

Trade name: edding Ink Permanent (blue) contained in: edding 21, edding 22

Current version : 4.1.0, issued: 27.04.2015

Replaced version: 4.0.0, issued: 27.02.2015

Region: GB

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

1.1 Product identifier

Trade name

edding Ink Permanent (blue) contained in: edding 21, edding 22

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

Relevant identified uses of the substance or mixture

Refilling ink

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

edding International GmbH

Bookkoppel 7

D-22926 Ahrensburg

Telephone no. +49 (0) 41 02 / 80 8-0

Information provided by / telephone

+49 (0)4102 - 808-0

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)30 30686 790 (Giftnotruf Berlin)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Flam. Liq. 2; H225

STOT SE 3; H336

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

F; R11

R67

2.2 Label elements

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

Hazard pictograms



GHS02



GHS07

Signal word

Danger

Hazardous component(s) to be indicated on label:

1-methoxy-2-propanol

Hazard statements

H225

Highly flammable liquid and vapour.

H336

May cause drowsiness or dizziness.

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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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 Use only outdoors or in a well-ventilated area.
P370+P378 In case of fire: Use water spray, extinguishing powder, foam or CO2 for extinction.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local and national regulations.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients
3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures
Chemical characterization

Mixture (preparation)

Hazardous ingredients

| No | Substance name | | | Additional information | |
|----|--|---------------------------|---------------------------------------|------------------------|--------|
| | CAS / EC / Index / REACH no | Classification 67/548/EEC | Classification (EC) 1272/2008 (CLP) | Concentration | % |
| 1 | ethanol | | | | |
| | 64-17-5 200-578-6 603-002-00-5 - | F; R11 | Flam. Liq. 2; H225 | > 50.00 - < 70.00 | %-b.w. |
| 2 | 1-methoxy-2-propanol | | | | |
| | 107-98-2 203-539-1 603-064-00-3 - | R10 R67 | Flam. Liq. 3; H226 STOT SE 3; H336 | > 25.00 - < 30.00 | %-b.w. |

Full Text for all R-phrases , H-phrases and EUH-phrases: pls. see section 16

3.3 Other information

The data subject of this Material Safety Data sheet refer to the ink contained in this product (marker).

SECTION 4: First aid measures
4.1 Description of first aid measures
General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water. Do NOT use solvents or thinners.

After eye contact

Remove contact lens. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse mouth thoroughly with water. Call a doctor immediately. Never give anything by mouth to an unconscious person.

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4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam; Extinguishing powder; Carbon dioxide; Water spray jet

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO)

5.3 Advice for firefighters

Cool endangered containers with water spray jet. Use self-contained breathing apparatus. Suppress gases/vapours/mists with water spray jet. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away sources of ignition.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). Send in suitable containers for recovery or disposal.

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as it is possible by the state of the art.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale vapours. Clean skin thoroughly after work; apply skin cream.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

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Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

Advice on storage assembly

Do not store together with: Acids; Alkalis; Oxidizing agents

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

| No | Substance name | CAS no. | EC no. |
|--|-----------------------------------|----------|--|
| 1 | ethanol | 64-17-5 | 200-578-6 |
| List of approved workplace exposure limits (WELs) / EH40 | | | |
| | Ethanol | | |
| | TWA | 1920 | mg/m ³ 1000 ml/m ³ |
| 2 | 1-methoxy-2-propanol | 107-98-2 | 203-539-1 |
| 2000/39/EWG | | | |
| | 1-Methoxypropanol-2 | | |
| | STEL | 568 | mg/m ³ 150 ml/m ³ |
| | TWA | 375 | mg/m ³ 100 ml/m ³ |
| | Skin resorption / sensibilisation | Skin | |
| List of approved workplace exposure limits (WELs) / EH40 | | | |
| | 1-Methoxypropan-2-ol | | |
| | STEL | 560 | mg/m ³ 150 ml/m ³ |
| | TWA | 375 | mg/m ³ 100 ml/m ³ |
| | Skin resorption / sensibilisation | Sk | |

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

| | | | |
|----------------------|--------------|-----|------|
| Appropriate Material | butyl rubber | | |
| Material thickness | | 0.5 | mm |
| Breakthrough time | > | 240 | min. |

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | | | |
|--|---|-------------|-------------------|
| Form/Colour | | | |
| liquid | | | |
| blue | | | |
| Odour | | | |
| characteristic | | | |
| Odour threshold | | | |
| No data available | | | |
| pH value | | | |
| No data available | | | |
| Boiling point / boiling range | | | |
| Value | > | 70 | °C |
| Reference pressure | | 1013 | hPa |
| Melting point / melting range | | | |
| No data available | | | |
| Decomposition point / decomposition range | | | |
| No data available | | | |
| Flash point | | | |
| Value | | 18 - 21 | °C |
| Auto-ignition temperature | | | |
| No data available | | | |
| Oxidising properties | | | |
| No data available | | | |
| Explosive properties | | | |
| No data available | | | |
| Flammability (solid, gas) | | | |
| No data available | | | |
| Lower flammability or explosive limits | | | |
| No data available | | | |
| Upper flammability or explosive limits | | | |
| No data available | | | |
| Vapour pressure | | | |
| Value | < | 110 | kPa |
| Reference temperature | | 50 | °C |
| Vapour density | | | |
| No data available | | | |
| Evaporation rate | | | |
| No data available | | | |
| Relative density | | | |
| No data available | | | |
| Density | | | |
| Value | | 0.80 - 1.20 | g/cm ³ |
| Reference temperature | | 20 | °C |

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| | | | |
|---|--------------|------|-----|
| Solubility in water | | | |
| No data available | | | |
| Solubility(ies) | | | |
| No data available | | | |
| Partition coefficient: n-octanol/water | | | |
| No data available | | | |
| Viscosity | | | |
| Value | 12 | - 80 | sec |
| Reference temperature | | 20 | °C |
| Type | Efflux time | | |
| Method | DIN cup 4 mm | | |
| Solvent separation test | | | |
| Value | < | 3 | % |

9.2 Other information

| |
|--|
| Other information |
| The physical data is that of the main component/s. |

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Acids; Alkalis; Oxidizing agents

10.6 Hazardous decomposition products

Hydrogen

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| Acute oral toxicity | | | |
|------------------------------|----------------------|----------|------------------|
| No | Substance name | CAS no. | EC no. |
| 1 | ethanol | 64-17-5 | 200-578-6 |
| LD50 | | 6200 | mg/kg bodyweight |
| Species | rat | | |
| Source | Manufacturer | | |
| 2 | 1-methoxy-2-propanol | 107-98-2 | 203-539-1 |
| LD50 | | 5660 | mg/kg bodyweight |
| Species | rat | | |
| Source | Manufacturer | | |
| Acute dermal toxicity | | | |
| No | Substance name | CAS no. | EC no. |
| 1 | 1-methoxy-2-propanol | 107-98-2 | 203-539-1 |
| LD50 | | 9999.99 | mg/kg bodyweight |
| Species | rabbit | | |
| Source | Manufacturer | | |

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| |
|---|
| Acute inhalational toxicity |
| No data available |
| Skin corrosion/irritation |
| No data available |
| Serious eye damage/irritation |
| No data available |
| Respiratory or skin sensitisation |
| No data available |
| Germ cell mutagenicity |
| No data available |
| Reproduction toxicity |
| No data available |
| Carcinogenicity |
| No data available |
| STOT-single exposure |
| No data available |
| STOT-repeated exposure |
| No data available |
| Aspiration hazard |
| No data available |
| Delayed and immediate effects as well as chronic effects from short and long-term exposure |
| Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness. Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin. |

SECTION 12: Ecological information

12.1 Toxicity

| Toxicity to fish (acute) | | | |
|------------------------------------|----------------|--------------|-----------|
| No | Substance name | CAS no. | EC no. |
| 1 | ethanol | 64-17-5 | 200-578-6 |
| LC50 | | 8150 | mg/l |
| Duration of exposure | | 96 | h |
| Species | Leuciscus idus | | |
| Source | Manufacturer | | |
| Toxicity to fish (chronic) | | | |
| No data available | | | |
| Toxicity to Daphnia (acute) | | | |
| No | Substance name | CAS no. | EC no. |
| 1 | ethanol | 64-17-5 | 200-578-6 |
| EC50 | | 9268 - 14221 | mg/l |
| Duration of exposure | | 48 | h |
| Species | Daphnia magna | | |
| Source | Manufacturer | | |

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Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

Biodegradability

| No | Substance name | CAS no. | EC no. |
|------------|----------------|-----------------------|-----------|
| 1 | ethanol | 64-17-5 | 200-578-6 |
| Value | | % | |
| Source | | Manufacturer | |
| Evaluation | | readily biodegradable | |

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

| | |
|---------------------------|------------------------|
| Class | 3 |
| Classification code | F1 |
| Packing group | II |
| Hazard identification no. | 33 |
| UN number | UN1263 |
| Technical name | PAINT RELATED MATERIAL |
| Special Provision 640 | 640D |
| Tunnel restriction code | D/E |
| Label | 3 |

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14.2 Transport IMDG

| | |
|----------------------|------------------------|
| Class | 3 |
| Packing group | II |
| UN number | UN1263 |
| Proper shipping name | PAINT RELATED MATERIAL |
| EmS | F-E+S-E |
| Label | 3 |

14.3 Transport ICAO-TI / IATA

| | |
|----------------------|------------------------|
| Class | 3 |
| Packing group | II |
| UN number | UN1263 |
| Proper shipping name | Paint related material |
| Label | 3 |

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

| | |
|---|----------|
| The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII. | No 3, 40 |
|---|----------|

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks Annex I, part 2, category 7 b

15.2 Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

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Full text of the R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

| | |
|------|---|
| R10 | Flammable. |
| R11 | Highly flammable. |
| R67 | Vapours may cause drowsiness and dizziness. |
| H226 | Flammable liquid and vapour. |

Department issuing safety data sheet

UMCO Umwelt Consult GmbH

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.