

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 1 / 13

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

1.1. product identifiers

Article No. (manufacturer/supplier) 407
Trade name/designation BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
MV: 5/1 mit 924

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

1.3. Details of the supplier of the safety data sheet

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

Department responsible for information:

laboratory Manager
E-mail (competent person)

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P260 Do not breathe vapour.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves and eye/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
 Print date: 26.12.2022 Revision date: 10.12.2022 EN
 Version: 2.0 Issue date: 10.12.2022 Page 2 / 13

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P314 Get medical advice/attention if you feel unwell.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P370 + P378 In case of fire: Use extinguishing powder or sand to extinguish.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

Xylene

Supplemental hazard information

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
 EUH208 Contains reaction mass of
 α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxypoly(oxyethylene) and
 α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propr
 Fatty acids, C18-unsaturated., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and
 1,3-propanediamine. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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

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

EC No. CAS No. Index No.	REACH No. Designation classification // Remark	weight-%
204-658-1 123-86-4 607-025-00-1	01-2119485493-29 n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336 / EUH066	10 - 15
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32 Xylene Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / STOT SE 3 H335 / STOT RE 2 H373 / Asp. Tox. 1 H304 / Flam. Liq. 3 H226	10 - 15
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
238-878-4 14808-60-7	Quarz (SiO2) Substance with a common (EC) occupational exposure limit value.	1 - 5
400-830-7 607-176-00-3	01-0000015075-76 reaction mass of α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxy poly(oxyethylene) and α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxypoly(oxyethylene) Skin Sens. 1 H317 / Aquatic Chronic 2 H411	0.1 - 0.5
605-296-0 162627-17-0	01-2119970640-38 Fatty acids, C18-unsaturated., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine Skin Sens. 1 H317	0.1 - 0.5

Additional information

Full text of classification: see section 16

Safety Data Sheet

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

Article No.: 407
Print date: 26.12.2022
Version: 2.0

BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Revision date: 10.12.2022
Issue date: 10.12.2022

EN

Page 3 / 13

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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

In case of inhalation

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

Following skin contact

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

After eye contact

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

Following ingestion

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

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

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

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers,

Safety Data Sheet

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

Article No.: 407
Print date: 26.12.2022
Version: 2.0

BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Revision date: 10.12.2022
Issue date: 10.12.2022

EN

Page 4 / 13

equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

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

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Hints on joint storage

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

Further information on storage conditions

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

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

Xylene

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

WEL, TWA: 220 mg/m³; 50 ppm

WEL, STEL: 441 mg/m³; 100 ppm

Remark: (may be absorbed through the skin)

BMGV, TWA: 650 mmol/mol creatinine

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

ethylbenzene

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

WEL, TWA: 441 mg/m³; 100 ppm

WEL, STEL: 552 mg/m³; 125 ppm

Remark: (may be absorbed through the skin)

Quarz (SiO₂)

EC No. 238-878-4 / CAS No. 14808-60-7

WEL, TWA: 0.1 mg/m³

Remark: (Silica, crystalline; respirable fraction)

Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

Xylene

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

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

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

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

DNEL long-term inhalative (local), Workers:

DNEL long-term inhalative (systemic), Workers: 221 mg/m³

DNEL long-term oral (repeated), Consumer: 12,5 mg/kg bw/day

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 5 / 13

DNEL long-term dermal (systemic), Consumer: 125 mg/kg bw/day
DNEL acute inhalative (local), Consumer: 260 mg/m³
DNEL acute inhalative (systemic), Consumer: 260 mg/m³
DNEL long-term inhalative (local), Consumer: 65,3 mg/m³
DNEL long-term inhalative (systemic), Consumer: 65,3 mg/m³

ethylbenzene

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

n-butyl acetate

Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
DNEL short-term oral (acute), Workers:
DNEL long-term inhalative (systemic), Workers: 480 mg/m³
DNEL long-term inhalative (systemic), Consumer: 102,34 mg/m³

PNEC:

Xylene

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

ethylbenzene

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

n-butyl acetate

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

8.2. Exposure controls

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

Personal protection equipment

Respiratory protection

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

Hand protection

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

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

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

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

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Safety Data Sheet

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

Article No.: 407
Print date: 26.12.2022
Version: 2.0

BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Revision date: 10.12.2022
Issue date: 10.12.2022

EN

Page 6 / 13

Body protection

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

Protective measures

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

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	refer to label
Odour:	characteristic
Odour threshold:	not applicable
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	126 °C Source: n-butyl acetate
Flammability:	Flammable liquid and vapour.
Lower and upper explosion limit:	
Lower explosion limit:	1.11 Vol-%
Upper explosion limit:	8 Vol-% Source: Xylene
Flash point:	25 °C Method: DIN 53213
Auto-ignition temperature:	370 °C Source: n-butyl acetate
Decomposition temperature:	not applicable
pH at 20 °C:	not applicable
Cinematic viscosity (40°C):	< 400 mm²/s
Viscosity at 20 °C:	650 - 750 mPas
Solubility(ies):	
Water solubility at 20 °C:	insoluble
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	13 mbar Source: n-butyl acetate
Density and/or relative density:	
Density at 20 °C:	1.27 g/cm³
Relative vapour density:	not applicable
particle characteristics:	not applicable

9.2. Other information

Solid content:	69 weight-%
solvent content:	
Organic solvents:	31 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.

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 7 / 13

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

Xylene

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

Method: EU Test B.1

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

ethylbenzene

oral, LD50, Rat: 3,5 mg/kg

dermal, LD50, Rabbit: 15,4 mg/kg

n-butyl acetate

oral, LD50, Rat: 10760 mg/kg

Method: OECD 423

dermal, LD50, Rabbit: 14112 mg/kg

Method: OECD 402

inhalative (dust and mist), LC50, Rat: 23,4 mg/L (4 h)

Method: OECD 403

Hydrocarbons, C9, aromatics, <0.1% benzene

oral, LD50, Rat: 3492 mg/kg

dermal, LD50, Rabbit: > 3160 mg/kg

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

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

ethylbenzene

Skin, Rabbit (24 h)

Causes mild skin irritation.

eyes, Rabbit

Causes slight eye irritation

n-butyl acetate

Skin, Rabbit (4 h)

Method: OECD 404

No skin irritation

eyes

Method: OECD 405

No eye irritation

Hydrocarbons, C9, aromatics, <0.1% benzene

Skin (4 h)

Method: OECD 404

Not to be classified as skin etching/irritant.

eyes

Method: OECD 405

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

Respiratory or skin sensitisation

n-butyl acetate

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 8 / 13

Skin, Guinea pig: ; Evaluation not sensitising.

Method: OECD 406

Mouse mouse ear swelling test (MEST)

Hydrocarbons, C9, aromatics, <0.1% benzene

Skin:

Method: OECD 406

Not to be classified as skin sensitising.

Respiratory system:

No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

ethylbenzene

Germ cell mutagenicity; Evaluation negative

Hamster; Mouse; ovaries

Carcinogenicity; Evaluation Carc. Cat. 2

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

n-butyl acetate

Germ cell mutagenicity; Evaluation Ames test negative.

Hydrocarbons, C9, aromatics, <0.1% benzene

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

Does not qualify as a carcinogen.

In vitro mutagenicity; Evaluation positive

STOT-single exposure; STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Xylene

Specific target organ toxicity (repeated exposure)

Liver and kidney damage; central nervous system

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

Liver and kidney damage; central nervous system; hearing organs

ethylbenzene

Repeated dose toxicity, Rat: 75 mg/kg

Method OECD 407

RTECS-no.: DA0700000

Depression of central nervous system

movement disorders; headache; Vomiting

n-butyl acetate

Specific target organ toxicity (single exposure)

central nervous system; May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

human; Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).; Steam in high concentration leads to unconsciousness.

Hydrocarbons, C9, aromatics, <0.1% benzene

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

n-butyl acetate

Aspiration hazard; Evaluation No classification for aspiration toxicity

Hydrocarbons, C9, aromatics, <0.1% benzene

Aspiration hazard

Safety Data Sheet

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

Article No.: 407
Print date: 26.12.2022
Version: 2.0

BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Revision date: 10.12.2022
Issue date: 10.12.2022

EN
Page 9 / 13

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

Xylene

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

Method: OECD 203

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

Method: OECD 201

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

Method: OECD 201

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

Method: OECD 203

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

Method: OECD 202

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

Method: OECD 201

Daphnia toxicity, growth test (Eb-Cx) 10%⁴, 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 Microorganisms, EC50, microorganisms: 96 mg/L (24 h)

n-butyl acetate

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 18 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 44 mg/L (48 h)

Algae toxicity, ErC50

Algae toxicity, EC50, Desmodesmus subspicatus: 647,7 mg/L (72 h)

(Growth inhibition)

Algae toxicity, NOEC, Desmodesmus subspicatus: 200 mg/L

Bacteria toxicity, IC50, Tetrahymena: 356 mg/L (40 h)

Hydrocarbons, C9, aromatics, <0.1% benzene

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

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

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Xylene

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 10 / 13

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)

12.2. Persistence and degradability

Xylene

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

ethylbenzene

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

n-butyl acetate

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

Hydrocarbons, C9, aromatics, <0.1% benzene

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

12.3. Bioaccumulative potential

Xylene

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

ethylbenzene

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

n-butyl acetate

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

Hydrocarbons, C9, aromatics, <0.1% benzene

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

12.4. Mobility in soil

Xylene

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

n-butyl acetate

:
No data available

Hydrocarbons, C9, aromatics, <0.1% benzene

soil:
No data available

12.5. Results of PBT and vPvB assessment

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

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 11 / 13

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

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

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

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

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

Appropriate disposal / Package Recommendation

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

SECTION 14: Transport information

14.1. UN number or ID number

UN 1263

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

Land transport (ADR/RID): KEINE GÜTER DER KLASSE 3
bei Gebinden > 450 l Klasse 3
Sea transport (IMDG): 3
for packages < = 450 litres: Transport in accordance with the provisions of paragraph 2.3.2.5 of the IMDG Cod e.
Air transport (ICAO-TI / IATA-DGR): 3

14.4. Packing group

III

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

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

Article No.: 407
 Print date: 26.12.2022
 Version: 2.0

BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
 Revision date: 10.12.2022
 Issue date: 10.12.2022

EN
 Page 12 / 13

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

VOC-value (in g/L): 394

National regulations

Restrictions of occupation

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

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

15.2. **Chemical Safety Assessment**

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

EC No. CAS No.	Designation	REACH No.
204-658-1 123-86-4	n-butyl acetate	01-2119485493-29
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
400-830-7	reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl xypoly(oxyethylene)	01-0000015075-76
605-296-0 162627-17-0	Fatty acids, C18-unsaturated., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	01-2119970640-38

SECTION 16: Other information

Full text of classification in section 3

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.

Classification procedure

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

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

Abbreviations and acronyms

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

Safety Data Sheet

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

Article No.: 407 BRILALUX 2K-PUR Anti-Graffiti DD-407 Schutzfarbe
Print date: 26.12.2022 Revision date: 10.12.2022 EN
Version: 2.0 Issue date: 10.12.2022 Page 13 / 13

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

Further information

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

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