Product Name : V BOARD MASTER FEI SH EET

Date of Issue: SDS No.: Version:

Feb. 20, 2013 RI-022 005





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 : V BOARD MASTER Product code : WBMA-VBM-F-B/R/L/G/O/V-BG WBMA-VBM-M-B/R/L/G/O/V-BG WBMA-VBM-MC-B/R/L/G/O-BG WBMA-VBM-B-B/R/L/G/O-BG Preparation name : WMAM-B/L/G /V, WMA-R/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 regula	tion in Japan	
Physical /Chemical haz	Flammable liquid.	
r nysicai /Chemicai naz	Acute toxic substance	
Environmental hazard	s : 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.	

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3. COMPOSITION / INFORMATION ON INGREDIENTS

 $Based \ on \quad the \ law \ and \ regulation \ in \ Japan$

For ink unless otherwise specified

Ingredients	CAS No.	EINECS Number	Weight %	Component
Ethanol	64-17-5	200-578-6	35-79	All colors
Propan-2-ol	67-63-0	200-661-7	4-41	All colors
Propan-1-ol	71-23-8	200-746-9	1-4	Black, Violet
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 MEASU	RES		
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		
: 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 M	EASURES		
5.1 Suitable extinguishin	ng media	: In case of fire, use water spray, foam, dry, chemical powder or carbon dioxide.	
5.2 Extinguishing media safety.	which shall not be used for	: None.	
5.3 Special exposure haz	ards arising from the	$\stackrel{:}{\cdot}$ CO ₂ , CO, NO _x , and SO _x , are produced after	

- 5.3 Special exposure hazards arising from the substance or preparation itself, combustion products5.4 Special protective equipment for fire-figters.
- 5.5 Additional information

6. ACCIDENTAL RELEASE MEASURES

6.1 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.

combustion.

: Not required.

:None.

7. HANDLING AND STORAGE			
7.1. Handling	Avoid rough handling or dr	: Avoid rough handling or dropping.	
7.1.1 Protective measures : N		: Not required in normal use.	
7.1.2 Measures to prevent aerosol and dust generation		: Not required in normal use.	
7.1.3 Measures required 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 required in normal use.		: 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	r 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 applicable	e : 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

9. PHYSICAL AND CHEMICAL PROPERTIES

For ink unless otherwise specified

9.1. General information

Appearance	: Liquid
	[Color] Black, Red, Blue, Green, Orange, Violet
Odor	: 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
Water solubility	: Insoluble

Product Name : V BOARD MASTER		
Partition coefficient: n-octanol / water	: No data	

:	No	data

- : 5 -13 mPa · s (at 20 degrees Celsius)
- : 1.6 (at 20 degrees Celsius, ethanol)
 - : No data

9.3. Other information : None.

Evaporation rate

Viscosity Vapor density

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 (acu	ate toxicity, irritation and corr	osivity) :		
: Acute toxicity	Ethanol	: LDL ₀ 1,400 mg/kg (human oral)		
		: LD ₅₀ 7,060 mg/kg (rat oral)		
	propan-2-ol	$ m ^{12}LD_{50}~5045$ mg/kg (rat oral)		
		: LDL ₀ 3570 mg/kg (rabbit skin)		
	propan-1-ol	: LD ₅₀ 1870 mg/kg (rat oral)		
		LD ₅₀ 4000 mg/kg (rabbit skin)		
: 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 to	xicity	: No data.		
11.5 CMR (carcinogenicity, mutagenicity, and toxicity for reproduction)				
	Carcinogenicity	Carbon black IARC Class 2B		

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.	

13. DISPOSAL CONSIDERATIONS

Product Name : V BOARD MASTER

 \cdot Follow all regulations in your country.

14. TRANSPORT INFORMATION

For ink unless otherwise specified	
14.1.1 UN number	: 1993
14.1.2 Class	: 3
14.2.1 Proper shipping name	: Not applicable.
14.3.1 Packing group	: Not applicable.
14.4.1 Marine pollutant	: Not applicable.
14.5.1 Other applicable information	: None.

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.

 $\operatorname{End}\,\operatorname{of}\,\operatorname{SDS}$