## 1.) Identification of the substance/mixture and of the company/undertaking

**Trade name**

**Permanent Marker**

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

**Relevant identified uses of the substance or mixture**

Ink for stationery products

**Details of the supplier of the safety data sheet**

**Address**


Pentel Bürobedarf-Handelsgesellschaft mbH
Lademannbogen 143
22339 Hamburg
GERMANY

Telephone no. +49 (0) 40 / 53 80 91 - 0

Fax no. +49 (0) 40 / 53 85 58 - 7


**Information provided by / telephone**

+49 (0) 40 / 53 80 91 - 0

**Emergency telephone**

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

**Advice on Safety Data Sheet**

sdb_info@umco.de

## 2.) Hazards identification

**Classification of the substance or mixture**

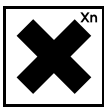
**Classification in accordance with Regulation 67/548/EEC or 1999/45/EC**

R10
R43
Xi; R38
Xn; R20/21

**Label elements**

**Labelling according to Directive 1999/45/CE**

**Hazard symbols**




Harmful

**Hazardous component(s) to be indicated on label, contains:**

Xylene
Rosin, fumarated

**R phrases**

| | |
|---|---|
| 10 | Flammable. |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 38 | Irritating to skin. |
| 43 | May cause sensitisation by skin contact. |

**S phrases**

| | |
|---|---|
| 2 | Keep out of the reach of children. |
| 23.3 | Do not breathe vapour. |
| 24/25 | Avoid contact with skin and eyes. |
| 46 | If swallowed, seek medical advice immediately and show this container or label. |

**Labelling information**

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

## 3.) Composition / information on ingredients

**Chemical characterization**

Mixture (preparation)

**Hazardous ingredients**

**Xylene**

| | | | | | |
|---|---|---|---|---|---|
| EC no. | 215-535-7 | Index no. | 601-022-00-9 | CAS no. | 1330-20-7 |
| Concentration | > 50 | < 70 | %-b.w. | | |
| Classification | R10 Xn; R20/21 Xi; R38 | | | | |
| Hazard symbols | Xn | R phrases | 10-20/21-38 | | |

**1-ethoxypropan-2-ol**

| | | | | | |
|---|---|---|---|---|---|
| EC no. | 216-374-5 | Index no. | 603-177-00-8 | CAS no. | 1569-02-4 |
| Concentration | > 10 | < 30 | %-b.w. | | |
| Classification | R10 R67 | | | | |
| Hazard symbols | - | R phrases | 10-67 | | |

**alpha,alpha-bis[4-(diethylamino)phenyl]-4-(ethylamino)naphthalene-1 methanol C.I. Solvent Blue 5**

| | | | | | |
|---|---|---|---|---|---|
| EC no. | 215-409-1 | Index no. | - | CAS no. | 1325-86-6 |
| Concentration | > 1 | < 5 | %-b.w. | | |
| Classification | Xn; R22 Xi; R41 | | | | |
| Hazard symbols | Xn | R phrases | 22-41 | | |

**Rosin, fumarated**

| | | | | | |
|---|---|---|---|---|---|
| EC no. | 266-040-8 | Index no. | - | CAS no. | 65997-04-8 |
| Concentration | > 1 | < 5 | %-b.w. | | |
| Classification | R43 | | | | |
| Hazard symbols | Xi | R phrases | 43 | | |

## 4.) 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**

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

**After ingestion**

Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

## 5.) Fire-fighting measures

**Suitable extinguishing media**
Alcohol-resistant foam; extinguishing powder; Carbon dioxide; Water spray jet

**Extinguishing media that must not be used for safety reasons**
Full water jet

**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**
In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO)

**Special protective equipment for fire-fighters**
Use self-contained breathing apparatus. Wear protective clothing.

**Other information**
Cool endangered containers with water spray jet. Suppres gases/vapours/mists with water spray jet.

## 6.) Accidental release measures

**Personal precautions**
Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Keep away sources of ignition. Do not inhale vapours. Avoid contact with skin, eyes and clothing.

**Environmental precautions**
Do not discharge into the drains/surface waters/groundwater.

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

## 7.) Handling and storage

**Handling**

**Advice on safe handling**
Provide good ventilation of working area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. 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 it is possible by the state of the art.

**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.

**Storage**

**Requirements for storage rooms and vessels**
Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

**Advice on storage assembly**
None known

**Further information on storage conditions**
Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

## 8.) Exposure controls / personal protection

**Exposure limit values**

**Xylene**

| | |
|---|---|
| CAS no. | 1330-20-7 |
| EC no. | 215-535-7 |

**2000/39/EWG**

Xylene, mixed isomers, pure

| | | | | |
|---|---|---|---|---|
| TWA | 221 | mg/m³ | 50 | ml/m³ |
| STEL | 442 | mg/m³ | 100 | ml/m³ |
| Skin resorption / sensibilisation | Skin | | | |

**List of approved workplace exposure limits (WELs) / EH40**

Xylene, o-, m-, p- or mixed isomers

| | | | | |
|---|---|---|---|---|
| TWA | 220 | mg/m³ | 50 | ml/m³ |
| STEL | 441 | mg/m³ | 100 | ml/m³ |
| Skin resorption / sensibilisation | Sk | | | |

**Exposure controls**

**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.

**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 glove 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.

**Eye protection**

Safety glasses with side protection shield (EN 166)

**Skin protection**

Normal chemical work clothing.

**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.

## 9.) Physical and chemical properties

**General information**

| | |
|---|---|
| Form | liquid |
| Colour | product specific |
| Odour | solvent-like |

**Important health, safety and environmental information**

**Changes in physical state**

| | | |
|---|---|---|
| Type | Boiling point | |
| Value | 108 | °C |

**Flash point**

| | | | |
|---|---|---|---|
| Value | 24,1 | | °C |

**Density**

| | | | |
|---|---|---|---|
| Value | 0,98 | | g/cm³ |
| Reference temperature | 20 | ° C | |

**Viscosity**

| | | | |
|---|---|---|---|
| Type | dynamic | | |
| Value | 2,4 | | mPa*s |
| Reference temperature | 20 | °C | |
| Type | kinematic | | |
| Value | 2,45 | | mm²/s |
| Reference temperature | 20 | ° C | |

## 10.) Stability and reactivity

**Conditions to avoid**
Protect from sun.

**Materials to avoid**
None known.

**Hazardous decomposition products**
No hazardous decomposition products known.

## 11.) Toxicological information

**Experience in practice**
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. Irritating to eyes.

**Other information (chapter 11.)**
Product specific toxicological data are not known.

## 12.) Ecological information

**Other information**
Ecological data are not available. Do not discharge product unmonitored into the environment.

## 13.) Disposal considerations

**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.

## 14.) Transport information

**Transport ADR/RID/ADN**

| | |
|---|---|
| Class | 3 |
| Classification code | F1 |
| Packing group | II |
| Hazard identification no. | 33 |
| UN number | 1263 |
| Technical name | PAINT |
| Special Provision 640 | 640D |
| Tunnel restriction code | D/E |
| Label | 3 |

**Transport IMDG**

| | |
|---|---|
| Class | 3 |
| Packing group | II |
| UN number | 1263 |
| Proper shipping name | PAINT |
| EmS | F-E+S-E |
| Label | 3 |

**Transport ICAO/IATA**

| | |
|---|---|
| Class | 3 |
| Packing group | II |
| UN number | 1263 |
| Proper shipping name | Paint |
| Label | 3 |

## 15.) Regulatory information

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

**EU regulations**

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

| | |
|---|---|
| Remarks | Annex I, part 2, category 6 |

## 16.) Other information

**Relevant R-phrases (chapter 3):**

| | |
|---|---|
| 10 | Flammable. |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 22 | Harmful if swallowed. |
| 38 | Irritating to skin. |
| 41 | Risk of serious damage to eyes. |
| 43 | May cause sensitisation by skin contact. |
| 67 | Vapours may cause drowsiness and dizziness. |

**Department issuing safety data sheet**

UMCO Umwelt Consult GmbH
Georg-Wilhelm-Str. 183 b, 21107 Hamburg, Germany
Tel.: +49 40 / 41 92 13 00 Fax: +49 40 / 41 92 13 57 e-mail: umco@umco.de

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.