

SAFETY DATA SHEET**1. PRODUCT & COMPANY IDENTIFICATION**

· WRITING INK NAMES WMAM-B,L,G WMA-R,O
 · WRITING INSTRUMENT NAMES WBMA-VBM-B/M/MC-B,R,L,G,O(-BG) WBS-VBM-B,R,L,G,O
 WMBM-12L/18BM-B,R,L,G,O P-WMRF8-B,R,L,G,O
 · NAME OF MANUFACTURER / SUPPLIER PILOT CORPORATION
 · ADDRESS 6-21, KYOBASHI 2-CHOME, CHUO-KU, TOKYO,
 104-8304 JAPAN
 · TELEPHONE NUMBER 03-3538-3700
 · FAX NUMBER 03-3538-3901

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE / MIXTURE	MIXTURE	
	CAS No	weight %
Ethyl alcohol	64-17-5	33-35
Isopropanol	67-63-0	34-40 (black, blue, green) 4.9 (red, orange)

3. HAZARDS IDENTIFICATION

· CLASS NAME OF HAZARDOUS CHEMICALS FOR SDS IN JAPAN
 FLAMMABLE LIQUID
 · PHYSICAL AND CHEMICAL HAZARDS Flammable liquid
 · ADVERSE HUMAN HEALTH EFFECTS Irritating to eyes.
 Irritating to skin.
 · ENVIRONMENTAL EFFECTS Not available

4. FIRST-AID MEASURES

· EYE CONTACT Gently rinse the affected eyes with clean water for at least 15 minutes.
 And refer for medical attention.
 · SKIN CONTACT Wash the affected area under tepid running water using a mild soap.
 · INHALATION Remove the victim from the contamination immediately to fresh air.
 And refer for medical attention.
 · INGESTION Refer for medical attention.

5. FIRE-FIGHTING MEASURES

· EXTINGUISHING MEDIA In case of fire , use water spray , foam , dry chemical powder or carbon dioxide.
 · SPECIFIC HAZARD WITH REGARD TO FIRE-FIGHTING MEASURES
 Apply water from a safe distance to cool and protect surrounding area.

6. ACCIDENTAL RELEASE MEASURES

Absorb spill with material (e.g.dry sand or earth , cloth) , then place in a chemical waste containers.

7. HANDLING & STORAGE

·HANDLING

Avoid rough handling or dropping.
 Keep container tightly closed.
 Wear protective safety glasses,gloves.

·STORAGE

Inside storage should be in a well -ventilated ,noncombustible location ,away from all possible source of ignition.

8. EXPOSURE CONTROL /PERSONAL PROTECTION

·CONTROL PARAMETERS

Ethyl alcohol	1000ppm
Isopropanol	400ppm

·ENGINEERING MEASURES

Use with local exhaust ventilation.

·PERSONAL PROTECTIVE EQUIPMENT

·RESPIRATORY PROTECTION	Industrial Canister gas masks.
·EYE PROTECTION	Safety glasses
·HAND, SKIN AND BODY PROTECTION	Rubber gloves

9. PHYSICAL & CHEMICAL PROPERTIES

·PHYSICAL STATE , FORM:

·APPEARLANCE:

liquid

·COLOR:

black, blue, green, red, orange

·DENSITY:

0.83-0.85 (20.0°C)

·FLASH POINT

14.0°C (Ethyl alcohol)

·AUTOIGNITION TEMPERATURE:

392°C (Ethyl alcohol)

·UPPER AND LOWER EXPLOSION LIMIT:

19% (g/m³), 3.3 % (g/m³) , Ethyl alcohol

·BOILING POINT:

78.3 °C (Ethyl alcohol)

·MELTING POINT:

-114.2°C (Ethyl alcohol)

·VAPOR PRESSURE:

44mmHg (20.0°C Ethyl alcohol)

·SOLUBILITY IN WATER

Insoluble

·SOLUBILITY IN -----:

10.STABILITY & REACTIVITY

·FLAMMABILITY

Flammable

·SPONTANEOUS COMBUSTIBILITY

Not available

·REACTIVITY WITH WATER

This material is stable.

·OXIDIZIBILITY

This material is stable

·SELF-REACTIVITY

This material is stable

·STABILITY & REACTIVITY

This product is considered a stable material under normal and anticipated storage and handling conditions

11. TOXICOLOGICAL INFORMATION

·CORROSIVE AND IRRITANT PROPERTIES	Not available
·ALLERGENIC AND SENSITIZING EFFECTS	Not available
·ACUTE TOXICITY	Not available
·SUB-CHRONIC TOXICITY	Not available
·CHRONIC TOXICITY	Not available
·CARCINOGENIC EFFECTS	Not available
·MUTAGENIC EFFECTS	Not available
·EFFECTS ON THE REPRODUCTIVE SYSTEM	Not available
·TERATOGENIC EFFECTS	Not available

12. ECOLOGICAL INFORMATION

·BIODEGRADABILITY	Not available
·BIOACCUMULATION	Not available
·FISH TOXICITY	Not available

13. DISPOSAL CONSIDERATION

Follow all regulations in your country.

14. TRANSPORT INFORMATION

Follow all regulations in your country.

·UN CLASS:	Class 3
·UN No.:	1993

15. REGULATORY INFORMATION

Follow all regulations in your country.

16. OTHER INFORMATION

·REFERENCES

The information here is given in good faith ,but no warranty ,express or implied , is made.