

# SAFETY DATA SHEET

Date of Issue: March 1, 2023  
SDS No.: RI-023  
Version: 011



## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

For ink unless otherwise specified.

### 1.1. Product identifier.

Product name : Cartridge for V BOARD MASTER

Product code : WBS-VBM-B/L/G

Mixture name : WMAM-B/L/G

Product code	UFI number
WBS-VBM-B	NX5K-4Y2T-8D0C-RNP2
WBS-VBM-L	K46K-4YFK-VD0C-2AU6
WBS-VBM-G	172A-EK76-0F0N-27DH

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

Identified uses : Ink for writing instrument

### 1.3. Details of the supplier of the safety data sheet

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

Telephone number : +33 (0)1 45 42 59 59

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

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable Liquid Category 2 H225

Eye Damage / Eye Irritation Category 2 H319

Specific target organ toxicity (Single exposure) Category 3 H336

### 2.2. Label elements

Labeling according Regulation (EC) No 1272/2008

## Hazard Pictograms



Signal word Danger

## Hazard statement(s)

H225 Highly flammable liquid and vapour

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

## Precautionary statement(s)

## Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

P271 Use only outdoors or in a well-ventilated area.

P102 Keep out of reach of children.

## Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards None

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS No.	EC No.	Index No.	REACH Registration No.	% Weight	Classification	Component
						(EC)No 1272/2008	
Ethanol	64-17-5	200-578-6	603-002-00-5	01-21194 57610-43 -xxxx	35-45	Flam Liq.2 H225	All colors
Propan-2-ol	67-63-0	200-661-7	603-117-00-0	01-21194 57558-25 -xxxx	35-40	Flam Liq.2 H225 Eye Irrit. 2 H319 STOT SE 3 H336	All colors
Propan-1-ol	71-23-8	200-746-9	603-003-00-0	-	2.9	Flam liq. 2 H225 Eye Dam.1 H318 STOT SE3 H336	Black
Carbon black	1333-86-4	215-609-9	Not applicable	-	4.0	Not classified	Black

H318: Causes serious eye damage.

### 4. FIRST AID MEASURES

## 4.1. Description of 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.

4.2. Most important symptoms and effects, both acute and delayed

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

4.3. Indication of any immediate medical attention and special treatment needed

There is no specific antidote. Treat symptoms.

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## 5. FIRE-FIGHTING MEASURES

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- 5.1. Extinguishing media : In case of fire, use water spray, foam, dry, chemical powder or carbon dioxide.
- 5.2. Special hazards arising from the substance or mixture : CO<sub>2</sub>, CO, NO<sub>x</sub>, and SO<sub>x</sub>, is produced after combustion.
- 5.3. Advice for firefighters : None

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## 6. ACCIDENTAL RELEASE MEASURES

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- 6.1. Personal precautions, protective equipment and emergency procedures  
: Use proper ventilation. Use eye and skin protection.
- 6.2. Environmental precautions  
: Do not dispose of waste to the sewer.
- 6.3. Methods and material for containment and cleaning up  
: Absorb spill with material (cloth or paper), then place in a chemical waste containers.
- 6.4. Reference to other sections : None

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## 7. HANDLING AND STORAGE

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- 7.1. Precautions for safe handling  
: Use proper ventilation.  
Avoid rough handling or dropping.  
Wear protective gloves / protective clothing / eye protection / face protection.  
Keep out of reach of children and do not drink ink.
- 7.2. Conditions for safe storage, including any incompatibilities  
: Store in a dry, cool, well-ventilated location.
- 7.3. Specific end use(s)  
: Not use it except the ink for writing instruments.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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8.1. Control parameters

Data of France.

	Limit value - Eight hours	Limit value - Short term
Ethanol	1000 ppm	5000 ppm
Propan-2-ol	—	400 ppm
Carbon black	3.5 mg/m <sup>3</sup>	—

8.2. Exposure controls

: Wear protective gloves / protective clothing / eye protection / face protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties	
(a) Appearance	: Black/Blue/Green Liquid
(b) Odour	: Alcohol odour
(c) Odour threshold	: No data
(d) pH	: Not applicable
(e) Melting point / Freezing point	: No data
(f) Boiling point / boiling range	: 78.3 degrees Celsius (Ethanol)
(g) Flash point	: 14.0 degrees Celsius (Ethanol)
(h) Evaporation rate	: No data
(i) Flammability (solid, gas)	: Flammable
(j) Upper/lower flammability or explosive limits	: None
(k) Vapor pressure	: 40hPa (at 20 degrees Celsius, Ethanol)
(l) Vapor density	: 1.6 (at 20 degrees Celsius, Ethanol)
(m) Relative density	: 0.83-0.85 (at 20 degrees Celsius)
(n) Solubility(ies)	: Not applicable
(o) Partition coefficient: n-octanol / water	: Not available
(p) Auto-ignition temperature	: No data
(q) Decomposition temperature	: No data
(r) Viscosity	: 6.0-13.0 mPa · s (at 20 degrees Celsius)
(s) Explosive properties	: No data
(t) Oxidising properties	: No data
9.2. Other information	: None

## 10. STABILITY AND REACTIVITY

10.1. Reactivity	: This material is stable.
10.2. Chemical stability	: This material is stable.
10.3. Possibility of hazardous reactions	: This material is stable.
10.4. Conditions to avoid	: Direct sunshine, the high temperature and source of ignition.
10.5. Incompatible materials	: Strong oxidizing agents and reducing agents.
10.6. Hazardous decomposition products	: Heating can release vapours which can be ignited. : Burning produces obnoxious and toxic fumes, carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

Mixture: No data

11.1. Information on toxicological effects		
(a) acute toxicity	Ethanol	: LD <sub>50</sub> 11,500 mg/kg (rat oral)

	Propan-2-ol	: LD <sub>50</sub> 3,437 mg/kg (rat oral) : LD <sub>50</sub> 4,059 mg/kg (rabbit skin)
	Propan-1-ol	: LD <sub>50</sub> 2,695 mg/kg (rat oral)
(b) skin corrosion/ irritation	Ethanol	: 400 mg open ; MILD (rabbit skin)
	Propan-2-ol	: 500 mg open ; MILD (rabbit skin)
	Propan-1-ol	: 500 mg open ; MILD (rabbit skin)
(c) serious eye damage/ irritation	Ethanol	: 100 mg/24h ; MODERATE (rabbit eye)
	Propan-2-ol	: 100 mg/24h ; MODERATE (rabbit eye)
	Propan-1-ol	: 100 mg/24h ; MODERATE (rabbit eye)
(d) respiratory or skin sensitisation	No data available	
(e) germ cell mutagenicity	No data available	
(f) carcinogenicity	Carbon black	: IARC Class 2B
(g) reproductive toxicity	No data available	
(h) STOT-single exposure	Propan-2-ol	: May cause drowsiness or dizziness.
	Propan-1-ol	: May cause drowsiness or dizziness.
(i) STOT-repeated exposure	No data available	
(j) aspiration hazard	No data available	

Although carbon black is classified with 2B by IARC, it was in solution, and since it was not a granular material, it carried out the outside of classification.

## 12. ECOLOGICAL INFORMATION

Mixture: No data.

12.1. Toxicity	Ethanol	: LC <sub>50</sub> - Salmo gairdneri-13,000 mg/L-96H EC <sub>50</sub> - Daphnia magna-12,340 mg/L-48H
	Propan-2-ol	: LC <sub>50</sub> - Fathead minnow- 11,130mg/L-96H
	Propan-1-ol	: EC <sub>50</sub> - Daphnia magna(Water flea)- 3,025 mg/L-48H
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	

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

- Follow all regulations in your country.

**14. TRANSPORT INFORMATION**

14.1. UN number	: 1993
14.2. UN proper shipping name	: Flammable liquid N.O.S (Ethanol)
14.3. Transport hazard class(es)	: 3
14.4. Packing group	: II
14.5. Environmental hazards	: Not applicable.
14.6. Special precautions for user	: Not applicable.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not applicable.

**15. REGULATORY INFORMATION**

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Follow all regulations in your country.
- 15.2. Chemical safety assessment
- No data

**16. OTHER INFORMATION**

Hazard statement according to (EC) No 1272/2008

Precautionary Statements		
Prevention	P233	Keep container tightly closed.
	P240	Ground / bond container and receiving equipment.
	P241	Use explosion-proof electrical, ventilating and lighting equipment.
	P242	Use only non-sparking tools.
	P243	Take action to prevent static discharges.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P264	Wash hands thoroughly after handling.
	P261	Avoid breathing mist or vapours or spray.
Response	P303+P361 +P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P337+P317	If eye irritation persists: Get medical help.
	P319	Get medical help if you feel unwell.
	P370 + P378	In case of fire: Use water spray, foam, dry chemical powder or carbon dioxide for extinguish.
Storage	P403+P235	Store in a well-ventilated place. Keep cool.
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
Disposal	P501	Dispose of contents and container in accordance with all

		local, regional, national and international regulations.
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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

# SAFETY DATA SHEET

Date of Issue: March 01, 2020  
SDS No.: RI-130  
Version: 001



## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

For ink unless otherwise specified.

### 1.1. Product identifier.

Product name : Cartridge for V BOARD MASTER

Product code : WBS-VBM-R/O

Mixture name : WMA-R/O

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

Identified uses : Ink for writing instrument

### 1.3. Details of the supplier of the safety data sheet

Name of manufacture : PILOT CORPORATION OF EUROPE  
/ supplier

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

Telephone number : +33 (0)1 45 42 59 59

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

## 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable Liquid Category 2 H225

### 2.2. Label elements

Labeling according Regulation (EC) No 1272/2008

Hazard Pictograms



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour

Precautionary statement(s)

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. -No smoking.



Keep out of reach of children.

Response

P370 + P378

In case of fire: Use water spray, foam, dry chemical powder or carbon dioxide for extinguish.

2.3. Other hazards

None

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS No.	EC No.	Index No.	REACH Registration No.	% Weight	Classification	Component
						(EC)No 1272/2008	
Ethanol	64-17-5	200-578-6	603-002-00-5	01-21194 57610-43 -xxxx	70-80	Flam Liq.2 H225	All colors
Propan-2-ol	67-63-0	200-661-7	603-117-00-0	01-21194 57558-25 -xxxx	4.9	Flam Liq.2 H225 Eye Irrit. 2 H319 STOT SE 3 H336	All colors

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

### 4. FIRST AID MEASURES

#### 4.1. Description of 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.

#### 4.2. Most important symptoms and effects, both acute and delayed

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

#### 4.3. Indication of any immediate medical attention and special treatment needed

There is no specific antidote. Treat symptoms.

### 5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media : In case of fire, use water spray, foam, dry, chemical powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture : CO<sub>2</sub>, CO, NO<sub>x</sub>, and SO<sub>x</sub>, is produced after combustion.

5.3. Advice for firefighters : None

**6. ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal precautions, protective equipment and emergency procedures

: Use proper ventilation. Use eye and skin protection.

## 6.2. Environmental precautions

: Do not dispose of waste to the sewer.

## 6.3. Methods and material for containment and cleaning up

: Absorb spill with material (cloth or paper), then place in a chemical waste containers.

## 6.4. Reference to other sections

: None

**7. HANDLING AND STORAGE**

## 7.1. Precautions for safe handling

: Use proper ventilation.

Avoid rough handling or dropping.

Wear protective gloves / protective clothing / eye protection / face protection.

Keep out of reach of children and do not drink ink.

## 7.2. Conditions for safe storage, including any incompatibilities

: Store in a dry, cool, well-ventilated location.

## 7.3. Specific end use(s)

: Not use it except the ink for writing instruments.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

## 8.1. Control parameters

Data of France.

	Limit value - Eight hours	Limit value - Short term
Ethanol	1000 ppm	5000 ppm
Propan-2-ol	—	400 ppm

## 8.2. Exposure controls

: Wear protective gloves / protective clothing / eye protection / face protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on basic physical and chemical properties

(a) Appearance	: Red/Orange Liquid
(b) Odour	: Alcohol odour
(c) Odour threshold	: No data
(d) pH	: Not applicable
(e) Melting point / Freezing point	: No data
(f) Boiling point / boiling range	: 78.3 degrees Celsius (Ethanol)
(g) Flash point	: 14.0 degrees Celsius (Ethanol)
(h) Evaporation rate	: No data
(i) Flammability (solid, gas)	: Flammable
(j) Upper/lower flammability or explosive limits	: None
(k) Vapor pressure	: 40hPa (at 20 degrees Celsius, Ethanol)
(l) Vapor density	: 1.6 (at 20 degrees Celsius, Ethanol)

(m) Relative density	: 0.82-0.83 (at 20 degrees Celsius)
(n) Solubility(ies)	: Not applicable
(o) Partition coefficient: n-octanol / water	: Not available
(p) Auto-ignition temperature	: No data
(q) Decomposition temperature	: No data
(r) Viscosity	: 7.0-11.0 mPa · s (at 20 degrees Celsius)
(s) Explosive properties	: No data
(t) Oxidising properties	: No data
9.2. Other information	: None

## 10. STABILITY AND REACTIVITY

10.1. Reactivity	: This material is stable.
10.2. Chemical stability	: This material is stable.
10.3. Possibility of hazardous reactions	: This material is stable.
10.4. Conditions to avoid	: Direct sunshine, the high temperature and source of ignition.
10.5. Incompatible materials	: Strong oxidizing agents and reducing agents.
10.6. Hazardous decomposition products	: Heating can release vapours which can be ignited. : Burning produces obnoxious and toxic fumes, carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

Mixture: No data

11.1. Information on toxicological effects		
(a) acute toxicity	Ethanol	: LD <sub>50</sub> 11,500 mg/kg (rat oral)
	Propan-2-ol	: LD <sub>50</sub> 3,437 mg/kg (rat oral) : LD <sub>50</sub> 4,059 mg/kg (rabbit skin)
(b) skin corrosion/irritation	Ethanol	: 400 mg open ; MILD (rabbit skin)
	Propan-2-ol	: 500 mg open ; MILD (rabbit skin)
(c) serious eye damage/irritation	Ethanol	: 100 mg/24h ; MODERATE (rabbit eye)
	Propan-2-ol	: 100 mg/24h ; MODERATE (rabbit eye)
(d) respiratory or skin sensitisation	No data available	
(e) germ cell mutagenicity	No data available	
(f) carcinogenicity	No data available	
(g) reproductive toxicity	No data available	
(h) STOT-single exposure	Propan-2-ol	: May cause drowsiness or dizziness.
(i) STOT-repeated exposure	No data available	
(j) aspiration hazard	No data available	

**12. ECOLOGICAL INFORMATION**

Mixture: No data.

12.1. Toxicity	Ethanol	: LC <sub>50</sub> - Salmo gairdneri-13,000 mg/L-96H EC <sub>50</sub> - Daphnia magna-12,340 mg/L-48H
	Propan-2-ol	: LC <sub>50</sub> - Fathead minnow- 11,130mg/L-96H
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	

**13. DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

- Follow all regulations in your country.

**14. TRANSPORT INFORMATION**

14.1. UN number	: 1993
14.2. UN proper shipping name	: Flammable liquid N.O.S (Ethanol)
14.3. Transport hazard class(es)	: 3
14.4. Packing group	: II
14.5. Environmental hazards	: Not applicable.
14.6. Special precautions for user	: Not applicable.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not applicable.

**15. REGULATORY INFORMATION**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Follow all regulations in your country.

15.2. Chemical safety assessment

- No data

**16. OTHER INFORMATION**

Hazard statement according to (EC) No 1272/2008

Precautionary Statements		
Prevention	P233	Keep container tightly closed.
	P240	Ground / bond container and receiving equipment.
	P241	Use explosion-proof electrical, ventilating and lighting equipment.
	P242	Use only non-sparking tools.
	P243	Take action to prevent static discharges.

	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P303+P361 +P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water.
Storage	P403+P235	Store in a well-ventilated place. Keep cool.
Disposal	P501	Dispose of contents and container in accordance with all local, regional, national and international regulations.

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