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

#### 1.1 **Product identifier**

Trade name

## Boardmarker ink (yellow, orange) 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

Legamaster International B.V.

Kwinkweerd 62

Postbus 111

AC Lochem 7240

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**

## 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

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

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 (CO2); 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 it is 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	
	List of approved workplace exposure limits (WELs) / E	EH40			
	Ethanol				
	TWA	1920	mg/m³	1000	ml/m³
2	1-methoxy-2-propanol	107-98-2		203-539-1	
	2000/39/EWG				
	1-Methoxypropanol-2				
	STEL	568	mg/m³	150	ml/m³
	TWA	375	mg/m³	100	ml/m³
	Skin resorption / sensibilisation	Skin			
	List of approved workplace exposure limits (WELs) / E	EH40			
	1-Methoxypropan-2-ol				
	STEL	560	mg/m³	150	ml/m³
	TWA	375	mg/m³	100	ml/m³
	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 workstation 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
yellow; orange

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Odour			
characteristic			
Odour threshold			
No data available			
pH value			
No data available			
Boiling point / boiling range  No data available			
Melting point / melting range  No data available			
Decomposition point / decomposition range			
No data available			
Flash point			
Value		13	°C
Ignition temperature			
Value		287	°C
Auto-ignition temperature			
Remarks	Product is not selfi	gniting.	
Oxidising properties			
No data available			
Explosive properties  This product is not explosive. In and offer use of	langer of production of	of inflower	mahla aampaunda
This product is not explosive. In and after use d	anger of production of	of inflamr	mable compounds.
This product is not explosive. In and after use d  Flammability (solid, gas)	langer of production o	of inflamr	mable compounds.
This product is not explosive. In and after use d  Flammability (solid, gas)  No data available	anger of production of	of inflamr	mable compounds.
This product is not explosive. In and after use d  Flammability (solid, gas)	langer of production of	of inflamr	mable compounds.  % vol
This product is not explosive. In and after use d  Flammability (solid, gas)  No data available  Lower flammability or explosive limits  Value	langer of production of		
This product is not explosive. In and after use d  Flammability (solid, gas)  No data available  Lower flammability or explosive limits	langer of production of		
This product is not explosive. In and after use d  Flammability (solid, gas)  No data available  Lower flammability or explosive limits  Value  Upper flammability or explosive limits  Value	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas)  No data available  Lower flammability or explosive limits  Value  Upper flammability or explosive limits	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate No data available	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate No data available  Relative density	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate No data available  Relative density No data available	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate No data available  Relative density No data available  Density	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate No data available  Relative density No data available  Density No data available	langer of production of	1.7	% vol
This product is not explosive. In and after use d  Flammability (solid, gas) No data available  Lower flammability or explosive limits Value  Upper flammability or explosive limits Value  Vapour pressure Value Reference temperature  Vapour density No data available  Evaporation rate No data available  Relative density No data available  Density	anger of production of	1.7	% vol



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

#### 9.2 Other information

Other information	
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

Acu	te oral toxicity			
No	Substance name	CAS no.		EC no.
1	ethanol	64-17-5		200-578-6
LD5	0		6200	mg/kg bodyweight
Spe	cies	rat		
Sou	rce	Manufacturer		
2	1-methoxy-2-propanol	107-98-2		203-539-1
LD5	0		5660	mg/kg bodyweight
Spe	cies	rat		
Sou	rce	Manufacturer		

Acu	te dermal toxicity			
No	Substance name	CAS no.		EC no.
1	1-methoxy-2-propanol	107-98-2		203-539-1
LD5	0		9999.99	mg/kg bodyweight
Spe	cies	rabbit		
Sou	rce	Manufacturer		



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**Acute inhalational toxicity** 

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT-single exposure
No data available

STOT-repeated exposure
No data available

**Aspiration hazard** 

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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

Toxi	icity to fish (acute)			
No	Substance name	CAS no.		EC no.
1	ethanol	64-17-5		200-578-6
LC5	0	8	3150	mg/l
Dura	ation of exposure	9	96	h
Spec	cies	Leuciscus idus		
Soul	rce	Manufacturer		

#### Toxicity to fish (chronic)

No data available

Tox	icity to Daphnia (acute)				
No	Substance name	CAS no.			EC no.
1	ethanol	64-17-5			200-578-6
EC5	0	9268	-	14221	mg/l
Dura	ation of exposure			48	h
Spe	cies	Daphnia magna			
Sou	rce	Manufacturer			



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**Toxicity to Daphnia (chronic)** 

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

**Bacteria toxicity** 

No data available

12.2 Persistence and degradability

Biod	degradability		
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Valu	e		%
Sou	rce	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

Other information	
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.

#### Packagino

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 Ш Hazard identification no. 33 UN1263 UN number Technical name **PAINT** Special Provision 640 640D Tunnel restriction code D/E Label



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#### 14.2 Transport IMDG

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

#### 14.3 Transport ICAO-TI / IATA

Class 3
Packing group II
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

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XVII.

## 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

#### 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.

## EC safety data sheet



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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

**UMCO Umwelt Consult GmbH** 

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

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