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Ink Cartridge (BK) (H086059-00)

MSDS Number: MSDSH086059-00-02-OT-E--- *Effective Date: 08/09/2006*

1. Product Identification

Product Name: Ink Cartridge (BK) (H086059-00)

Synonyms: None

Use: Water-Based Printing Ink

2. Composition Information

This is an aqueous fluid formulation

Fluid Composition	CAS No.	% By Weight
Carbon Black	1333-86-4	< 5 %
Proprietary dyes	–	< 1 %
Proprietary organic materials	–	10 – 15 %
Glycerols	–	10 – 15 %
Triethanolamine	102-71-6	1 – 5 %
Water	7732-18-5	balance

3. Hazards Identification

3.1 Emergency Overview: Ink component is black liquid that may cause eye irritation. Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water. Keep out of reach of children.

3.2 Potential Health Effects:

Eyes: Ink contact with eye may be mildly irritating. See Section 11 for Toxicology.

Skin: Ink contact with skin may cause irritation, swelling, or redness. It is not expected to cause an allergic skin reaction. See Section 11 for Toxicology.

Inhalation: Intentional exposure to the vapors of ink may cause respiratory irritation. See Section 11 for Toxicology.

Ingestion: May cause upset stomach. See Section 11 for Toxicology.

4. First Aid Measures

4.1 Eyes: Immediately flush with room temperature, low pressure, clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

4.2 Skin: Wash surface areas with soap and water. Wash soiled clothing before rewearing. Consult a physician. Consult a physician if irritation continues.

4.3 Inhalation: Remove subject to ventilated fresh air. Consult physician if necessary.

4.4 Ingestion: Seek medical advise; and attention if stomach continues to be upset.

5. Fire Fighting Measures

5.1 Flammability: Not flammable

5.2 Extinguishing Media: Dry chemical or carbon dioxide

5.3 Fire Fighting Instructions: No special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known.

6. Accidental Release Measures

If a spill occurs, use sponges to wipe-up fluid, then rinse area with damp cloth. Place waste in closed container for disposal. Use proper ventilation. Do not dispose of waste to the sewer. No eye or skin protection required during clean-up. Wash hands with soap and water.

7. Precautions for Safe Handling and Use

Keep out of reach of children and do not drink ink. Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not dismantle t cartridge. Do not store cartridges with oxidizing agents or explosives. Make sure cartridge is dry before insertion into printer housing.

8. Exposure Controls/Personal Protection

8.1 Engineering Controls: None required

8.2 Exposure Controls: Not applicable

8.3 Personal Protection: None required when cartridges are used as intended.

9. Physical and Chemical Properties

Appearance: Black liquid.

Odor: No odor.

pH: 8.7 ± 0.3

Freezing point: Less than 32°F/0

Flash Point: Greater than 212°F/100 (Closed cup, ASTM D3278)

Autoflammability: None

Explosive properties: None

Oxidizing properties: None

Vapor density: No data available

Relative density: 1.048

Solubility in water: Complete

Solubility in fat: No data available

Partition coefficient: No data available

Viscosity: Less than 5 mPa · s

10. Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: None

Incompatibilities materials: Oxidizers and explosives

11. Toxicological and Health Hazards

Routes of Overexposure: Eye, skin, inhalation, and oral

Acute Health Hazards:

- Overexposure of eye surface to the fluid may be mildly irritating
- Overexposure of skin to the fluid contact may cause irritation and in some people swelling and redness
- Intentional inhalation overexposure to the fluid vapors may result in respiratory tract irritation
- Intentional or accidental oral ingestion may cause an upset stomach

Chronic Health Hazards: None known

Mutagenicity: No data available

Carcinogenicity: In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen(possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The letter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Toxicity Data:	Oral LD ₅₀ > 2500 mg/kg(Rat)	Dermal LD ₅₀ > 2000 mg/kg(Rat)	Inhalant LC ₅₀ No data available
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Skin irritation: Mild irritant(Rabbit)

Eye irritation: Mild irritant(Rabbit)

Sensitization: Non-sensitiser

Mutagenicity: Negative (by Ames test)

12. Ecological Information

No data available on the adverse effects of this material on the environment

13. Disposal Considerations

Disposal should be in accordance with national and local requirements.

14. Transport Information

UN Class/UN Number: Not applicable

15. Regulatory Considerations

EU Regulations: All components of this ink are compliant with EU chemical inventory regulations

U.S.Regulations: All components of this ink are compliant with TSCA chemical inventory regulations

16. Other Information

This “Material Safety Data Sheet” contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time.

Disclaimer:

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