

Trade name: Boardmarker refill ink 119503, 119903 contained in: TZ 1

Product no.: TZ1 blau

Current version : 2.0.0, issued: 10.09.2014

Replaced version: 1.0.1, issued: 21.11.2012

Region: GB

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

1.1 Product identifier

Trade name

Boardmarker refill ink 119503, 119903 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

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 Irrit. 2; H319

Flam. Liq. 2; H225

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

F; R11

R67

2.2 Label elements

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

Hazard pictograms



GHS02



GHS07

Signal word

Danger

Hazard statements

H225

Highly flammable liquid and vapour.

H319

Causes serious eye irritation.

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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.
 P370+P378 In case of fire: Use water spray, extinguishing powder, foam or CO2 for extinction.
 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 67/548/EEC	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	ethanol				
	64-17-5 200-578-6 603-002-00-5 -	F; R11	Flam. Liq. 2; H225	< 70.00	%-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	< 16.00	%-b.w.

Full Text for all R-phrases , H-phrases and EUH-phrases: pls. see section 16

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. Do NOT use solvents or thinners!

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.

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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. Run-off water from fire fighting must not be discharged into drains or enter surface water. 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). 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.

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

Do not store together with: Oxidizing agents; Alkali metals; Earth alkali metals; Acids; Peroxides

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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) / EH40			
Ethanol			
	TWA	1920	mg/m ³ 1000 ml/m ³
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

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
blue
Odour
characteristic

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Odour threshold	
No data available	
pH value	
No data available	
Boiling point / boiling range	
Value	78.3 °C
Melting point / melting range	
Value	-114.5 °C
Decomposition point / decomposition range	
No data available	
Flash point	
Value	12 °C
Ignition temperature	
Value	425 °C
Auto-ignition temperature	
No data available	
Oxidising properties	
No data available	
Explosive properties	
No data available	
Flammability (solid, gas)	
No data available	
Lower flammability or explosive limits	
Value	3.5 % vol
Upper flammability or explosive limits	
Value	15.0 % vol
Vapour pressure	
Value	59 hPa
Reference temperature	20 °C
Vapour density	
No data available	
Evaporation rate	
No data available	
Relative density	
No data available	
Density	
No data available	
Solubility in water	
Remarks	miscible

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Solubility(ies)

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

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 if maintained in the original packaging and under ordinary storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

10.5 Incompatible materials

Oxidizing agents; Alkali metals; Earth alkali metals; Acids; Peroxides

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	ethanol	64-17-5	200-578-6
LD50		6200	mg/kg bodyweight
Species	rat		
Source	Manufacturer		
2	propan-2-ol	67-63-0	200-661-7
LD50		5280	mg/kg bodyweight
Species	rat		
Source	Manufacturer		

Acute dermal toxicity

No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
LD50		12800	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		

Acute inhalational toxicity

No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
LC50		72.6	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Source	Manufacturer		

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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

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			
2	propan-2-ol	67-63-0		200-661-7
LC50			9640	mg/l
Duration of exposure			96	h
Species	Pimephales promelas			
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			
2	propan-2-ol	67-63-0		200-661-7
EC50			13299	mg/l
Duration of exposure			48	h
Species	Daphnia magna			
Source	Manufacturer			

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Toxicity to Daphnia (chronic)	
No data available	

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
EC50	>	1000	mg/l
Duration of exposure		72	h
Species	Desmodesmus subspicatus		
Source	Manufacturer		

Toxicity to algae (chronic)	
No data available	

Bacteria toxicity	
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		
2	propan-2-ol	67-63-0	200-661-7
Value		95	%
Duration		21	day(s)
Method	OECD 301 E		
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

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
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
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 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)

R11	Highly flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.
H225	Highly flammable liquid and vapour.
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.