

Trade name: Permanent Marker  
 Product no.: N50-AE Black

Status: 17.03.2011  
 Version: 1.0.0 / GB

**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 Directive 67/548/EEC or 1999/45/EC

F; R11

R67

Xi; R38

Xi; R41

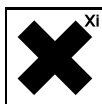
Label elements

Labelling according to Directive 1999/45/CE

Hazard symbols



Highly flammable



Irritant

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

Benzenesulfonic acid, C10-16-alkyl derivs.

R phrases

11	Highly flammable.
38	Irritating to skin.
41	Risk of serious damage to eyes.
67	Vapours may cause drowsiness and dizziness.

S phrases

2	Keep out of the reach of children.
23.3	Do not breathe vapour.
26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37/39	Wear suitable gloves and eye/face protection.
46	If swallowed, seek medical advice immediately and show this container or label.

Supplemental label elements

Contains: Rosin, fumarated - May produce an allergic reaction.

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**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**

**ethanol**

EC no.	200-578-6	Index no.	603-002-00-5	CAS no.	64-17-5
Concentration	> 50	< 70	%-b.w.		
Classification	F; R11				
Hazard symbols	F	R phrases	11		

**n-propanol, propan-1-ol**

EC no.	200-746-9	Index no.	603-003-00-0	CAS no.	71-23-8
Concentration	> 10	< 30	%-b.w.		
Classification	F; R11 Xi; R41	R67			
Hazard symbols	F; Xi	R phrases	11-41-67		

**propan-2-ol**

EC no.	200-661-7	Index no.	603-117-00-0	CAS no.	67-63-0
Concentration	> 5	< 10	%-b.w.		
Classification	F; R11 Xi; R36	R67			
Hazard symbols	F; Xi	R phrases	11-36-67		

**benzyl-alcohol**

EC no.	202-859-9	Index no.	603-057-00-5	CAS no.	100-51-6
Concentration	> 5	< 10	%-b.w.		
Classification	Xn; R20/22				
Hazard symbols	Xn	R phrases	20/22		

**Benzenesulfonic acid, C10-16-alkyl derivs.**

EC no.	271-528-9	Index no.	-	CAS no.	68584-22-5
Concentration	> 1	< 5	%-b.w.		
Classification	C; R35 Xn; R22				
Hazard symbols	C	R phrases	22-35		

**sulphuric-acid**

EC no.	231-639-5	Index no.	016-020-00-8	CAS no.	7664-93-9
Concentration	> 1	< 5	%-b.w.		
Classification	C; R35				
Hazard symbols	C	R phrases	35		

**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

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**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 (CO<sub>2</sub>); 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. Suppresses 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 as 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**

**ethanol**

CAS no. 64-17-5  
 EC no. 200-578-6

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

Ethanol				
TWA	1920	mg/m <sup>3</sup>	1000	ml/m <sup>3</sup>

**n-propanol, propan-1-ol**

CAS no. 71-23-8  
 EC no. 200-746-9

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

Propan-1-ol				
TWA	500	mg/m <sup>3</sup>	200	ml/m <sup>3</sup>
STEL	625	mg/m <sup>3</sup>	250	ml/m <sup>3</sup>
Skin resorption / sensibilisation	Sk			

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**propan-2-ol**

CAS no. 67-63-0  
 EC no. 200-661-7

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

Propan-2-ol  
 TWA 999 mg/m<sup>3</sup> 400 ml/m<sup>3</sup>  
 STEL 1250 mg/m<sup>3</sup> 500 ml/m<sup>3</sup>

**sulphuric-acid**

CAS no. 7664-93-9  
 EC no. 231-639-5

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

Sulphuric acid  
 TWA 1 mg/m<sup>3</sup>

**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 alkohol-like

**Important health, safety and environmental information**

**Changes in physical state**

Type Boiling point  
 Value 78,5 °C

**Flash point**

Value 14,5 °C

**Density**

Value 0,87 g/cm<sup>3</sup>  
 Reference temperature 20 °C

**Viscosity**

Type dynamic  
 Value 3,9 mPa\*s  
 Reference temperature 20 °C  
 Type kinematic  
 Value 4,48 mm<sup>2</sup>/s

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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

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

