

3. COMPOSITION / INFORMATION ON INGREDIENTS

Based on the law and regulation in Japan

For ink unless otherwise specified

Ingredients	CAS Number	EINECS Number	Weight %	Component
Ethylene glycol	102-71-6	203-049-8	5.0-10.0	All Colors
Isopropyl alcohol	67-63-0	200-661-7	0.5-1.5	All Colors
Carbon black	1333-86-4	215-609-9	6.8	SG-DS-B
29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32 copper	147-14-8	205-685-1	6.8	SG-DS-L

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 mixture 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
- | | |
|-------------------|-------------------------|
| Ethylene glycol | : 50 ppm |
| Isopropyl alcohol | : 200 ppm |
| Carbon black | : 3.5 mg/m ³ |

9. PHYSICAL AND CHEMICAL PROPERTIES

For ink unless otherwise specified

9.1. General information

- Appearance : Viscosity liquid
[Color] Black, Red, Blue
- Odor : Slight characteristic

9.2. Important health, safety and environmental information

- pH : 8-9
- 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 : 1.08-1.10 (at 20 degrees Celsius)
- Solubility : Not applicable
- Water solubility : Soluble
- Partition coefficient: n-octanol / water : Not available

Viscosity : 3.5-4.3 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

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11.1. Toxicokinetics, metabolism and distribution : No data
11.2. Acute effects (acute toxicity, irritation and corrosivity)
: Acute toxicity Ethylene glycol LD₅₀ 8,540 mg/kg (rat)
Isopropyl alcohol LD₅₀ 4,000-10,200 mg/kg (rat)
Carbon black LD₅₀ 15,400 mg/kg (rat)
29H,31H-phthalocyaninato(2-)- LD₅₀ >15,400 mg/kg (rat)
N29,N30,N31,N32 copper
11.3. Sensitization : No data
11.4. Repeated dose toxicity : No data
11.5. CMR (carcinogenicity, mutagenicity, and toxicity for reproduction)
: Carcinogenicity Carbon black IARC Group 2B

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