

SAFETY DATA SHEETS

This SDS packet was issued with item:

070405985

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

070405969 070405977 070405993 070406033

SAFETY DATA SHEET

Date of Issue: September 30, 2010
SDS No.: SI-100
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 : MARKLITER
Product code : SF-13M-Y(A)
SF-13MS-BL-L/ P/ Y
SF-13M-WBL- L/ P/ Y-A
Preparation name : RFJS-GP-B (ballpoint pen)
:SWSL-L/P/Y (Marker)

1.2. Use of the preparation : Ink for writing instrument

1.3. Company identification e-mail address

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)
F acsimile number : 03-3538-3909
e-mail address : international@pilot.co.jp

2. HAZARDS IDENTIFICATION

Based on the law and regulation in Japan

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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Based on the law and regulation in Japan

For ink unless otherwise specified

RFJS-GP-B

| Ingredients | CAS Number | EINECS Number | Weight % | Component |
|----------------------------|----------------|----------------|----------------|-----------|
| Chromium and its compounds | Non-disclosure | Non-disclosure | Non-disclosure | Black |

SWSL-L/P/Y

| Ingredients | CAS Number | EINECS Number | Weight % | Component |
|-----------------|------------|---------------|----------|------------------|
| Phenol | 108-95-2 | 203-632-7 | 0.3 | Blue,Pink,Yellow |
| Diethanolamine | 111-42-2 | 203-868-0 | 3.2 | Yellow |
| Triethanolamine | 102-71-6 | 203-049-8 | 9.5 | Yellow |

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.
- 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 : CO₂, CO, NO_x, and SO_x are produced after combustion.
- 5.4. Special protective equipment for fire-fighters : Not required
- 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.
- 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.

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 Phenol : 5 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

For ink unless otherwise specified

9.1. General information

- Appearance : Viscosity liquid
- [Color] Black(ballpoint pen), Blue , Pink, Yellow (Marker)
- Odor : Slight characteristic

9.2. Important health, safety and environmental information

- pH : No data(B)
- 5.0-10.0(L,P,Y)
- Boiling point / boiling range : No data(B)
- About 100 degrees Celsius(L,P,Y)

| | |
|--|---|
| Flash point | :110 degrees Celsius(B) Boils without flashing(L,P,Y) |
| Flammability (solid, gas) | : None |
| Explosive properties | : None |
| Oxidizing properties | : None |
| Vapor pressure | : No data |
| Relative density | : 1.02-1.13 (at 20 degrees Celsius) |
| Solubility | : Not available(B) Not applicable(L,P,Y) |
| Water solubility | : Insoluble(B) Soluble(L,P,Y) |
| Partition coefficient: n-octanol / water | : Not available |
| Viscosity | : < 35,000mPa · s(B) (1.7S ⁻¹ ; at 20 degrees Celsius) 3.0-5.0 mPa · s (at 20 degrees Celsius) (L,P,Y) |
| Vapor density | : No data |
| Evaporation rate | : No data |

9.3. Other information : None

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 |

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 | Phenol LD ₅₀ 317 mg/kg(rat) |
| 11.3. Sensitization | : No data |
| 11.4. Repeated dose toxicity | : No data |
| 11.5. CMR (carcinogenicity, mutagenicity, and toxicity for reproduction) | : No data |

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.
- Not hazardous waste.

14. TRANSPORT INFORMATION

| | |
|------------------------------------|------------------|
| 14.1. UN number | : Not applicable |
| 14.2. Class | : Not applicable |
| 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

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