

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



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 1 / 11

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

1.1. product identifiers

Article No. (manufacturer/supplier) 288XXX
Trade name/designation Brush Pen Covering Lacquer
all colours, all gloss values
UFI: P5HA-HVC5-T20W-DYR8

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

Relevant identified uses:

Coating (Paint, Varnish).

Uses advised against:

Do not use for products which come into contact with the food stuffs.

1.3. Details of the supplier of the safety data sheet

Manufacturer/supplier

Heinrich König GmbH & Co. KG
An der Rosenhelle 5
61138 Niederdorfelden
Germany

Telephone: +49 (0)6101 5360 0
Telefax: +49 (0)6101 5360 11
E-mail: Info@heinrich-koenig.de
Website: www.heinrich-koenig.de

Department responsible for information:

Laboratory

Only available during office hours:

Telephone: +49 (0)6101 5360 71
Mon - Thurs 08:00 to 16:00
Friday 08:00 - 12:30

E-mail (competent person)

SDB@heinrich-koenig.de

1.4. Emergency telephone number

Emergency telephone number

Emergency CONTACT (24-Hour-Number): GBK
GmbH +49 (0)6132-84463

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. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
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



Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P370 + P378 In case of fire: Use foam to extinguish.
P403 + P235 Store in a well-ventilated place. Keep cool.

Hazard components for labelling

n-butyl acetate

Supplemental hazard information

EUH066 Repeated exposure may cause skin dryness or cracking.
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

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



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 2 / 11

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description Acrylic resin lacquer

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-xxxx n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336 / EUH066	50 < 100
918-668-5 64742-95-6 649-356-00-4	01-2119455851-35-xxxx Hydrocarbons, C9, aromatics STOT SE 3 H335 / STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411 / Flam. Liq. 3 H226 / EUH066	7 < 10
201-159-0 78-93-3 606-002-00-3	01-2119457290-43-xxxx butanone Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336 / EUH066	7 < 10
236-675-5 13463-67-7 022-006-00-2	01-2119489379-17-xxxx titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] Carc. 2 H351	3 < 5
203-603-9 108-65-6 607-195-00-7	01-2119475791-29-xxxx 2-methoxy-1-methylethyl acetate STOT SE 3 H336 / Flam. Liq. 3 H226	3 < 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.

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)

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



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 3 / 11

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

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:

n-butyl acetate

Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

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



Article No.: 288XXX Brush Pen Covering Lacquer
Print date: 21.12.2022 Revision date: 02.12.2022
Version: 3.4 Issue date: 02.11.2022

GB
Page 4 / 11

TWA: 724 mg/m³; 150 ppm
STEL: 966 mg/m³; 200 ppm

butanone

Index No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

TWA: 600 mg/m³; 200 ppm
STEL: 899 mg/m³; 300 ppm

2-methoxy-1-methylethyl acetate

Index No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6

TWA: 274 mg/m³; 50 ppm
STEL: 548 mg/m³; 100 ppm

Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Index No. 022-006-00-2 / EC No. 236-675-5 / CAS No. 13463-67-7

DNEL long-term inhalative (local), Workers: 10 mg/m³

DNEL long-term oral (repeated), Consumer: 700 mg/kg

Hydrocarbons, C9, aromatics

Index No. 649-356-00-4 / EC No. 918-668-5 / CAS No. 64742-95-6

DNEL long-term dermal (systemic), Workers: 25 mg/kg

DNEL long-term inhalative (systemic), Workers: 150 mg/m³

DNEL long-term oral (repeated), Consumer: 11 mg/kg

DNEL long-term dermal (systemic), Consumer: 11 mg/kg

DNEL long-term inhalative (systemic), Consumer: 32 mg/m³

butanone

Index No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

DNEL long-term dermal (systemic), Workers: 1161 mg/kg

DNEL long-term inhalative (systemic), Workers: 600 mg/m³

DNEL long-term oral (repeated), Consumer: 31 mg/kg

DNEL acute dermal, short-term (local), Consumer: 412 mg/kg

DNEL long-term dermal (systemic), Consumer: 206 mg/kg

DNEL long-term inhalative (systemic), Consumer: 106 mg/m³

n-butyl acetate

Index No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

DNEL acute dermal, short-term (systemic), Workers: 11 mg/kg

DNEL long-term dermal (systemic), Workers: 7 mg/kg

DNEL acute inhalative (local), Workers: 600 mg/m³

DNEL acute inhalative (systemic), Workers: 600 mg/m³

DNEL long-term inhalative (local), Workers: 300 mg/m³

DNEL long-term inhalative (systemic), Workers: 48 mg/m³

DNEL short-term oral (acute), Consumer: 2 mg/kg

DNEL long-term oral (repeated), Consumer: 2 mg/kg

DNEL acute dermal, short-term (systemic), Consumer: 6 mg/kg

DNEL long-term dermal (systemic), Consumer: 3,4 mg/kg

DNEL acute inhalative (local), Consumer: 300 mg/m³

DNEL acute inhalative (systemic), Consumer: 300 mg/m³

DNEL long-term inhalative (local), Consumer: 35,7 mg/m³

DNEL long-term inhalative (systemic), Consumer: 12 mg/m³

PNEC:

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Index No. 022-006-00-2 / EC No. 236-675-5 / CAS No. 13463-67-7

PNEC aquatic, freshwater: 0,127 mg/L

PNEC aquatic, marine water: 1 mg/L

PNEC aquatic, intermittent release: 0,61 mg/L

PNEC sediment, freshwater: 1000 mg/kg

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



Article No.: 288XXX Brush Pen Covering Lacquer
Print date: 21.12.2022 Revision date: 02.12.2022
Version: 3.4 Issue date: 02.11.2022

GB
Page 5 / 11

PNEC sediment, marine water: 100 mg/kg
PNEC, soil: 100 mg/kg
PNEC sewage treatment plant (STP): 100 mg/L

butanone

Index No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

PNEC aquatic, freshwater: 55,8 mg/L
PNEC aquatic, marine water: 55,8 mg/L
PNEC aquatic, intermittent release: 55,8 mg/L
PNEC sediment, freshwater: 284,7 mg/kg
PNEC sediment, marine water: 284,7 mg/kg
PNEC, soil: 22,5 mg/kg
PNEC sewage treatment plant (STP): 709 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
PNEC sediment, marine water: 0,0981 mg/kg
PNEC, soil: 0,0903 mg/kg

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.

Suitable respiratory protection apparatus: A

Hand protection

For prolonged or repeated handling the following glove material must be used: PE/EVAL/PE

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.

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:	Preparations containing solvent
Odour threshold:	not determined
Melting point/freezing point:	not determined
Initial boiling point and boiling range:	80 °C Method: calculated. Source: butanone
Flammability:	Highly flammable liquid and vapour.
Lower and upper explosion limit:	

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



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 6 / 11

Lower explosion limit:	1,24 Vol-% Method: calculated.
Upper explosion limit:	14 Vol-% Method: calculated. Source: (2-methoxymethylethoxy)propanol
Flash point:	16 °C Method: calculated.
Auto-ignition temperature:	415 °C Method: calculated. Source: n-butyl acetate
Decomposition temperature:	not determined
pH at 20 °C:	not applicable
Cinematic viscosity (40°C):	> 20 mm²/s
Viscosity at 20 °C:	100 s 3 mm Method: EN ISO 2431
Solubility(ies):	
Water solubility at 20 °C:	insoluble
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	15,7892 mbar Method: calculated.
Density and/or relative density:	
Density at 20 °C:	0,95 g/cm³ Method: calculated.
Relative vapour density:	not applicable
particle characteristics:	not applicable
9.2. Other information	*
Solid content:	27,53 weight-%
solvent content:	
Organic solvents:	72 weight-%
Water:	0 weight-%

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

2-methoxy-1-methylethyl acetate

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



Article No.: 288XXX Brush Pen Covering Lacquer
Print date: 21.12.2022 Revision date: 02.12.2022
Version: 3.4 Issue date: 02.11.2022

GB
Page 7 / 11

oral, LD50, Rat: 8532 mg/kg
dermal, LD50, Rabbit: > 5000 mg/kg
Based on available data, the classification criteria are not met.

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

oral, LD50, Rat: > 5000 mg/kg
Method: OECD 425
dermal, LD50, Rabbit: > 5000 mg/kg
inhalative (dust and mist), LC50, Rat: > 6,8 mg/L (4 h)

Hydrocarbons, C9, aromatics

oral, LD50, Rat: 3592 mg/kg
Method: OECD 401
dermal, LD50, Rabbit: > 3160 mg/kg
Method: OECD 402
Based on available data, the classification criteria are not met.

butanone

oral, LD50, Rat: > 2193 mg/kg
Method: OECD 423
dermal, LD50, Rabbit: > 5000 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: 34 mg/L (4 h)
Based on available data, the classification criteria are not met.

n-butyl acetate

oral, LD50, Rat: 10760 mg/kg
Method: OECD 423
dermal, LD50, Rabbit: > 14112 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: 23,4 mg/L (4 h)
Method: OECD 403
Based on available data, the classification criteria are not met.

Skin corrosion/irritation; Serious eye damage/eye irritation

butanone

eyes, Rabbit
Method: OECD 405
Causes serious eye irritation.

Respiratory or skin sensitisation

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

Carcinogenicity
Suspected of causing cancer if inhaled.

STOT-single exposure; STOT-repeated exposure

May cause drowsiness or dizziness.

2-methoxy-1-methylethyl acetate

Specific target organ toxicity (single exposure), drowsiness Evaluation May cause drowsiness or dizziness.

Hydrocarbons, C9, aromatics

Specific target organ toxicity (single exposure), Irritation
May cause respiratory irritation.
Specific target organ toxicity (single exposure), drowsiness
May cause drowsiness or dizziness.

butanone

Specific target organ toxicity (single exposure), drowsiness
May cause drowsiness or dizziness.

n-butyl acetate

Specific target organ toxicity (single exposure), drowsiness
May cause drowsiness or dizziness.

Aspiration hazard



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 8 / 11

Hydrocarbons, C9, aromatics
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

2-methoxy-1-methylethyl acetate

Fish toxicity, LC50, *Oncorhynchus mykiss* (Rainbow trout): 134 mg/L 0 - 180 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): > 500 mg/L (48 h)

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

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Fish toxicity, LC50, *Pimephales promelas* (fathead minnow): > 1000 mg/L (96 h)

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): > 100 mg/L (48 h)

Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: 16 mg/L (72 h)

Bacteria toxicity, NOEC, Activated sludge: > 100000 mg/L (28 D)

Hydrocarbons, C9, aromatics

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

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 3,2 mg/L (48 h)

Method: OECD 202

Algae toxicity, ErC50, *Pseudokirchneriella subcapitata* 2,6 - 2,9 mg/L (72 h)

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

butanone

Fish toxicity, LC50, *Pimephales promelas* (fathead minnow): 2990 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 308 mg/L (48 h)

Method: OECD 202

Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: 1972 mg/L (72 h)

Method: OECD 201

Bacteria toxicity, EC0, *Pseudomonas putida*: 1150 mg/L (16 h)

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

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)

Method: OECD 202

Algae toxicity, EC50, *Desmodesmus subspicatus*.: 397 mg/L (72 h)

Method: OECD 201

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

Long-term Ecotoxicity

Harmful to aquatic life with long lasting effects.

Hydrocarbons, C9, aromatics

Fish toxicity, LC50 (96 h)

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



Article No.: 288XXX Brush Pen Covering Lacquer
Print date: 21.12.2022 Revision date: 02.12.2022
Version: 3.4 Issue date: 02.11.2022

GB
Page 9 / 11

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

2-methoxy-1-methylethyl acetate
Biodegradation: 100 % (8 D)
Readily biodegradable (according to OECD criteria).

Hydrocarbons, C9, aromatics
Biodegradation:
Readily biodegradable (according to OECD criteria).

butanone
Biodegradation: 98 % (28 d)
Readily biodegradable (according to OECD criteria).

n-butyl acetate
Biodegradation, aerobic: 83 % (28 D)
Method: OECD 301D
Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

2-methoxy-1-methylethyl acetate
Partition coefficient: n-octanol/water: 1,2
Method: Log KOW

butanone
Partition coefficient: n-octanol/water: 0,3

n-butyl acetate
Partition coefficient: n-octanol/water: 2,3
Method: OECD 117

12.4. Mobility in soil

Toxicological data are not 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 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)

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



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 10 / 11

3

14.4. **Packing group**

II

14.5. **Environmental hazards**

Land transport (ADR/RID) not determined

Marine pollutant not determined

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): 703

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

VOC product category: (Cat. B/e) ; VOC limit value: 840 g/l

Maximum VOC content of the product in a ready to use condition (in g/L): 703

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

REACH candidate list of substances of very high concern (SVHC) for the approval process.

According to the available data and / or according to the information provided by the suppliers, the product does not contain any substance that is eligible for inclusion in Annex XIV (list of substances subject to authorization) in accordance with Article 57 in conjunction with Article 59 of REACH.

Regulation (EC) 1907/2006. material in question applies. Regulation (EC) 1907/2006 (REACH) Annex XIV (list of substances subject to authorization)

According to the available data and / or according to the information provided by the suppliers, the product does not contain any substance that is considered to be a substance that requires authorization according to REACH Regulation (EC) 1907/2006 Annex XIV.

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-xxxx
918-668-5 64742-95-6	Hydrocarbons, C9, aromatics	01-2119455851-35-xxxx
201-159-0 78-93-3	butanone	01-2119457290-43-xxxx
236-675-5 13463-67-7	titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	01-2119489379-17-xxxx
203-603-9 108-65-6	2-methoxy-1-methylethyl acetate	01-2119475791-29-xxxx

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



Article No.: 288XXX
Print date: 21.12.2022
Version: 3.4

Brush Pen Covering Lacquer
Revision date: 02.12.2022
Issue date: 02.11.2022

GB
Page 11 / 11

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.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
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.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer if inhaled.

Classification procedure

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

Flam. Liq. 2	Flammable liquids	On basis of test data.
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
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.

You can also find current SDSs for our standard products online on our homepage under **Downloads** in the relevant product area.

* Data changed compared with the previous version