



Product Safety Information Sheet

General environmental and safety information for consumers

1. Product and Company Identification

- 1.1 *Identification of the preparation*
51645 series – No. 45 black ink.
- 1.2 *Company undertaking identification*
Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis OR 97330-4239
USA
- 1.3 *Emergency telephone number*
Hewlett-Packard Health Effects Line
1-800-457-4209 (USA and Canada) or
Intl +1-503-494-7199 (all other areas)
- 1.4 *General information telephone number*
1-208-323-2551 (USA and Canada)
Intl +1-208-323-2551 (all other areas)

Hazard rating	NFPA/HMIS
Health	1
Flammability	2
Instability/Reactivity	0
Special	none

2. Composition/information on ingredients

This ink cartridge contains an aqueous ink formulation.

Component	CAS No.	% by weight	Workplace Limits (PEL, TLV)
carbon black	1333-86-4	<5	not established
isopropyl alcohol	67-63-0	<3	400 ppm(983 mg/m ³) OSHA PEL and NIOSH TLV ¹
2-pyrrolidone	616-45-5	<10	not established
trade secret materials	not specified	<10	not established
Water	7732-18-5	balance	not established

¹ NIOSH also applies a 2000 ppm IDLH (immediately dangerous to life or health) and 500 ppm (1225 mg/m³) short term exposure limit to isopropyl alcohol.



3. Hazards Identification

3.1 *Primary Routes of Exposure*
skin, eye, oral, and inhalation

3.2 *Acute Health Hazards*

Skin: May cause slight skin irritation characterized by redness and swelling after prolonged contact. Indications may be masked by color of ink.

Eye: May be mildly irritating.

Oral: May cause stomach upset after ingestion.

Inhalation: Prolonged inhalation may result in irritation to the respiratory tract.

3.3 *Chronic Health Hazards*

None noted

3.4 *Carcinogenicity*

Carbon Black has been classified by the International Agency for Research on Cancer (IARC) as Group 2B (possible human carcinogen). Neither this component nor the other ingredients have been classified as carcinogens according to ACGIH, EPA, EU, MAK and OSHA criteria. According to IARC, printing inks are not classifiable as to their carcinogenicity to humans (Group 3).

4. First Aid Measures

4.1 *Emergency First Aid Procedures*

Call the HEWLETT-PACKARD HEALTH EFFECTS LINE at 1-800-457-4209 (Intl + 1-503-494-7199 outside USA and Canada).

First aid for skin

Wash affected areas thoroughly with soap and water. Clothing should be laundered before reuse. **Seek medical attention if skin irritation persists.**

First aid for eyes

Contact with eyes may cause mild irritation. Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. **Seek medical attention if eye irritation persists.**

First aid for ingestion

Ingestion of ink may cause stomach upset. Seek medical advice and then call the HEWLETT-PACKARD HEALTH EFFECTS LINE. **Seek medical attention if stomach upset persists.**

First aid for inhalation

Remove to fresh air.



5. Fire Fighting Measures

Flash point: approximately 129°F -135 °F. No ignition, sustained combustion or flashing in the Sustained Combustibility Test (method in US 49CFR173, Appendix H).	Autoignition temperature: not determined
Extinguishing media: water, dry chemical, carbon dioxide, foam	Special fire fighting procedures: none
Unusual fire and explosion hazards: no special hazards known	

6. Accidental release measures

Spill or Leak Procedures

No special procedures are indicated. Use absorbent towels to wipe up ink. Rinse area with damp cloth to remove remaining traces of ink.

7. Handling and storage

No special handling or storage required.

KEEP OUT OF THE REACH OF CHILDREN

Storage temperature: -40° – 70 °C	Shelf life: 1 year
Handling and storage precautions: do not use inkjet cartridge when frozen. Ensure inkjet cartridge exterior is dry before inserting into printer.	Special sensitivity: none

8. Exposure control / personal protection

No special eye or skin protection is needed for cleanup of spills. Standard eye and skin protection for laboratory chemical safety is required.

9. Physical and chemical properties

Appearance: black liquid	Physical state: liquid at room temperature
pH: 7.8 - 8.4	Solvent content: <20%
Solubility in water: soluble	Vapor density: >1 (air = 1.0)
Odor: not applicable	Vapor pressure: not applicable





10. Stability and reactivity

Stability: stable under normal storage conditions	Thermal decomposition products: Oxides of carbon/nitrogen, water
Incompatibilities: strong oxidizers	Hazardous polymerization: none

11. Toxicological information

Refer to sections 3. Hazards Identification and 4. First Aid Measures

12. Ecological information

This ink complies with the requirements for the German Blue Angel Environmental Certification for printers.

13. Disposal considerations

Dispose in accordance with all applicable federal, state and local laws

14. Transport information

Not a regulated article under DOT, IATA, ADR or RID.

15. Regulatory information

According to EU Directive 88/379/EEC, this product is not classified as dangerous and therefore no hazard label is required. For other countries, including the USA, no product label would be required.

TSCA Inventory: all components are listed.

TSCA Section 12(b) Export Notification required for Isopropyl alcohol (67-63-0), traces of tetrahydrofuran (CAS No: 109-99-9) and traces of triethylene glycol monoethyl ether (CAS No: 112-50-5)

16. Other Information

Date revised: 6 July 2000

Supersedes: August 30, 1999.

Sections revised: Section 2.0, 5.0 and 15.0

DISCLAIMER: This Product Safety Information Sheet is offered without charge to the customers of Hewlett-Packard. Data is the most current known to Hewlett-Packard at the time of preparation and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application.