

SAFETY DATA SHEET

Date of Issue: Feb. 20, 2013
 SDS No.: RI-023
 Version: 005



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

1.1. Identification of the substance or preparation

Product name : Cartridge for V BOARD MASTER
 Product code : WBS-VBM-B/R/L/G/O/V
 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 <http://www.centres-antipoison.net>

2. HAZARDS IDENTIFICATION

All colors of preparation are dangerous according to Directive 67/548/EEC and its amendments.

Ingredients : ethanol, propan-2-ol and propan-1-ol

Classification : F+R11

3. COMPOSITION / INFORMATION ON INGREDIENTS

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

Risk-phrase Ethanol :R11
 Propan-2-ol :R11,R,36,R67
 Propan-1-ol :R11

Safety-phrase	Ethanol	:S2,S7,S16
	Propan-2-ol	:S2,S7,S16,S24/25,S26
	Propan-1-ol	:S2,S7,S16,S24,S26,S39
Additional information		: None

4. FIRST AID MEASURES

Inhalation	: Remove the victim from the contamination immediately to fresh air. And refer for medical attention.
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	: None

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	: Not applicable
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-fighters	: No data
5.5. Additional information	: None

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions	: Use proper ventilation. Use eye and skin protection.
6.2. Environmental precautions	: Keeping away from drains, surface-and ground-water and soil, possible need to alert the neighbourhood.
6.3. Methods for cleaning up	: Absorb spill with material (cloth or paper), then place in chemical waste containers.
6.4. Additional information	: None

7. HANDLING AND STORAGE

7.1. Handling	: Avoid rough handling or dropping. : Keep container tightly closed. : Wear suitable gloves and eye protection.
7.1.1. Protective measures	: 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.
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 : No data
- 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 : 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
- | | | |
|-----------------|--------------|-------------------------|
| : ACGIH TLV-TWA | Ethanol | : 1000 ppm |
| | Propan-2-ol | : 400 ppm |
| | Propan-1-ol | : 200 ppm |
| | Carbon black | : 3.5 mg/m ³ |

9. PHYSICAL AND CHEMICAL PROPERTIES

- 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
- Partition coefficient: n-octanol / water : No data
- Viscosity : 5 -13 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 : Direct sunshine, the high temperature and source of ignition.
- 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

There is no data available on the preparation itself.

11.1. Toxicokinetics, metabolism and distribution : No data

11.2. Acute effects (acute toxicity, irritation and corrosivity)

: Acute toxicity	Ethanol	: LD ₅₀ 7,060 mg/kg (rat oral) LDL ₀ 1,400 mg/kg (human oral)
	Propan-2-ol	: LD ₅₀ 5,045 mg/kg (rat oral) TDL ₀ 3,570 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 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

13. DISPOSAL CONSIDERATIONS

- Follow all regulations in your country.

14. TRANSPORT INFORMATION

14.1. UN number	: 1993
14.2. Class	: 3
14.3. Proper shipping name	: Not applicable
14.4. Packing group	: Not applicable
14.5. Marine pollutant	: Not applicable
14.6. Other applicable information	: None

15. REGULATORY INFORMATION

- Follow all regulations in your country.

16. OTHER INFORMATION

R11: Highly flammable.

R36: Irritant to eyes.

R67: Vapors may cause drowsiness and dizziness.

S2: Keep out of the reach of children.

S7: Keep container tightly closed.

S16: Keep away from sources of ignition - No smoking.

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39: Wear eye/face protection.

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