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

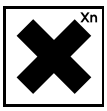
Classification in accordance with Regulation 67/548/EEC or 1999/45/EC

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

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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.