SAFETY DATA SHEET

Date of Issue SDS No. Version

: March 1, 2017 :AI-005 :001



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

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

1.1. Identification of the substance or mixture

| Product name | : Precise V5/V7 |
|--------------|-----------------------------|
| Product code | : BX-V5-BL-B/R/L/G/V/P/LB-A |
| | BX-V7-BL-B/R/L-A |
| | BX-V5-S7N-A |
| | BX-V5-NP-BL-B/L-A |
| | BX-V7-NP-BL-B/L-A |
| | BX-V5PT-BL-B/R/L/G/V/P/LB-A |
| Mixture name | : V5-B/R/L/G/V/P/LB |
| | V7-B |

- 1.2. Use of the mixture : Ink for writing instrument
- 1.3. Company identification e-mail address

| Name of manufacture /supplier | : PILOT Corporation |
|----------------------------------|---|
| 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) |
| Facsimile number | : 03-3538-3909 |
| E-mail address | international@pilot.co.jp |

2. HAZARDS IDENTIFICATION • ••

| 2.1. GHS Classification of the substance or mixture | | | |
|---|---------------------------------------|--|--|
| Health hazards | | | |
| Skin corrosion/irritation | : Category 2 (V5-R/L/G/V/P/LB / V7-B) | | |
| Eye damage/irritation | Category 2 | | |
| Sensitization - skin | : Category 1 (V5-B/R/L/G/V/P/LB) | | |
| Environmental hazards | | | |
| Hazardous to the aquatic environment, | Category 3 | | |
| short-term (acute) | | | |
| | | | |

2.2. GHS label elements

Hazard pictograms



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| Hazard statements | |
|--------------------------|--|
| H315 | Causes skin irritation (V5-R/L/G/V/P/LB / V7-B) |
| H317 | : May cause an allergic skin reaction (V5-B/R/L/G/V/P/LB) |
| H319 | Causes serious eye irritation |
| H402 | : Harmful to aquatic life |
| Precautionary statements | |
| Prevention | |
| P261 | : Avoid breathing mist/vapors/spray. (V5-B/R/L/G/V/P/LB) |
| P264 | [:] Wash hands thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. (V5-B/R/L/G/V/P/LB) |
| P273 | Avoid release to the environment. |
| P280 | : Wear protective gloves/protective clothing/eye protection/face protection. |
| Response | |
| P302+P352 | : IF ON SKIN: Wash with plenty of soap and water. |
| P305+P351+P338 | : IF IN EYES: Rinse cautiously with water for several minutes. |
| | Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332+P313 | : If skin irritation occurs: Get medical advice/attention. |
| P333+P313 | : If skin irritation or rash occurs: Get medical advice/attention. (V5-B/R/L/G/V/P/LB) |
| P337+P313 | : If eye irritation persists: Get medical advice/attention. |
| P362+P364 | : Take off contaminated clothing and wash it before reuse. |
| Disposal | |
| P501 | [:] Dispose of contents/container in accordance with |
| | local/regional/national/international regulations. |
| 2.3. Other hazards | : None |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Su | lbstance or mixture | : Mixture | | |
|----|--------------------------|------------|-----------|--------|
| In | gredients and compositio | n | | |
| | Ingredients | CAS Number | Weight % | |
| | Urea | 57-13-6 | 9.0-12 % | V5-R/I |
| | 2-Pyrrolidono | 616-45-5 | 4 0-5 0 % | |

| 1 | | | | |
|---------------------|--------------|---------------|------------------------|--|
| Ingredients | CAS Number | Weight % | Component | |
| Urea | 57-13-6 | 9.0-12 % | V5-R/L/G/V/P/LB / V7-B | |
| 2-Pyrrolidone | 616 - 45 - 5 | 4.0-5.0 % | All colors | |
| Polyethylene Glycol | 25322-68-3 | 2.0-4.0 % | All colors | |
| Additive A | Non Public | 3.0-3.3 % | V5-B/R/L | |
| Additive B | Non Public | 0.50-0.80 % | V5- G/V/P/LB / V7-B | |
| Triethanolamine | 102-71-6 | 0.50- 2.2 % | All colors | |
| Surfactant | Non Public | 0.45-1.0 % | All colors | |
| | | | | |

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 Ink contact with skin may cause irritation, swelling or redness.

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.

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.
- 5.2. Specifc hazards arising from the substance or mixture
 - $: CO_2, CO, NO_x$, and SO_x , is produced after combustion.
- 5.3. Special protective equipment and precautions for fire-fighters : 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 upAbsorb spill with material (cloth or paper), then place in a chemical waste containers.

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

| Comment | Threshold limit values | |
|-----------------|-----------------------------|--|
| Component | ACGIH | |
| Triethanolamine | TLV-TWA 5 mg/m ³ | |

- 8.2. Appropriate engineering controls
 - : No special controls are needed.
- 8.3. Individual protection measures, such as personal protective equipment.

: 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 : Liquid [Color] Black, Red, Blue, Green, Violet, Pink, Light Blue (b) Odor : Slight characteristic Odor threshold (c) : No data (d) : 7.8 - 10.3pН (e) Melting point/freezing point : No data (f) : About 100 degrees Celsius Initial boiling point/boiling range (g) : Boils without flashing Flash point (h) **Evaporation** rate : No data (i) Flammability (solid, gas) : None (j) Upper/lower flammability or : No data explosive limits (k) Vapor pressure : No data (1)Vapor density : No data (m) Relative density : 1.05-1.11 (at 20 degrees Celsius) (n) Solubility : Not applicable (0)Partition coefficient: : Not available n-octanol/water : No data (p) Auto-ignition temperature (q) Decomposition temperature : No data (r) Viscosity $: 2.8-4.2 \text{ mPa} \cdot \text{s}$ (at 20 degrees Celsius) 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 | : This material is stable. |
| 10.5. Incompatible materials | [:] Strong oxidizing agents and reducing agents. |
| 10.6. Hazardous decomposition products | : No data |

11. TOXICOLOGICAL INFORMATION

There is no data available on the mixture itself.

Information on toxicological effects

Skin corrosion/irritation

: 2-Pyrrolidone

- : Additive A
- : Surfactant

- : Category 3
- : Category 2
- : Category 1

| | : Urea | : Category 2 |
|-----------------------|-----------------------|---------------|
| | : Triethanolamine | : Category 2 |
| Eye damage/irritation | : 2-Pyrrolidone | : Category 2 |
| | : Polyethylene Glycol | : Category 2B |
| | : Additive A | Category 2 |
| | : Additive B | Category 1 |
| | : Surfactant | Category 1 |
| | : Triethanolamine | : Category 2A |
| | : Urea | : Category 2A |
| Sensitization - skin | : Additive A | Category 1 |
| | : Triethanolamine | Category 1 |
| | : Additive B | Category 1 |

12. ECOLOGICAL INFORMATION

| There is no data available on the mix | ture itself. | |
|---------------------------------------|---------------------|------------|
| 12.1. Ecotoxicity | | |
| 12.1.1. Hazardous to the aquatic | : 2-Pyrrolidone | Category 2 |
| environment, short-term | : Surfactant | Category 3 |
| (acute) | | |
| 12.1.2. Hazardous to the aquatic | : No data available | |
| environment, long-term | | |
| (chronic) | | |
| 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. Other adverse effects | : None | |
| | | |

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

• Follow all regulations in your country.

14. TRANSPORT INFORMATION

| 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. Transport in bulk according to Annex II | : Not applicable |
| of MARPOL 73/78 and the IBC Code | |
| 14.7. Special precautions for user | : None |
| | |

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture $\$

• Follow all regulations in your country.

16. OTHER INFORMATION

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.

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