Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994

Revised: Mar 16, 2021

Printed: 15.10.2021, nuernber

Page 1 of 9

487 17-3

No. of article

STAEDTLER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Lumocolor permanent refill station, blue

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

Relevant applications identified:

Ink(s) for writing, drawing and marking

Applications which are not advised:

None known

1.3 Details of the supplier of the safety data sheet

STAEDTLER MARS GmbH & Co. KG Moosaeckerstrasse 3 90427 Nuremberg GERMANY

Telephone:+49-(0)911-9365-0e-mail adress:info@staedtler.com

Responsible for the Safety Data Sheet:

Andreas Schaefer, Central Department Product Safety

e-mail adress: sdb@staedtler.com

1.4. Emergency telephone number: +49-(0)911-9365-731 Only during office hours: Mo - Fr, 8:30 am - 5:00 pm

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product is dangerous within the meaning of Regulation (EC) No 1272/2008

Classification according to Regulation (EC) No 1272/2008:

| Flam. Liq. 2 | Flammable liquids, Hazard category 2 |
|------------------|---|
| Skin. Sens. 1 | Skin sensitisation, Hazard category 1 |
| Eye Dam. 1 | Serious eye damage, Hazard category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure), Hazard category 3 |
| Aquatic Chron. 2 | Hazardous to the aquatic environment: chronic hazard, Hazard category 2 |

2.2 Label elements

Label elements according to Regulation (EC) No. 1272/2008 (CLP)

This product is dangerous within the meaning of Regulation (EC) No 1272/2008

Classification according to Regulation (EC) No 1272/2008:

| Flam. Liq. 2 | Flammable liquids, Hazard category 2 |
|------------------|---|
| Skin. Sens. 1 | Skin sensitisation, Hazard category 1 |
| Eye Dam. 1 | Serious eye damage, Hazard category 1 |
| STOT SE 3 | Specific target organ toxicity (single exposure), Hazard category 3 |
| Aquatic Chron. 2 | Hazardous to the aquatic environment: chronic hazard, Hazard category 2 |

Signal word:

Danger!

Hazard determining component(s) for labelling:

1-methoxypropan-2-ol Propan-1-ol Maleic resin

Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994

C.I. Basic Blue 7

Hazard pictograms:



Hazard statements:

| H225 | Highly flammable liquid and vapour. |
|------|--|
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |

Revised: Mar 16, 2021

Precautionary statements:

| P101 | If medical advice is needed, have product container or label at hand. | |
|---|--|--|
| P102 | Keep out of reach of children. | |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. — No smoking. | |
| P273 | Avoid release to the environment. | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if | |
| present and easy to do. Continue rinsing. | | |
| P405 | Store locked up. | |
| P501 | Dispose of contents/container to hazardous or special waste collection point. | |

2.3. Other hazards

Results of the PBT and vPvB assessment.

- PBT: Not applicable
- vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

This product is a mixture pursuant to Regulation (EC) 1272/2008

3.2. Mixtures

General chemical characterisation:

Alcoholic solution(s) from resins and dyes

Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

| Name of Substance | | |
|--|---------------|----------------------|
| CAS-No. | EC-No. | REACH-No. |
| Symbol of Danger | | Wt% |
| Hazard class | H-Phrase | |
| Propan-1-ol | | |
| 71-23-8 | 200-746-9 | 01-2119486761-29-000 |
| GHS02, GHS05, GHS07 | | 40 - 50 |
| STOT SE 3, Eye Dam. 1, Flam. Liq. 2 | 225, 318, 336 | |
| 1-Methoxypropan-2-ol | | |
| 107-98-2 | 203-539-1 | 01-2119457435-35-000 |
| GHS02, GHS07 | | 40 - 50 |
| Flam. Liq. 3, STOT SE 3 | 226, 336 | |
| maleic resin | | |
| - | - | |
| GHS05, GHS07 | | 5 - 10 |
| Skin. Sens. 1, Eye Dam. 1, Aquatic Chron. 4 | 317, 318, 413 | |
| C.I. Basic Blue 7 | | |

Printed: 15.10.2021

Page 2 of 9

Acc. to regulation (EC) no. 1907/2006

 Prepared: Sep 13, 1994
 Revised: Mar 16, 2021
 Printed: 15.10.2021
 Page 3 of 9

 2200.60.5
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0
 210.222.0

| 2390-60-5 | 219-232-0 | |
|---|--------------------------|-------|
| GHS05, GHS06, GHS09 | | < 5 |
| Acute Tox. 3, Eye Dam. 1, Aquatic Chron. 1 | 301, 318, 410 | |
| | | |
| 2-Methoxypropanol | | |
| 1589-47-5 | 216-455-5 | |
| GHS02, GHS08, GHS05, GHS07 | | < 0,3 |
| Repr. 1B, STOT SE 3, Skin Irrit. 2, Eye Dam. 1, Flam. Liq. 3 | 226, 335, 315, 318, 360D | |
| | | |

Full text of H phrases see heading 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

After contact with eyes: Rinse with water and seek medical care. After contact with skin: Rinse with water and soap; do not use solvents. If swallowed: Rinse mouth with water and seek medical care. After inhalation: Fresh air supply, seek medical attention if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Irritates skin, eyes and breathing organs, headaches, dizziness, nausea, vertigo, impaired balance, narcosis and loss of consciousness.

Intensive breathing in of the vapours can cause malaise.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Powder, carbon dioxide, water spray, foam Unsuitable extinguishing media: Water with full spray

5.2 Special hazards arising from the substance or mixture

The formation of explosive vapour /air mixtures possible. Vapours are heavier than air and spread on the ground. The following can be released in a fire: Organic decomposition products

5.3 Advice for firefighters

In enclosed spaces, use a self-contained breathing apparatus. Collect contaminated extinguishing water separately, must not enter sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Keep unprotected persons away. Remove ignition sources. No smoking. Prevent sparks. Avoid breathing in the fumes. Thoroughly ventilate affected areas. A risk of explosion exists.

6.2 Environmental precautions

Do not allow to enter sewers / surface water or groundwater.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994 Revised: M

Revised: Mar 16, 2021

Printed: 15.10.2021

487 17-3 No. of article

Page 4 of 9

Keep the workspace well ventilated. Dispose of contaminated material as waste according to Point 13.

6.4 Reference to other sections

See section 7 for information on safe handling. See section 8 for information on protective equipment. See section 13 for information on disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Provides for good ventilation/extraction in the workspace. Keep out of reach of children. Read label before use. Keep container tightly closed. Do not eat, drink or smoke when using this product.

Advice on fire and explosion prevention:

Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not spray on an open flame or other ignition source.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Keep away from direct sunlight and other sources of heat and ignition. Keep only in original container. Store in a well-ventilated place. Keep container tightly closed.

Information on storage with other products:

Do not store together with flammable and self-igniting materials or with highly valuable solids.

Further information on the storage conditions:

Observe regulations/technical rules on the storage of flammable liquids.

Storage class:

LGK 3, flammable liquid substance (TRGS 510, storage of hazardous materials in the mobile containers)

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1. Limit values for exposure in the workplace and/or biological limit values workplace limit values (AGW) Germany

| Name of Substance | | CAS-No. | |
|----------------------|--------------|-----------|---------|
| Kind of TLV | Value | Year | Country |
| 1-Methoxy-2-propanol | | 107-98-2 | |
| AGW | 100.00 ml/m³ | 2006 | |
| 2-Methoxypropanol | | 1589-47-5 | |
| AGW | 5.00 ml/m³ | 2014 | |

8.1.2.DNEL- and PNEC- values

No DNEL and PNEC values are available.

Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994 Revised: Mar 16, 2021

8.1.3. Control-Banding (e.g. ILO, EMKG)

No data on COSHH essentials or the EMKG model from the BAuA is available.

8.2. Exposure controls

8.2.1. Suitable technical control elements

No further relevant information available.

8.2.2. Individual protective measures – personal protective equipment

General safety and hygiene measures:

Keep away from drinks, food and feedingstuffs. Wash hands before breaks and at the end of the working day.

Breathing protection:

Reading protection not necessary with proper ventilation.

Hand protection:

Solvent-resistant protective gloves.

Eye protection:

Eye protection: Protective goggles with risk of splashing

Body protection:

No protective clothing is necessary for use according to the provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical state: Colour: Odour: | liquid blue alcoholic | | | |
|--------------------------------------|-----------------------------|--------------------|-------|------|
| Boiling range: | | >= 78 | °C | |
| Melting range: | | | | n.d. |
| Relative density: | | 0,892 | g/cm³ | |
| Vapour pressure: | | <= 59 | hPa | |
| Viscosity: | | 4,0 | mPas | |
| pH: | | 3,9 | | |
| Flash point: | | 20 | °C | |
| Auto-ignition temp | erature: | >= 425 | °C | |
| Explosion limit, lov | ver: | 1,7 | %vol | |
| Explosion limit, up | per: | 11,5 | Vol% | |
| Water solubility: | | partially miscible | | |
| Solids content: | | 14 | %m | |
| VOC - volatile orga | anic compound: | 86 | %m | |
| VOC - volatile orga | anic compound: | 741 | g/l | |
| Organic solvent: | | 86 | %m | |
| | | | | |

9.2 Other information

Explosion limits, vapour pressure and the auto-ignition temperature refer to the solvents contained.

Printed: 15.10.2021

Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994 Revised: Mar 16, 2021

Printed: 15.10.2021

487 17-3 No. of article

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No further relevant information available.

10.2. Chemical stability

Thermal decomposition: Not expected with the specified use. The following should be prevented: Heat flame sparks

10.3. Possibility of dangerous reactions

Dangerous reactions: With highly oxidising substances

10.4. Conditions to avoid

No further relevant information available.

10.5. Incompatible materials

No further relevant information available.

10.6. Hazardous decomposition products

Hazardous decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxide in the event of fire

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary irritant effect on the skin:

- Frequent or prolonged skin exposure can degrease and dry out the skin, which can lead to skin defects and inflammation (dermatitis).

Primary irritant effect in the eyes:

- Causes eye irritation.
- Sensitization:

- Sensitisation is possible.

Subacute to chronic toxicity:

- Liver damage is possible with chronic exposure

Additional toxicological advice:

- Prolonged or repeated contact may degrease the skin and lead to skin inflammation (dermatitis).
- Inhalation:

- Inhalation of the vapour can cause irritation of the airways.

Ingestion:

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity: No measurement data is available

12.2. Persistence and degradability

No measurement data is available

12.3. Bioaccumulative potential

No measurement data is available

12.4. Mobility in soil

Do not allow to enter sewers / surface water / groundwater.

12.5. Results of PBT and vPvB assessment

- PBT: Not applicable

- vPvB: Not applicable.

12.6. Other adverse effects

⁻ Ingestion may cause irritation

Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994 Revised: Mar 16, 2021

No further information available.

Printed: 15.10.2021

487 17-3 No. of article

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The advice below relates to the product and not to any further processed products. Mixing with other products can require other disposal procedures; in case of doubt, contact the supplier of the product or the local authorities.

Disposal recommendation

Must not be disposed of together with house waste. Do not allow to enter sewers. Taking into account the provisions of the local authorities, conduct special waste handling operations.

Waste code number:

Since 1.1.1999, waste code numbers are not only related to the product, but generally related to the application. The valid waste code number for the application can be found in the European waste catalogue.

Recommended waste code number:

Recommended waste code: 08 01 11 Waste paint and varnish containing organic solvents or other dangerous substances.

Uncleaned packaging:

Disposal according to the official legislation.

Recommendation for empty containers

Other containers: completely empty and clean before reconditioning or recycling. Caution: Residues in the containers can present an explosion risk. Do not cut, perforate or weld uncleaned containers.

SECTION 14: TRANSPORT INFORMATION

14.1 UN-Number

1263 - PAINT

14.2. UN proper shipping name

ADR/RID

UN 1263 PAINT

IMDG-Code / ICAO-TI / IATA-DGR

UN 1263 PAINT

14.3 Transport hazard class(es)

3

14.4. Packaging group

Ш

Hazard inducers

14.5. Environmental hazards

Label environmentally hazardous substances

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: yes Marine Pollutant: no

14.6 Special precautions for user

Acc. to regulation (EC) no. 1907/2006

Prepared: Sep 13, 1994 Revised: Mar 16, 2021

No further relevant information available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No further relevant information available.

Transport/ further information

Tunnel restriction code D/E

UN "Model Regulation"

UN 1263, PAINT, 3, II, (D/E), MARINE POLLUTANT

SECTION 15: REGULATORY INFORMATION

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

National provisions:

- Major Accidents Ordinance: Substance group 6 (flammable liquids); observe quantity threshold.
- Presentation according to the Industrial Safety Regulation (BetrSichV): flammable

- Technical instructions air: No measurement values are available.

Water hazard class: 3 - Highly water-polluting (self-classification)

REACH (EC) 1907/2006: The main components are preregistered, released or otherwise in conformity.

Printed: 15.10.2021

15.2. Chemical Safety Assessment

No substance safety assessment was conducted.

SECTION 16: OTHER INFORMATION

Amendments in this safety data sheet

Section 2: Classification of the substance or mixture Section 9: Physical and chemical properties Section 14: Transport information

Abbreviations

n.a = not applicable n.d.: not determined RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organization LEV: Local Exhaust Ventilation **RPE: Respiratory Protective Equipment** RCR: Risk Characterisation Ratio (RCR= PEC/PNEC) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008) EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany) DNEL: Derived No-Effect Level (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent As provided for in Regulation (EC) No 1272/2008:

Wording of the H phrases in Point 3:

- H225 Highly flammable liquid and vapour.
- H318 Causes serious eye damage.
- H336 May cause drowsiness or dizziness.
- H226 Flammable liquid and vapour.
- H317 May cause an allergic skin reaction.
- H413 May cause long lasting harmful effects to aquatic life.
- H301 Toxic if swallowed.

Safety Data Sheet Acc. to regulation (EC) no. 1907/2006

| Acc. to regulation (LC) In | 0. 1907/2000 |
|----------------------------|-----------------------|
| Prepared: Sep 13, 1994 | Revised: Mar 16, 2021 |

Printed: 15.10.2021

Page 9 of 9

| H410 | Very toxic to aquatic life with long lasting effects. |
|-------|---|
| H335 | May cause respiratory irritation. |
| H315 | Causes skin irritation. |
| H360D | May damage the unborn child. |
| | |

Training for employees

Instruction must take place before the start of employment and then at least once every year.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties. These products should be stored, handled, and used in conformity with any legal regulation. The information provided above is for general guidance only without responsibility, liability, and warranty on our part and is subject to change without notice.