oxidation in air

Biodegradation: 86 percent (20 d)

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

according to Regulation (EU) 2020/878

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Readily biodegradable (according to OECD criteria)

Xylene

Persistence and degradability:

Method: Rapid photochemical oxidation in air

Biodegradation: 98 percent (28 d)

Readily biodegradable (according to OECD criteria)

ethylbenzene

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

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Biodegradation: 74,7 percent (28 d)
Hydrocarbons. C9. aromatics. <0.1% benzene

Biodegradation: Evaluation Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Toluene

Distribution coefficient n-octanol/water (log KOW): 2,65

Method: BCF: 90

The product has a low bioaccumulation potential

Xylene

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

ethylbenzene

Distribution coefficient n-octanol/water (log KOW): 3.6

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Distribution coefficient n-octanol/water (log KOW):

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

Distribution coefficient n-octanol/water (log KOW): 3,7 - 4,5

Bioconcentration factor (BCF)

Toluene

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

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Bioconcentration factor (BCF): 500

high

12.4. Mobility in soil

Toluene

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

Xylene

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

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

soil:

No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

soil:

No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

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

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Recommendation

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

List of proposed waste codes/waste designations in accordance with EWC

080111* Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1263

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

Land transport (ADR/RID): KEINE GÜTER DER KLASSE 3 bei Gebinden > 450 l Klasse 3

Sea transport (IMDG)

for packages < = 450 litres: Transport in accordance with the provisi ons of paragraph 2.3.2.5 of the

IMDG Cod e.

Air transport (ICAO-TI / IATA-DGR) 3

14.4. Packing group

Ш

14.5. Environmental hazards

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

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code D/E

Sea transport (IMDG)

EmS-No. F-E, S-E 14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L): 390

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

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

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15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

| EC No. CAS No. | Designation | REACH No. |
|------------------------|---|------------------|
| 919-446-0 | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) | 01-2119458049-33 |
| 203-625-9 108-88-3 | Toluene | 01-2119471310-51 |
| 215-535-7 1330-20-7 | Xylene | 01-2119488216-32 |
| 918-668-5 | Hydrocarbons, C9, aromatics, <0.1% benzene | 01-2119455851-35 |
| 202-849-4 100-41-4 | ethylbenzene | 01-2119489370-35 |

SECTION 16: Other information

Full text of classification in section 3

STOT SE 3 / H336 STOT-single exposure May cause drowsiness or dizziness.

Asp. Tox. 1 / H304 Aspiration hazard May be fatal if swallowed and enters airways.

Aquatic Chronic 2 / H411 Hazardous to the aquatic environment Flam. Liq. 3 / H226 Flammable liquids Flammable liquids Flammable liquid and vapour.

Flammable liquids Highly flammable liquid and vapour.

Flam. Liq. 2 / H225 Flammable liquids Highly flammable liquid and vapour.

Repr. 2 / H361 Reproductive toxicity Suspected of damaging the unborn child.

STOT RE 2 / H373 STOT-repeated exposure May cause damage to organs (or state all organs affected, if known) through prolonged or

repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Skin Irrit. 2 / H315 Skin corrosion/irritation Causes skin irritation.

Acute Tox. 4 / H312 Acute toxicity (dermal) Harmful in contact with skin.

Acute Tox. 4 / H332 Acute toxicity (inhalative) Harmful if inhaled.

Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.
STOT SE 3 / H335 STOT-single exposure May cause respiratory irritation.

Repr. 2 / H361 Reproductive toxicity Suspected of damaging fertility. Suspected of

damaging the unborn child.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP] Flam. Liq. 3 Flammable liquids On basis of test data. Skin Irrit. 2 Skin corrosion/irritation Calculation method. Repr. 2 Reproductive toxicity Calculation method. STOT SE 3 STOT-single exposure Calculation method. Aquatic Chronic 3 Hazardous to the aquatic environment Calculation method.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL Occupational Exposure Limit Value

BLV Biological Limit Value
CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging CMR Carcinogenic, Mutagenic and Reprotoxic

DIN German Institute for Standardization / German industrial standard

DNEL Derived No-Effect Level

EAKV European Waste Catalogue Directive

EC Effective Concentration
EC European Community
EN European Standard

IATA-DGR International Air Transport Association – Dangerous Goods Regulations

IBC Code International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk ICAO-TI International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous

Goods by Air

IMDG Code International Maritime Code for Dangerous Goods ISO International Organization for Standardization

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

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LC Lethal Concentration

LD Lethal Dose

MARPOL Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

Organisation for Economic Cooperation and Development **OFCD**

PBT persistent, bioaccumulative, toxic **PNEC** Predicted No Effect Concentration

Registration, Evaluation, Authorisation and Restriction of Chemicals REACH

Regulations concerning the International Carriage of Dangerous Goods by Rail RID

UN **United Nations**

VOC Volatile Organic Compounds

vPvB very persistent and very bioaccumulative

Further information

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

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

* Data changed compared with the previous version