SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the preparation C1810A

Use of the Substance/Preparation Inkjet printing

Version # 06

Revision date 17-Dec-2010

Chemical family ink

CAS # Mixture

Company identification

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2. HAZARDS IDENTIFICATION

Emergency Overview Contact with skin and eyes may result in irritation.

Acute health effects

Any potential hazards are presumed to be due to exposure to the components.

Skin contact

2-pyrrolidone
Contact with skin may result in irritation.

Eye contact

2-pyrrolidone
Contact with eyes may result in irritation.

Isopropyl alcohol
Contact with eyes may result in severe irritation.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Isopropyl alcohol
Inhalation may cause drowsiness or dizziness.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Potential health effects

Routes of exposure

Potential routes of overexposure to this product are skin and eye contact

Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions.

Complete toxicity data are not available for this specific formulation

Chronic health effects

Carbon Black: Chronic inhalation studies performed with fine dust particles resulted in lung tumors in animals. The IARC classification was based upon these results. IARC also concluded "there is inadequate evidence in humans for the carcinogenicity of carbon black." Inhalation of fine dust particles is not expected to occur during normal conditions of use of this ink.

Carcinogenicity

Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk.
None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

Other information This black ink is not classified according to EU Directive 1999/45/EC.

Classification Not classified.

Physical hazards Not classified as a physical hazard.

Health hazards Not classified as a health hazard.

Environmental hazards Not classified as an environmental hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Water	7732-18-5	< 80	231-791-2	
2-pyrrolidone	616-45-5	< 15	210-483-1	Xi;R36/38
Carbon black	1333-86-4	< 5	215-609-9	
Isopropyl alcohol	67-63-0	< 2.5	200-661-7	F;R11, Xi;R36, R67

Composition comments This ink supply contains an aqueous ink formulation.
This product has been evaluated using criteria specified in the EU Directives 67/548/EEC anc 1999/45/EC, as amended.
For the full text of the R phrases mentioned in this Section, see Section 16.
Carbon black is present only in a bound form in this preparation.

4. FIRST AID MEASURES

Inhalation Move to fresh air. If symptoms persist, get medical attention.

Skin contact Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

Eye contact Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.

Ingestion If ingestion of a large amount does occur, seek medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media CO2, water, dry chemical, or foam

Extinguishing media which must not be used for safety reasons None known.

Unusual fire & explosion hazards None known.

Specific hazards None known.

Specific methods None established.

Hazardous combustion products Refer to section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Wear appropriate personal protective equipment.

Environmental precautions Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Other information Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations.

7. HANDLING AND STORAGE

Handling Avoid contact with skin, eyes and clothing.

Storage Keep out of the reach of children. Keep away from excessive heat or cold.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

United Kingdom

Components	Type	Value
Carbon black (1333-86-4)	STEL	7.0000 mg/m3
	TWA	3.5000 mg/m3
Isopropyl alcohol (67-63-0)	STEL	1250.0000 mg/m3
		500.0000 ppm
	TWA	400.0000 ppm
		999.0000 mg/m3

Additional exposure data Exposure limits have not been established for this product.

Exposure controls	Use in a well ventilated area. Provide adequate ventilation.
Occupational exposure controls	
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
Eye protection	Not required under intended use.
Skin and body protection	Protected gloves not required under intended use.
General	Use personal protective equipment to minimize exposure to skin and eye.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Not available.
Physical state	Liquid
Form	Not available.
Color	Black.
Odor	Not available.
Odour threshold	Not available.
pH	7.8
Boiling point	93.3 °C (200 °F)
Flash point	55 °C (131 °F) Pensky-Martens Closed Cup; No ignition, sustained combustion or flashing detected using the Sustained Combustibility Test (method in US 49CFR173, Appendix H).
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not determined
Relative density	Not available.
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not determined
Viscosity	2 cp
Vapor density	Not available.
Evaporation rate	Not determined
Melting point	Not available.
Freezing point	Not available.
Auto-ignition temperature	Not available.
Specific gravity	1
Bulk density	1 gm/ml
VOC	< 3 %

10. STABILITY AND REACTIVITY

Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Stability	Stable under recommended storage conditions.
Materials to avoid	Incompatible with strong bases and oxidizing agents.
Hazardous polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity	Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint.
Serious eye damage/eye irritation	Not available.
Skin sensitization	Not available.
Further information	Complete toxicity data are not available for this specific formulation. Refer to Section 2 for potential health effects and Section 4 for first aide measures.

12. ECOLOGICAL INFORMATION

Aquatic toxicity LC50/96h/Fathead minnows =>750 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal instructions Dispose of in compliance with federal, state, and local regulations.
HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

14. TRANSPORT INFORMATION

Further information Not a dangerous good under United States DOT, IATA, ADR, IMDG, or RID.
No ignition, sustained combustion, or flashing detected, using the Sustained Combustibility Test prescribed in the UN Manual of Tests and Criteria, Part III subsection 32.5.2. Refer to Dangerous Goods Regulations Section 3.3.1.3.

ADR

Not regulated as dangerous goods.

IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
UN number	None
Packing group	N/A
Packaging exceptions	None
Labels required	None
Packaging non bulk	None

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

Labeling

Contains	2-pyrrolidone, Carbon black, Isopropyl alcohol, Water
EC Label	This product does not require a label according to EU Directive 1999/45/EC.

Regulatory information All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3 R11 Highly flammable.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R67 Vapours may cause drowsiness and dizziness

Other information This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC.

Disclaimer This Safety Data Sheet document is provided without charge to customers of Hewlett-Packarc Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document 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. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

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This data sheet contains changes from the previous version in section(s): HAZARDS IDENTIFICATION: Carcinogenicity
COMPOSITION/INFORMATION ON INGREDIENTS: Composition comments
TOXICOLOGICAL INFORMATION: Carcinogenicity
REGULATORY INFORMATION: Regulatory information

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Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-term exposure limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds