SAFETY DATA SHEET

Date of Issue: SDS No.: Version: September 1, 2009 RI-085 001



1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

This product is a writing instrument to be recognized as Article.

1.1. Identification of the substance or preparation

Product name	: Wytebord Marker
Product code	: WBMA-TM-B/R/L/G/BN/O
	WBMA-TMC-B/R/L/G
Preparation name	: WMA-B/R/L/G/BN/O

- 1.2. Use of the preparation : Ink for writing instrument
- 1.3. Company identification e-mail address

Name of manufacture / supplier	: PILOT CORPORATION OF EUROPE
Address	: PAE de la Caille 74350 ALLONZIER-LA-CAILLE (France)
Telephone number	: +33 (0)4 50 08 33 00 Working hours (from 8.30am to 12.30pm and from 01.30pm to 05.30pm :04.00pm on Friday-French time)
Facsimile number	: +33 (0)4 50 46 43 59
e-mail address	: pilotfrance@piloteurope.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59

Association /Organization :ORFILA /INRS <u>http://www.centres-antipoison.net</u>

2. HAZARDS IDENTIFICATION

Based on the law and regulation in Japan			
	Physical /Chemical hazards : No		: Not applicable.
	Environmental hazaro	ds	: Not applicable.
	Effect of exposure	: Not applicable.	
Symptom of exposure			
	Inhalation	: Intentional exposure to ink vapors may cause respiratory irritation.	
	Ingestion	: May cause upset stomach.	
	Skin contact	: Ink contact with skin may cause irritation, swelling, or redness.	
	It is not expected to cause an allergic skin reaction.		
	Eye contact : Ink contact with eye may be mildly irritating.		

3. COMPOSITION / INFORMATION ON INGREDIENTS

Based on the law and regulation in Japan

For ink unless otherwise specified

Ingredients	CAS No.	EINECS Number	Weight %	Component
Ethanol	64-17-5	200-578-6	70 - 79	All colors
Propan-2-ol	67-63-0	200-661-7	4 -6	Exclude Brown
Propan-1-ol	71-23-8	200-746-9	3.0	Black
Butan-1-ol	71-36-3	200-751-6	14.0	Brown
Carbon black	1333-86-4	215-609-9	4.0	Black
C.I.Pigment Green 7	1328-53-6	215-524-7	4.5	Green

4. FIRST AID MEASURES		
Inhalation	Remove subject to ventilated fresh air. Consult physician if necessary.	
Ingestion	Refer for medical attention.	
Skin contact	: Wash the affected area under tepid running water using a mild soap.	
	And refer for medical attention if irritation continues.	
Eye contact	: Gently rinse the affected eyes with clean water for at least 15 minutes.	
	And refer for medical attention if irritation continues.	
First aid facilities	: Ensure eyewash and water service are available.	
Medical attention		
Local contami	nation	

Local contamination

: In case of skin or eye contamination treat as under First Aid Measures.

Systemic poisoning

: There is no specific antidote. Treat symptoms.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media	[:] In case of fire, use water spray, foam, dry, chemical powder or carbon dioxide.
5.2 Extinguishing media which shall not be used for safety.	: None.
5.3 Special exposure hazards arising from the substance or preparation itself, combustion products	: CO ₂ , CO, NO _x , and SO _x , are produced after combustion.
5.4 Special protective equipment for fire-figters.	: Not required.
5.5 Additional information	None.

6. ACCIDENTAL RELEASE MEASURES6.1 Personal precautions: Use proper ventilation. Use eye and skin protection.6.2 Environmental precautions: Do not dispose of waste to the sewer.6.3 Methods for cleaning up: Absorb spill with material (cloth or paper), then place in a chemical waste containers.6.4 Additional information:None.

7.1. Handling	Avoid rough handling or dropping.		
7.1.1 Protective measu	ires	: Not required in normal use.	
7.1.2 Measures to pre-	vent aerosol and dust generation	: Not required in normal use.	
7.1.3 Measures requir	ed to protect the environment	: Not required in normal use.	
7.1.4 Specific requirements or handling rules		: None.	
7.1.5 Precautions against fire and explosion : Not re		: Not required in normal use.	
7.2. Storage	Store in a dry, cool, well-ventilated location , away from possible all source of ignition.		
7.3. Specific use(s)	: Not use it except the ink for writing instruments.		

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure limit values : Not available.	
8.1.1 Occupational exposure controls.	: Not available.
8.1.2 Biological limit values.	: Not available.
8.1.3 DNEL and PNEC-value(s) as applicat	ble : No data.
8.2. Exposure controls	
8.2.1. Occupational exposure controls	
a) Respiratory protection	: Not required in normal use
b) Hand protection	: Not required in normal use
c) Eye protection	: Not required in normal use
d) Skin protection	: Not required in normal use
8.2.2. Environmental exposure controls	
Ethanol	:1000 ppm
Propan-2-ol	:400 ppm
Propan-1-ol	:200 ppm
Butan-1-ol	:20 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

For ink unless otherwise specified

9.1. General information

Appearance	: Liquid
	[Color] Black, Red, Blue, Green, Brown, Orange
Odor	i alcohol odor

9.2. Important health, safety and environmental information

pH	: Not applicable
Boiling point / boiling range	: 78.3 degrees Celsius (Ethanol)
Flash point	: 14.0 degrees Celsius (Ethanol)
Flammability (solid, gas)	: Flammable
Explosive properties	: None
Oxidizing properties	: None
Vapor pressure	: 44 mmHg (at 20 degrees Celsius, Ethanol)
Relative density	: 0.81-0.85 (at 20 degrees Celsius)
Solubility	: Not applicable
Flammability (solid, gas) Explosive properties Oxidizing properties Vapor pressure Relative density	 Flammable None None 44 mmHg (at 20 degrees Celsius, Ethanol) 0.81-0.85 (at 20 degrees Celsius)

Product Name : Wytebord Marker

Water solubility	: Insoluble
Partition coefficient: n-octanol / water	: No data
Viscosity	: 5 -9 mPa · s (at 20 degrees Celsius)
Vapor density	: 1.6 (at 20 degrees Celsius, Ethanol)
Evaporation rate	: No data

9.3. Other information : None.

10. STABILITY AND REACTIVITY	
10.1. Conditions to avoid	: Fire or intense heat may cause violent rupture of
	packages.
	: Take precautionary measures against static
	discharges.
10.2. Materials to avoid	Strong oxidizing agents and reducing agents.
10.3. Hazardous decomposition products	: Heating can release vapours which can be ignited.
	[:] Burning produces obnoxious and toxic fumes, carbon
	oxides.

11. TOXICOLOGICAL INFORMATION

For ink unless otherwise s	pecified			
11.1 Toxicokinetics,	metabolism and distribution	: No data.		
11.2 Acute effects (acute toxicity, irritation and corrosivity)				
: Acute toxicity	Ethanol	: LDL ₀ 1,400 mg/kg (human oral)		
		: LD ₅₀ 7,060 mg/kg (rat oral)		
	Propan-2-ol	$ m LD_{50}~5045~mg/kg~(rat~oral)$		
		: LDL ₀ 3570 mg/kg (rabbit skin)		
	Propan-1-ol	$ m LD_{50}$ 1870 mg/kg (rat oral)		
		LD ₅₀ 4000 mg/kg (rabbit skin)		
	Butan-1-ol	LD_{50} 790 mg/kg (rat oral)		
: Irritation	Ethanol	: 400 mg open ; MILD (rabbit skin)		
		100 mg/24h ; MODERATE (rabbit eye)		
	Propan-2-ol	: 500 mg open ; MILD (rabbit skin)		
		100 mg/24h ; MODERATE (rabbit eye)		
	Propan-1-ol	: 500 mg open ; MILD (rabbit skin)		
		100 mg/24h ; MODERATE (rabbit eye)		
11.3 Sensitization		: No data.		
11.4 Repeated dose toxicity		: No data.		
11.5 CMR (carcinogenicity, mutagenicity, and toxicity for reproduction)				
	Carcinogenicity	Carbon black IARC Class 2B		

12. ECOLOGICAL INFORMATION	
12.1. Ecotoxicity	: No data.
12.2. Mobility	: No data.
12.3. Persistence and degradability	: No data.
12.4. Bioaccumulative potential	: No data.
12.5. Results of PBT assessment	: No data.

12.6. Other adverse effects

: None.

: Not applicable.

: None.

13. DISPOSAL CONSIDERATIONS

 \cdot Follow all regulations in your country.

14. TRANSPORT INFORMATION

14.1.1 UN number	
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14.1.2 Class

14.2.1 Proper shipping name

14.3.1 Packing group

14.4.1 Marine pollutant

14.5.1 Other applicable information

15. REGULATORY INFORMATION

 \cdot Follow all regulations in your country.

16. OTHER INFORMATION

The information here is given in good faith, but no warranty, express or implied, is made. Final determination of suitability of any material is the sole responsibility of the user.

End of SDS