

13

96

DOKUMENTAL GMBH & CO. SCHREIBFARBEN
Safety Data Sheet in Accordance with 91/155/EEC

Product Name : WB 7223 black

Date: 08.05.00 Revision Date: 08.05.00

page 1/5

1. IDENTIFICATION OF THE PREPARATION AND COMPANY.

Product Name and Code : Board Marker Ink
WB 7223 black

Name, full address and tel. of company:

DOKUMENTAL GmbH & Co Schreibfarben

Woellnerstraße 26

D-67065 Ludwigshafen

Phone of the Company: 0621/5402-0

e-mail: b.polzin@dokumental.de

Telefax : 0621/5402-368

Emergency phone: 0621/5402-322

2. COMPOSITION/INFORMATION ON INGREDIENTS.

Chemical Characterisation: ethanolic solution of organic pigments
resins, and additives

Substances presenting a health hazard within the meaning of the Dangerous
Substances Directive 67/548/EEC.

| Cas-No. | Names | Conc. | Symb. R-phrases |
|----------|----------------------|----------|-----------------|
| 107-98-2 | 1-methoxy-2-propanol | 10 - 25 | 10 |
| 64-17-5 | ethanol | 50 - 100 | F 11 |
| 67-63-0 | Isopropanol | 2.5 - 10 | 11 |

(See full text of R phrases under chapter 16)

3. HAZARDS IDENTIFICATION OF THE PREPERATION.

F highly flammable
n.a.

4. FIRST AID MEASURES.

General :

In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation :

Remove for fresh air, keep patient warm and at rest, if breathing is
irregular or stopped, administer artificial respiration. Give nothing by
mouth. If unconscious place in recovery position and seek medical advice.

Eye contact :

Irrigate copiously with clean, fresh water for at least 10 minutes, holding
the eyelids apart and seek medical advice.

Skin contact :

Remove contaminated clothing. Wash skin thoroughly with soap and water or
use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion :

If accidentally swallowed obtain immediate medical attention. Keep at rest.
Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES.

Extinguishing media : recommended : alcohol resistant foam, CO₂,
powders, waterspray

Recommendations : not to be used : waterjet.
: Fire will produce dense black smoke. Exposure
to decomposition products may cause a health hazard.
Appropriate breathing apparatus may be required.
Cool closed containers exposed to fire with water. Do
not allow run-off from fire fighting to enter drains
or water courses.

DOKUMENTAL GMBH & CO. SCHREIBFARBEN
Safety Data Sheet in Accordance with 91/155/EEC

Product Name : WB 7223 black

Date: 08.05.00 Revision Date: 08.05.00

page 2/5

6. ACCIDENTAL RELEASE MEASURES.

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Do not allow to enter drains or watercourses.
Clean preferably with a detergent; avoid use of solvents.
If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

7. HANDLING AND STORAGE.

Handling.

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type
Keep container tightly closed. Isolate from sources of heat, sparks and open flame. No sparking tools should be used.
Avoid skin and eye contact. Avoid inhalation of vapour and spray mist.
Smoking, eating and drinking should be prohibited in application area.
For personal protection see Section 8.
Never use pressure to empty : container is not a pressure vessel.
Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.

Storage.

Although the storage and use of this product is not subject to specific statutory requirements, observation of the principles of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations as appropriate will be seen as good industrial practice in meeting the general duties of the Health and Safety at Work Act.
Observe label precaution. Store between 5 and 30 °C in a dry, well ventilated place away from sources of heat and direct sunlight.
Keep away from sources of ignition. Keep away from oxidising agents, from strongly alkaline and strongly acid materials.
No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

Engineering Measures.

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Exposure Limits.

Occupational exposure limit for :

| CAS-No. | Names |
|----------|----------------------|
| 107-98-2 | 1-methoxy-2-propanol |
| 64-17-5 | ethanol |
| 67-63-0 | Isopropanol |

STL mg/m³ LTI

MAK 400

DOKUMENTAL GMBH & CO. SCHREIBFARBEN
Safety Data Sheet in Accordance with 91/155/EEC

Product Name : WB 7223 black

Date: 08.05.00 Revision Date: 08.05.00

page 3/5

Personal Protection:

Respiratory protection.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection.

For prolonged or repeated contact, use :

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection.

Use safety eyewear designed to protect against splash of liquids.

Skin protection.

Personel should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

9. PHYSICAL AND CHEMICAL PROPERTIES.

| | value | unit | method |
|--------------------------|-------------------|------|-----------|
| physical state | : liquid | | |
| flash point | : > 14 | °C | DIN 53213 |
| viscosity at 20 °C | : 8.0 +/- 1.0 | mPas | |
| specific gravity | : 0.86 +/- 0.02 | g/ml | |
| lower explosion limit | : 1.7 | vol% | |
| upper explosion limit | : 19.8 | vol% | |
| solubility in water | : partial soluble | | |
| melting point | : < 0 | °C | |
| boiling point | : 78 | °C | |
| vapour pressure at 20°C: | 43 | | |
| pH | : n.a. | | |
| solid content | : 11 | % | |
| volatile | : 89 | % | |

10. STABILITY AND REACTIVITY.

Stable under recommended storage and handling conditions. (See section 7)
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.
Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

11. TOXICOLOGICAL INFORMATION.

There are no data available on the preparation itself.
Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system.

Symptoms and signs include headache; dizziness, fatigue, muscular weakness, drowsines and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
The liquid splashed in the eyes may cause irritation and reversible damage.

Acute oral toxicity (calculated from the components)
LD₅₀(oral.rat): > 5000 mg/kg

ASTM D-4236: The bulk ink conforms with ASTM D-4236, "HL No Labelling Required".

DOKUMENTAL GMBH & CO. SCHREIBFARBEN
Safety Data Sheet in Accordance with 91/155/EEC

Product Name : WB 7223 black

Date: 08.05.00 Revision Date: 08.05.00

page 4/5

According to ASTM D-4236 the complete writing instrument needs separate approval.

12. ECOLOGICAL INFORMATION.

There are no data available on the preparation itself.
The product should not be allowed to enter drains or water courses.

13. DISPOSAL CONSIDERATIONS.

Do not allow into drains or water courses.
Empty containers are to be deposited according to the official rules.

14. TRANSPORT INFORMATION.

Transport only in accordance with ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

ADR/RID Class: 3 item : 5b
Transport document Name : Farbe

IMDG Class: 3.2 UN Nr. : 1263 page: 3268
MFAG : 310
EMS Nr.: 3-05

Marine pollutant : n.a.
Proper shipping name: Paint Related Material
ICAO/IATA Class: 3 UN Nr. : 1263
Proper shipping name: Paint
Packaging group : II

15. REGULATORY INFORMATION.

The requirements of the Classification Packaging and Labelling of Dangerous Substances Regulations.
The product is labelled as follows :

F highly flammable
Danger classification :

n.a.

contains:

R phrases:

n.a.

S phrases:

16 Keep away from sources of ignition - No smoking.
38 In case of insufficient ventilation, wear suitable respiratory equipment.
51 Use only in well ventilated areas.
23 Do not breathe vapour.

16. OTHER INFORMATION.

Full text of R phrases with n° appearing in section 2 :

10 Flammable.
11 Highly flammable.

DOKUMENTAL GMBH & CO. SCHREIBFARBEN
Safety Data Sheet in Accordance with 91/155/EEC

Product Name : WB 7223 black

Date: 08.05.00 Revision Date: 08.05.00

page 5/8

The information of this MSDS is based on the present state of our knowledge and on current EEC and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction.

It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products' properties.

The information in this Safety Data Sheet is required pursuant to Dangerous Substances Regulations 1994.
