



SAFETY DATA SHEET

1. Product and company identification

Product name C9437 Series
Recommended use and Limitations on use
Recommended use Inkjet printing
Issue date 18-Mar-2015
Revision date 01-Sep-2015
Version # 02
Company identification HP Taiwan Information Technology Ltd.
10F-2, No. 66 Jing Mao 2 Road
Taipei, Taipei City, Taiwan 11568
Telephone 886-2-8722-9000

HP health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomer.inquiries@hp.com

2. Hazards identification

Hazard classification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.

Label elements

Symbols None.
Signal word None.

Hazard statement None.

Precautionary statement

Prevention None.
Response None.
Storage None.
Disposal None.

Other hazards

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. 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. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

3. Composition/information on ingredients

Substance or mixture Mixture

Components	CAS #	Percent
Water	7732-18-5	70-80
2-pyrrolidone	616-45-5	<7.5
Alkyldiol	Proprietary	<5
Diethylene glycol	111-46-6	<5

Components	CAS #	Percent
Glycerol	56-81-5	<5
Carbon black	1333-86-4	<2.5

Composition comments This ink supply contains an aqueous ink formulation.
Carbon black is present only in a bound form in this preparation.

4. First aid measures

First aid measures for different exposure routes

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 material is ingested, immediately contact a physician or poison control center.
Most important symptoms and effects	Not available.
Personal protection for first-aid responders	Not available.
Notes to physician	Not available.

5. Fire-fighting measures

Flash point	200.0 °F (93.3 °C) Pinsky-Martens Closed Cup
Extinguishing media	CO2, water, dry chemical, or foam
Extinguishing media to avoid	None known.
Specific hazards during fire fighting	None.
Special fire fighting procedures	None.
Protection of fire-fighters	None.
Specific methods	None established.

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.
Spill cleanup methods	Not available.
Other information	Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations.

7. Handling and storage

Handling

Precautions	Not available.
Safe handling advice	Avoid contact with skin, eyes and clothing.

Storage

Technical measures	Keep out of the reach of children. Keep away from excessive heat or cold.
Suitable storage conditions	Not available.
Incompatible materials	Not available.

8. Exposure controls/personal protection

Exposure limits

Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)

Components	Type	Value
Carbon black (CAS 1333-86-4)	TWA	3.5 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m ³	Inhalable fraction.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Engineering measures

Use in a well ventilated area.

Personal protective equipment

General

Use personal protective equipment to minimize exposure to skin and eye.

Respiratory protection

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

Hand protection

Not available.

Eye protection

Not required under intended use.

Skin and body protection

Protected gloves not required under intended use.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Exposure guidelines

Exposure limits have not been established for this product.

9. Physical and chemical properties

Appearance

Physical state

Not available.

Color

Black.

Odor

Not available.

pH

9.3

Melting point/freezing point

Not available.

Boiling point, initial boiling point, and boiling range

Not determined

Flash point

200.0 °F (93.3 °C) Pensky-Martens Closed Cup

Flammability (solid, gas)

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not determined

Solubility(ies)

Solubility (water)

Soluble in water

Decomposition temperature

Not available.

Other data

Specific gravity

1 - 1.1

VOC (Weight %)

< 192 g/L

10. Stability and reactivity

Stability

Stable under recommended storage conditions.

Conditions to avoid

None.

Incompatible materials

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. aldehydes, ketones, hydrogen fluoride, fluorinated hydrocarbons

Possibility of hazardous reactions

Will not occur.

11. Toxicological information

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory sensitizer	Based on available data, the classification criteria are not met.
Skin sensitizer	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.

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. Carbon black is present only in a bound form in this preparation.

ACGIH Carcinogens

Carbon black (CAS 1333-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
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IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
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Toxic to reproduction	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Other information	Complete toxicity data are not available for this specific formulation Refer to Section 2 for potential health effects and Section 4 for first aid measures.

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
<i>Oral</i>		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Carbon black (CAS 1333-86-4)		
Acute		
<i>Oral</i>		
LD50	Rat	> 8000 mg/kg
Diethylene glycol (CAS 111-46-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	11890 mg/kg
<i>Oral</i>		
LD50	Cat	3300 mg/kg
	Dog	9000 mg/kg
	Guinea pig	8700 mg/kg
	Mouse	13.3 g/kg
	Rabbit	26.9 g/kg
	Rat	12565 mg/kg
<i>Other</i>		
LD50	Mouse	9.6 g/kg

Components	Species	Test Results
	Rabbit	2000 mg/kg
	Rat	7700 mg/kg
		7.7 g/kg

12. Ecological information

Ecotoxicological data

Product	Species	Test Results
C9437 Series (CAS Mixture)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 750 mg/l, 96 hours
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours
Diethylene glycol (CAS 111-46-6)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) > 32000 mg/l, 96 hours
Glycerol (CAS 56-81-5)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>) 51000 - 57000 mg/l, 96 hours

Persistence and degradability Not available.

Bioaccumulation

Bioaccumulative potential

Octanol/water partition coefficient log Kow

2-pyrrolidone	-0.85
Glycerol	-1.76

Mobility in soil Not available.

Other hazardous effects Not available.

13. Disposal considerations

Local disposal regulations Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

15. Regulatory information

Applicable regulations

Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste

Not listed.

Standards on Workplace Atmosphere of Dangerous and Hazardous Materials

Carbon black (CAS 1333-86-4)

Listed.

GHS Classification List: GHS implementation phase 1 and 2 (CLA No. 0960145703, 0970146313, and 0990146707)

2-pyrrolidone (CAS 616-45-5)

Carbon black (CAS 1333-86-4)

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

References

Not available.

Issued by

Not available.

Prepared by

HP

Disclaimer

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP 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.

Issue date

18-Mar-2015

Revision date

01-Sep-2015

Version

02

This data sheet contains changes from the previous version in section(s):

Hazards identification: Other hazards
Other information: Disclaimer

Manufacturer information

HP
1501 Page Mill Road
Palo Alto, CA 94304-1112 US
Direct 1-650-857-5020

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