

Trade name: Boardmarker refill ink 119504 contained in: TZ 100

Product no.: TZ100 grün

Current version : 2.0.0, issued: 10.09.2014

Replaced version: 1.0.0, issued: 02.09.2014

Region: GB

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

1.1 Product identifier

Trade name

Boardmarker refill ink 119504 contained in: TZ 100

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Refilling ink

1.3 Details of the supplier of the safety data sheet

Address

Legamaster GmbH

Kwinkweerd 62

Postbus 111

7240

AC Lochem

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)

Eye Dam. 1; H318

Flam. Liq. 2; H225

STOT SE 3; H336

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

F; R11

R67

Xi; R41

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS02



GHS05



GHS07

Signal word

Danger

Hazardous component(s) to be indicated on label:

propan-1-ol

Hazard statements

H225

Highly flammable liquid and vapour.

H318

Causes serious eye damage.

H336

May cause drowsiness or dizziness.

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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.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 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**

Mixture (preparation)

Hazardous ingredients

No	Substance name			Additional information	
	CAS / EC / Index / REACH no	Classification 67/548/EEC	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	propan-1-ol				
	71-23-8 200-746-9 603-003-00-0 -	F; R11 Xi; R41 R67	Eye Dam. 1; H318 Flam. Liq. 2; H225 STOT SE 3; H336	> 50.00 - < 100.00	%-b.w.
2	propan-2-ol				
	67-63-0 200-661-7 603-117-00-0 -	F; R11 Xi; R36 R67	Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	> 2.50 - < 10.00	%-b.w.
3	1-methoxy-2-propanol				
	107-98-2 203-539-1 603-064-00-3 -	R10 R67	Flam. Liq. 3; H226 STOT SE 3; H336	> 2.50 - < 10.00	%-b.w.

Full Text for all R-phrases , 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.

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After eye contact

Remove contact lens. 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.

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

Use self-contained breathing apparatus. Cool endangered containers with water spray jet. 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 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.

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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.

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.

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.

Advice on storage assembly

None known

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	propan-1-ol	71-23-8	200-746-9
List of approved workplace exposure limits (WELs) / EH40			
	Propan-1-ol		
	STEL	625 mg/m ³	250 ml/m ³
	TWA	500 mg/m ³	200 ml/m ³
	Skin resorption / sensibilisation	Sk	
2	propan-2-ol	67-63-0	200-661-7
List of approved workplace exposure limits (WELs) / EH40			
	Propan-2-ol		
	STEL	1250 mg/m ³	500 ml/m ³
	TWA	999 mg/m ³	400 ml/m ³
3	1-methoxy-2-propanol	107-98-2	203-539-1
2000/39/EWG			
	1-Methoxypropanol-2		
	STEL	568 mg/m ³	150 ml/m ³
	TWA	375 mg/m ³	100 ml/m ³
	Skin resorption / sensibilisation	Skin	
List of approved workplace exposure limits (WELs) / EH40			
	1-Methoxypropan-2-ol		
	STEL	560 mg/m ³	150 ml/m ³
	TWA	375 mg/m ³	100 ml/m ³
	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)

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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		
green		
Odour		
characteristic		
Odour threshold		
No data available		
pH value		
No data available		
Boiling point / boiling range		
Value	82	°C
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 selfigniting.	
Oxidising properties		
No data available		
Explosive properties		
This product is not explosive. In and after use danger of production of inflammable compounds.		
Flammability (solid, gas)		
No data available		
Lower flammability or explosive limits		
Value	2.1	% vol
Upper flammability or explosive limits		
Value	13.5	% vol
Vapour pressure		
Value	19	hPa
Reference temperature	20	°C

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Vapour density		
No data available		
Evaporation rate		
No data available		
Relative density		
No data available		
Density		
no data available		
Solubility in water		
Remarks	partially miscible	
Solubility(ies)		
No data available		
Partition coefficient: n-octanol/water		
No data available		
Viscosity		
Value	12	mPa*s
Reference temperature	20	°C
Type	dynamic	
Solvent content		
Value	80.8	%
Solids content		
Value	1.6	%

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**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		5660	mg/kg bodyweight
Species		rat	
Source		Manufacturer	

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Acute dermal toxicity			
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		
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.			

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Toxicity to fish (acute)
No data available
Toxicity to fish (chronic)
No data available
Toxicity to Daphnia (acute)
No data available
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

No data available.

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.

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.

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Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1263
Technical name	PAINT RELATED MATERIAL
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1263
Proper shipping name	PAINT RELATED MATERIAL
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 related material
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 73/78 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****Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances**

Remarks Annex I, part 2, category 7 b

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

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

R10	Flammable.
R11	Highly flammable.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R67	Vapours may cause drowsiness and dizziness.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Department issuing safety data sheet

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

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.