

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

070134205

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

070133066 070133074 070133082 070133090 070133108 070133116 070134197 070173252 070173260 070173278

070173286 070173310

# MATERIAL SAFETY DATA SHEET

Date of Issue: January 5, 2010  
SDS No.: SP-001  
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 : G-2  
Product code : BG2, G23, G25, G27, G21, G2S7

1.2. Use of the preparation : Ink for writing instrument

### 1.3. Company identification e-mail address

Name of manufacture : PILOT CORPORATION OF AMERICA  
/ supplier  
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

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For ink unless otherwise specified

Ingredients	CAS Number	EINECS Number	Weight %	Component
Ethylene glycol	107-21-1	203-473-3	17-24	All Colors
Triethanolamine	102-71-6	203-49-8	1.3-7.0	All Colors

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### 4. FIRST AID MEASURES

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- 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 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.

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### 5. FIRE-FIGHTING MEASURES

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- 5.1 Suitable extinguishing media : Not classed as flammable.  
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<sub>2</sub>, CO, NO<sub>x</sub>, and SO<sub>x</sub>, is produced after combustion.
- 5.4 Special protective equipment for fire-fighters. : Not required.
- 5.5 Additional information :None.

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### 6. ACCIDENTAL RELEASE MEASURES

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- 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.

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## 7. HANDLING AND STORAGE

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- 7.1. Handling : Avoid rough handling or dropping.
- 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.
- 7.3. Specific 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. 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 : 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 : No data.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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For ink unless otherwise specified

### 9.1. General information

- Appearance : Viscosity liquid
- ☐ Color ☐ Black , Red , Blue, Green, Blue Black, Violet, Pink, Dark Red, Light Blue, Orange, Hunter Green, Peacock Green, Sky Blue, Lime Green, Caramel
- 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.

Vapor pressure	: No data.
Relative density	: 1.10-1.12 □ at 20 degrees Celsius)
Solubility	: Not allocated.
Water solubility	: Soluble.
Partition coefficient: n-octanol / water	: Not available.
Viscosity	: □ 2,000 mPa□s (1.9 S <sup>-1</sup> ;at 20 degrees Celsius)
Vapor density	: No data.
Evaporation rate	: No data.

9.3. Other information : None.

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## 10. STABILITY AND REACTIVITY

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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.

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## 11. TOXICOLOGICAL INFORMATION

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For ink unless otherwise specified

11.1 Toxicokinetics, metabolism and distribution	: No data.
11.2 Acute effects (acute toxicity, irritation and corrosivity)	:
Ethylene glycol	LD50 4,700 mg/kg (rat)
Triethanolamine	LD50 8,680 mg/kg (rat)
11.3 Sensitization	: No data.
11.4 Repeated dose toxicity	: No data.
11.5 CMR (carcinogenity, mutagenicity, and toxicity for reproduction)	: No data.

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## 12. ECOLOGICAL INFORMATION

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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.

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## 13. DISPOSAL CONSIDERATIONS

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- ☐ Follow all regulations in your country.
- ☐ Not hazardous waste.

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## 14. TRANSPORT INFORMATION

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14.1.1 UN number	: Not applicable.
14.1.2 Class	: Not applicable.
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.

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## 15. REGULATORY INFORMATION

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Suit a standard of "Safety of toys" Part3 (EN71-3)

Detrimental metallic elements are not containing.

(Antimony, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium)

Occupational Safety and Health Act ☐ The 57th 2 ☐

government ordinance number 75 ☐ Ethylene glycol

government ordinance number 381 ☐ Triethanolamine

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## 16. OTHER INFORMATION

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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: February 2, 2017  
 SDS No.: AP-001  
 Version: 001



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

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

This SDS is prepared regarding ink contained in an Article.

### 1.1. Product identifier.

Product name : G-2  
 : BL-G2-38-BL-B/R/L/G  
 BL-G2-10-BL-B/R/L/G/V/P/DR/PG  
 BL-G2-10-S8N-A  
 BL-G2-5-BL-B/R/L/G/V  
 BL-G2-7-BL-B/R/L/G/BB/V/P/DR/LB/O/HG/PG/SB/LG/CA  
 BL-G2-7-S8N-A  
 BLG27-AST-A(CB)  
 BL-G2-7-BL-R/P-B  
 BL-G27-NP-BL-L  
 BLG27-VP-BL-MLB/MGB/MPB/MOB/SIB  
 BLG27-VPBL-MLLB/MPP/MGLG/MOO  
 BLG27DP-BL-BB/GG/VV/LBLB/PP  
 BLG27MPBL-MBB/MLL/MVV/MDRDR/MPGPG  
 BLG27SP-BL-BB/RR/LL/VV/PGPG/SISI  
 BL-G2-7-BL-GD/SI/MG/ML/MP/MV  
 BL-G2 7M-S8N-A  
 BLS-G2-38-BL-B/R/L/G  
 BLS-G2-5-BL-B/R/L/G/V  
 BLS-G2-7-BL-B/R/L/G/BB/V/P/DR/LB/O/HG/PG/SB/LG/CA  
 BLS-G2-10-BL-B/R/L/G/V/P/DR/PG  
 Mixture name : G-2- B/R/L/G/BB/V/P/DR/LB/O/HG/PG/SB/LG/CA/  
 GD/SI/MG/ML/MP/MV/W

### 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  
 / supplier  
 Address : 6-21, Kyobashi 2-chome, Chuo-ku, Tokyo 104-8304 Japan  
 Telephone number : 03-3538-3700  
 Working hours (from 09.00am to 05.30pm: Japanese time)  
 Facsimile number : 03-3538-3909

## 2. HAZARDS IDENTIFICATION

### 2.1. GHS Classification of the substance or mixture.

Skin Sens : Category 1

### 2.2. GHS label elements

Pictogram



Signal word

Warning

Hazard statement(s)	H317	May cause an allergic skin reaction
Prevention	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves / protective clothing /eye protection / face protection.
Response	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P321	Specific treatment (see ... on this label)
	P363	Wash contaminated clothing before reuse.
Storage		
Disposal	P501	Dispose of contents/container to ...

### 2.3. Other hazards : None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance or mixture : Mixture

Ingredients and composition

Ingredients	CAS No.	% Weight	Classification	Component
Ethylene glycol	107-21-1	2-24	Acute Tox.4 H302	All Colors
1,2-Benzisothiazolin-3-one	2634-33-5	<0.07	Skin Sens.1 H317 (Skin Sens. 1; H317: C ≥ 0,05 %)	All Colors
Coloring materials	Trade secret	2-8	Not Classified	All Colors
Others	Trade secret	remnant	Not Classified	All Colors

H302: Harmful if swallowed

H317: May cause an allergic skin reaction



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#### 4. FIRST AID MEASURES

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##### 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 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

There is no specific antidote. Treat symptoms.

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

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

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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

: Avoid rough handling or dropping.

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

##### 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

	ACGIH	
	Limit value - Eight hours	Limit value - Short term
Ethylene glycol	20ppm	40ppm
1,2-Benzisothiazolin-3-one	No data	

### 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	: Viscous liquid <Color> Black , Red , Blue, Green, Blue Black, Violet, Pink, Dark Red, Light Blue, Orange, Hunter Green, Peacock Green, Sky Blue, Lime Green, Caramel, Gold, Silver, Metallic Green, Metallic Blue, Metallic Pink, Metallic Violet, White
(b) Odor	: Slight characteristic.
(c) Odor threshold	: No data
(d) PH	: 7-10
(e) Melting point / Freezing point	: No data
(f) Boiling point / boiling range	: About 100 degrees Celsius.
(g) Flash point	: Not applicable
(h) Evaporation rate	: No data.
(i) Flammability (solid, gas)	: None.
(j) Upper/lower flammability or explosive limits	: None.
(k) Vapor pressure	: No data.
(l) Vapor density	: No data.
(m) Relative density	: 1.10-1.12 (at 20 degrees Celsius)
(n) Solubility(ies)	: Soluble in water
(o) Partition coefficient: n-octanol / water	: Not available.
(p) Auto-ignition temperature	: Not Auto-ignition
(q) Decomposition temperature	: No data.
(r) Viscosity	: <4,000 mPa.s (1.9 s <sup>-1</sup> at 20 degrees Celsius)
(s) Explosive properties	: No data.
(t) Oxidising properties	: No data.
9.2. Other infomation	: 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	: No data
10.5. Incompatible materials	: No data.
10.6. Hazardous decomposition products	: No data.

## 11. TOXICOLOGICAL INFORMATION

Mixture: No data

11.1. Information on toxicological effects		
(a) acute toxicity	Ethylene glycol	LD50 Oral-rat-4,700mg/kg LD50 Dermal-rabbit-10,626 mg/kg
	1, 2-Benzisothiazolin-3-one	LD50 Oral-rat1,020mg/kg
(b) skin corrosion/ irritation	1, 2-Benzisothiazolin-3-one	Causes skin irritation.
(c) serious eye damage/ irritation	Ethylene glycol	Eyes-rabbit Result: Mild eye irritation-24h
(d) respiratory or skin sensitisation	1, 2-Benzisothiazolin-3-one	May cause allergic skin reaction
(e) germ cell mutagenicity	No data available	
(f) carcinogenicity	No data available	
(g) reproductive toxicity	Ethylene glycol	Laboratory experiments have shown teratogenic effects. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
(h) STOT-single exposure	No data available	
(i) STOT-repeated exposure	No data available	
(j) aspiration hazard	No data available	

## 12. ECOLOGICAL INFORMATION

Mixture: No data

12.1. Toxicity	Ethylene glycol	LC50 - Daphnia magna (Water flea) - 41.000 mg/l - 48 h EC50 - Daphnia magna (Water flea) - 74.000 mg/l - 24 h
	1, 2-Benzisothiazolin-3-one	LC50 - Oncorhynchus mykiss (rainbow trout) - 0,8 mg/l - 96,0 h EC50 - Daphnia magna (Water flea) - 4,4 mg/l - 48 h
12.2. Persistence and degradability	Ethylene glycol	no data available

12.3. Bioaccumulative potential	Ethylene glycol	Does not bioaccumulate. Bioaccumulation other fish - 61 d- 50 mg/l
12.4. Mobility in soil	No data available	
12.5. Results of PBT and vPvB assessment	No data available	
12.6. Other adverse effects	Ethylene glycol	Harmful to aquatic life.
	1, 2-Benzisothiazolin-3-one	Very toxic to aquatic life.

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### 13. DISPOSAL CONSIDERATIONS

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#### 13.1. Waste treatment methods

- Follow all regulations in your country.

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### 14. TRANSPORT INFORMATION

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|--|-------------------|
| 14.1. UN number  | : Not applicable. |
| 14.2. UN proper shipping name  | : Not applicable. |
| 14.3. Transport hazard class(es)   | : Not applicable. |
| 14.4. Packing group  | : Not applicable. |
| 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. |

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### 15. REGULATORY INFORMATION

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- 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

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### 16. OTHER INFORMATION

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International GHS conformity.

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