



SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material name CG304S
Product use Inkjet printing
Manufacturer Hewlett-Packard Korea
HPK House, 23-6
Yoido-Dong, Youngdeungpo-ku
Seoul 150-724
Korea

Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-503-494-7199

Revision Date 15-Dec-2007

CAS # Mixture

Product code(s) EMO

General information telephone number
Telephone (+82) 22199-0114
(Fax) (+82) 22199-7084

HP Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight
Water	7732-18-5	> 80
2-pyrrolidone	616-45-5	< 10
Carbon black	1333-86-4	< 5

Composition comments This ink supply contains an aqueous ink formulation.

3. HAZARDS IDENTIFICATION

Health hazards Not classified as a health hazard.

Environmental hazards Not classified as an environmental hazard.

Physical hazards Not classified as a physical hazard.

Potential health effects

Eyes Not applicable
2-pyrrolidone
Contact with eyes may result in irritation.
Carbon black
Not applicable
Water
Not applicable



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Skin	Not applicable <i>2-pyrrolidone</i> Contact with skin may result in irritation. <i>Carbon black</i> Not applicable <i>Water</i> Not applicable
Inhalation	Not applicable <i>2-pyrrolidone</i> Inhalation may result in respiratory irritation. <i>Carbon black</i> Not applicable <i>Water</i> Not applicable
Ingestion	Not applicable <i>2-pyrrolidone</i> Ingestion may result in nausea, vomiting and diarrhea. <i>Carbon black</i> Not applicable <i>Water</i> Not applicable
Main symptoms	Not applicable
Emergency Overview	Contact with skin and eyes may result in irritation. <i>2-pyrrolidone</i> Not applicable <i>Carbon black</i> Not applicable <i>Water</i> Not applicable
Specific hazards	Not applicable
Other information	Not applicable <i>2-pyrrolidone</i> Not applicable <i>Carbon black</i> Not applicable <i>Water</i> Not applicable

4. FIRST AID MEASURES

Inhalation	Remove to fresh air. If symptoms persist, get medical attention.
Skin contact	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
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.



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Medical conditions aggravated by exposure Not applicable
Notes to physician Not applicable
General advice Not applicable

5. FIRE-FIGHTING MEASURES

Flash point and method > 93.3 °C (> 200 °F); Pensky-Martens Closed Cup
Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.
Extinguishing media which must not be used for safety reasons None known.
Specific hazards Not applicable
Specific methods None established.
Special protective equipment for fire-fighters Not applicable
Fire fighting equipment/instructions Not applicable
Unusual fire & explosion hazards None known.
Hazardous combustion products Refer to section.

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.
Methods for cleaning up Soak up with inert absorbent material.
Containment procedures Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

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.
Further information Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures Provide adequate ventilation.
Control parameters Not applicable

Exposure limits

Korea

Components	CAS #	TWA	STEL	Ceiling
Carbon black	1333-86-4	3.5 mg/m ³	Not established	Not established



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ACGIH

Components	CAS #	TWA	STEL	Ceiling
Carbon black	1333-86-4	3.5 mg/m ³	Not established	Not established

Personal protective equipment

Respiratory protection For use other than intended use (such as in the event of a large spills), goggles and respirators may be required

Hand protection Not applicable

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.

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

Environmental exposure controls Not applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Not applicable
Physical state	Liquid.
Form	Not applicable
Colour	Black
Odour	Not applicable
Odor threshold	Not available
pH	8 - 9.3
Boiling point	Not determined
Melting point	Not available
Freezing point	Not available
Flash point	> 93.3 °C (> 200 °F); Pensky-Martens Closed Cup
Auto-ignition temperature	Not available
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not determined
Vapour pressure	Not determined
Vapour density	> 1 (Air = 1.0)
Relative density	Not available
Solubility in water	Soluble in water
Partition coefficient (n-octanol/water)	Not available
Evaporation rate	Not determined
Flammability	Not available.



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Specific gravity	1 - 1.2
VOC	< 3 %
Viscosity	Not determined

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Routes of exposure	Not applicable
Acute toxicity	Not applicable
Local effects	Not applicable
Sensitisation	Not applicable
Chronic toxicity	Not applicable
Synergistic materials	Not applicable
Carcinogenicity	Not applicable
Mutagenicity	Not applicable
Teratogenicity	Not applicable
Reproductivity	Not applicable
Inhalation toxicity	Not applicable
Oral toxicity	Not applicable
Dermal toxicity	Not applicable
Eye irritation	Not applicable
Toxicological information	Not applicable
Subchronic toxicity	Not applicable
Component analysis - LD50	Not applicable
Epidemiology	Not applicable
Neurotoxicity	Not applicable
Symptoms and target organs	Not applicable
Human experience	Not applicable
Pre-existing conditions aggravated by exposure	Not applicable
Further information	This ink formulation has not been tested for toxicological effects. Refer to Section 3 for potential health effects and Section 4 for first aide measures.



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12. ECOLOGICAL INFORMATION

Aquatic toxicity	LC50/96h/fathead minnows =
Environmental effects	Not applicable
Mobility	Not applicable
Persistence and degradability	Not applicable
Bioaccumulation	Not applicable
Ecotoxicity effects	Not applicable
Other adverse effects	Not applicable

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 .
Waste from residues / unused products	Not applicable
Contaminated packaging	Not applicable

14. TRANSPORT INFORMATION

ADR

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
UN number	None.
Packing group	N/A
Packaging exceptions	None.

General	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.
Further information	Not applicable

15. REGULATORY INFORMATION

International regulations	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/NDL), Australia, Japan, Philippines, South Korea, New Zealand, and China.
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16. OTHER INFORMATION

Manufacturer information	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis, OR 97330-4239 US
Recommended use	Not applicable
Recommended restrictions	Not applicable
Further information	Not applicable



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Other information

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

Bibliography

Not applicable

Disclaimer

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Issue date

15-Dec-2007

Revised sections

- 3. Hazards identification: Routes of exposure
- 3. Hazards identification: Chronic health effects
- 3. Hazards identification: Carcinogenicity
- 8. Exposure controls/personal protection: Respiratory

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