21860-XXXX

Product Name : BRAVO! SDS No.:SI -046 Page 1/5

# MATERIAL SAFETY DATA SHEET

Date of Issue: September 1, 2009

SDS No.: SI-046 Version: 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 : BRAVO!
Product code : BRV

1.2. Use of the preparation : Ink for writing instrument

1.3. Company identification e-mail address

Name of manufacture / supplier : PILOT Corporation Of America

Address : 3855 Regent Blvd., Jacksonville, FL 32224

Telephone number : 904-645-9999

Working hours (from 08.30am to 04.30pm EST)

Facsimile number : 904-996-2974

### 2. HAZARDS IDENTIFICATION

Physical /Chemical hazards : Not applicable
Environmental hazards : 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

#### For ink unless otherwise specified

Ingredients	CAS Number	EINECS Number	Weight %	Component
Triethanolamine	102-71-6	203-049-8	1.4	All Colors
Ethylene glycol	107-21-1	203-473-3	7-8	All Colors
phenol	108-95-2	203-632-7	0.3	All Colors
trisodium [29H,31H-				
phthalocyaninetrisulphonato(5-)-	1330-39-8	215-538-3	6	BRV-G
N29,N30,N31,N32]cuprate(3-)				

### 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 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 : Not classed as flammable.

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

: CO2, CO, NOx, and SOz are produced after

5.2. Extinguishing media which shall not be used for : None

safety

5.3. Special exposure hazards arising from the substance or preparation itself, combustion

substance or preparation itself, combustion

: Not required

combustion.

5.4. Special protective equipment for fire-figters : Not requ

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.

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6.4 Additional information : None

### 7. HANDLING AND STORAGE

7.1. Handling : Avoid rough handling or dropping.

7.1.1. Protective measures
7.1.2. Measures to prevent aerosol and dust generation
7.1.3. Measures required to protect the environment
Not required in normal use.
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.

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

b) Hand protection : Wear suitable gloves.
c) Eye protection : Wear eye protection.

d) Skin protection : Wear suitable protective clothing.

8.2.2. Environmental exposure controls

: ACGIH TLV-TWA Ethylene glycol : 50 ppm
Triethanolamine : 5 mg/m

Triethanolamine : 5 mg/m³ phenol : 5 ppm

### 9. PHYSICAL AND CHEMICAL PROPERTIES

For ink unless otherwise specified

9.1. General information

Appearance : Viscosity liquid

[Color] Black, Red, Blue, Green, Light Blue, Violet

Odor : Slight characteristic

9.2. Important health, safety and environmental information

pH : 8-10

Boiling point / boiling range : About 100 degrees Celsius
Flash point : Boils without flashing

Flammability (solid, gas) : None
Explosive properties : None
Oxidizing properties : None

Oxidizing properties : None
Vapor pressure : No data

Relative density : 1.07-1.11 (at 20 degrees Celsius)

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> Solubility : Not applicable

Water solubility : Soluble Partition coefficient: n-octanol / water : Not available

Viscosity : 2.5 mPa—s (at 20 degrees Celsius)

Vapor density : No data **Evaporation** rate : No data

9.3. Other information : None

# 10. STABILITY AND REACTIVITY

10.1. Conditions to avoid : This material is stable. 10.2. Materials to avoid : This material is stable.

10.3. Hazardous decomposition products : No data

# 11. TOXICOLOGICAL INFORMATION

For ink unless otherwise specified

11.1. Toxicokinetics, metabolism and distribution : No data

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

: Acute toxicity Triethanolamine LD<sub>50</sub> 4.92 ml/kg(rat)

Ethylene glycol LD<sub>50</sub> 8,540 mg/kg(rat) LD<sub>50</sub> 317 mg/kg(rat)

phenol

11.3. Sensitization : No data

11.4. Repeated dose toxicity : No data

: No data 11.5. CMR (carcinogenicity, mutagenicity, and toxicity for reproduction)

#### 12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity : No data 12.2. Mobility : No data : No data 12.3. Persistence and degradability 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.
- Not hazardous waste.

### 14. TRANSPORT INFORMATION

14.1. UN number : Not applicable : Not applicable 14.2. Class : Not applicable 14.3. Proper shipping name 14.4. Packing group : Not applicable : Not applicable 14.5. Marine pollutant

14.6. Other applicable information : None

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# 15. REGULATORY INFORMATION

- 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

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