

**Trade name:** Boardmarker ink (brown) contained in: TZ 1

**Current version :** 1.1.0, issued: 10.09.2015

**Replaced version:** 1.0.0, issued: 30.06.2015

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**Boardmarker ink (brown) contained in: TZ 1**

### 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**

Legamaster International B.V.

Kwinkweerd 62

Postbus 111

7240 AC Lochem

The Netherlands

Telephone no. +31 (0) 573-713000

**Information provided by / telephone**

+31 (0) 573-713000

**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 information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

### 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

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**Hazard statements**

H225 Highly flammable liquid and vapour.  
 H336 May cause drowsiness or dizziness.

**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**

Alcoholic solution of organic pigments, binding agents and additives.

**Hazardous ingredients**

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	
1	<b>ethanol</b>			
	64-17-5 200-578-6 603-002-00-5 -	Flam. Liq. 2; H225	>= 50.00 - < 100.00	%-b.w.
2	<b>1-methoxy-2-propanol</b>			
	107-98-2 203-539-1 603-064-00-3 -	Flam. Liq. 3; H226 STOT SE 3; H336	>= 10.00 - < 25.00	%-b.w.

Full Text for all 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.

**After eye contact**

Remove contact lenses. 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**

Do not induce vomiting. 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 (CO<sub>2</sub>); 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). 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.

##### 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.

**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
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Ethanol			
	TWA	1920	mg/m <sup>3</sup> 1000 ml/m <sup>3</sup>
2	1-methoxy-2-propanol	107-98-2	203-539-1
<b>2000/39/EWG</b>			
1-Methoxypropanol-2			
	STEL	568	mg/m <sup>3</sup> 150 ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup> 100 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Skin	
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
1-Methoxypropan-2-ol			
	STEL	560	mg/m <sup>3</sup> 150 ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup> 100 ml/m <sup>3</sup>
	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.

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Form/Colour**

liquid

brown

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<b>Odour</b>	
characteristic	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point / melting range</b>	
No data available	
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
Value	13 °C
<b>Ignition temperature</b>	
Value	287 °C
<b>Auto-ignition temperature</b>	
Remarks	Product is not selfigniting.
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
This product is not explosive. In and after use danger of production of inflammable compounds.	
<b>Flammability (solid, gas)</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
Value	1.7 % vol
<b>Upper flammability or explosive limits</b>	
Value	15.0 % vol
<b>Vapour pressure</b>	
Value	59 hPa
Reference temperature	20 °C
<b>Vapour density</b>	
No data available	
<b>Evaporation rate</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
No data available	
<b>Solubility in water</b>	
Remarks	partially miscible

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<b>Solubility(ies)</b>	
No data available	
<b>Partition coefficient: n-octanol/water</b>	
No data available	
<b>Viscosity</b>	
No data available	
<b>Solvent content</b>	
Value	79.4 %

**9.2 Other information**

<b>Other information</b>
No data available.

**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**

No data available.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

<b>Acute oral toxicity</b>			
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		
<b>Acute dermal toxicity</b>			
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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<b>Acute inhalational toxicity</b>
No data available
<b>Skin corrosion/irritation</b>
No data available
<b>Serious eye damage/irritation</b>
No data available
<b>Respiratory or skin sensitisation</b>
No data available
<b>Germ cell mutagenicity</b>
No data available
<b>Reproduction toxicity</b>
No data available
<b>Carcinogenicity</b>
No data available
<b>STOT-single exposure</b>
No data available
<b>STOT-repeated exposure</b>
No data available
<b>Aspiration hazard</b>
No data available
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>
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. Eye contact with the product may lead to irritation.

## 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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<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
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**

<b>Other information</b>
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	III
Hazard identification no.	30
UN number	UN1263
Technical name	PAINT
Special Provision 640	640E
Tunnel restriction code	D/E
Label	3



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**14.2 Transport IMDG**

Class	3
Packing group	III
UN number	UN1263
Proper shipping name	PAINT
EmS	F-E+S-E
Label	3

**14.3 Transport ICAO-TI / IATA**

Class	3
Packing group	III
UN number	UN1263
Proper shipping name	Paint
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 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
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**Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is subject to Part I of Annex I, risk category:	P5b
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**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:**

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 H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H226 Flammable liquid and vapour.

**Department issuing safety data sheet**

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

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