



# SAFETY DATA SHEET

## 1. Product and Company Identification

**Product identifier** C9438 Series  
**Issue date** 18-Mar-2015  
**Revision date** 09-Sep-2015  
**Version #** 02  
**Product use** Inkjet printing  
**CAS #** Mixture  
**Company identification** HP Canada Co.  
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## 2. Hazards Identification

**Physical hazards** Not classified.  
**Health hazards** Not classified.  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.  
**Chronic effects** None known.  
**Label elements**  
**Hazard symbol** None.  
**Signal word** None.  
**Hazard statement** Not available.  
**Precautionary statement**  
**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.  
**Other hazards** 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. 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.

## 3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
2-pyrrolidone	616-45-5	<7.5
Glycerol	56-81-5	<7.5
Alkyldiol	Proprietary	<5
Diethylene glycol	111-46-6	<5

Non-hazardous components	CAS #	Percent
Water	7732-18-5	75-85
Carbon Black	1333-86-4	<1

**Composition comments** This ink supply contains an aqueous ink formulation. The components of this product have been evaluated in accordance with the hazard criteria of the Canada Hazardous Products Regulations (HPR).

## 4. First Aid Measures

### First aid procedures

<b>Eye contact</b>	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.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.

## 5. Fire Fighting Measures

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

**Flammable properties** None known.

### Extinguishing media

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable extinguishing media** None known.

**Fire fighting equipment/instructions** Not available.

**Specific methods** None established.

### Explosion data

**Sensitivity to static discharge** Not available.

**Sensitivity to mechanical impact** Not available.

**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.

**Methods for cleaning up** Not available.

**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

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

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

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m <sup>3</sup>	
Glycerol (CAS 56-81-5)	TWA	10 mg/m <sup>3</sup>	Mist.

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m <sup>3</sup>	Inhalable
Glycerol (CAS 56-81-5)	TWA	3 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>	Respirable mist. Mist.

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

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

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m <sup>3</sup>	
Glycerol (CAS 56-81-5)	TWA	10 mg/m <sup>3</sup>	Mist.

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m <sup>3</sup>	
Glycerol (CAS 56-81-5)	TWA	10 mg/m <sup>3</sup>	Mist.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m <sup>3</sup>	
Glycerol (CAS 56-81-5)	PEL	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Personal protective equipment**

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

**Exposure guidelines**

Exposure limits have not been established for this product.

**Engineering controls**

Use in a well ventilated area.

**Personal protective equipment**

**Eye/face protection** Not available.

**Skin protection** Not available.

**Respiratory protection** Not available.

**9. Physical & Chemical Properties****Appearance**

**Physical state** Not available.

**Color** Grey, Dark Grey, Black.

**Odor** Not available.

**Odor threshold** Not available.

**pH** 9.4

**Vapor pressure** Not determined

**Boiling point** Not determined

**Melting point/Freezing point** Not available.

**Solubility (water)** Soluble in water

**Specific gravity** Not available.

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

**Flammability limits in air, upper, % by volume** Not available.

**Flammability limits in air, lower, % by volume** Not determined

**Auto-ignition temperature** Not determined

**VOC** < 96 g/l

**Evaporation rate** Not determined

<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Other data</b>	
<b>Oxidizing properties</b>	Not determined

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Not available.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Possibility of hazardous reactions</b>	Will not occur.

## 11. Toxicological Information

<b>Acute effects</b>	Based on available data, the classification criteria are not met.
<b>Skin irritation and corrosion</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	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.

<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Further information</b>	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.

### Toxicological data

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Carbon Black (CAS 1333-86-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 8000 mg/kg
Diethylene glycol (CAS 111-46-6)		
<b>Acute</b>		
<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

Components	Species	Test Results
	Mouse	13.3 g/kg
	Rabbit	26.9 g/kg
	Rat	12565 mg/kg
<i>Other</i>		
LD50	Mouse	9.6 g/kg
	Rabbit	2000 mg/kg
	Rat	7700 mg/kg
		7.7 g/kg

## 12. Ecological Information

**Environmental effects** Not available.

**Persistence and degradability** Not available.

### Partition coefficient

2-pyrrolidone	-0.85
Glycerol	-1.76

### Ecotoxicological data

Product	Species	Test Results
C9438 Series (CAS Mixture)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) > 750 mg/l, 96 hours
<b>Components</b>		
2-pyrrolidone (CAS 616-45-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> ) 13.21 mg/l, 48 hours
Diethylene glycol (CAS 111-46-6)		
<b>Aquatic</b>		
Fish	LC50	Western mosquitofish ( <i>Gambusia affinis</i> ) > 32000 mg/l, 96 hours
Glycerol (CAS 56-81-5)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss) 51000 - 57000 mg/l, 96 hours

## 13. Disposal Considerations

**Disposal instructions** 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.

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## 15. Regulatory Information

**Other 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/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

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## 16. Other Information

**HMIS® ratings** Health: 1  
Flammability: 1  
Physical hazard: 0

**NFPA ratings** Health: 1  
Flammability: 1  
Instability: 0

**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.

**Prepared by** HP

**Issue date** 18-Mar-2015

**Revision date** 09-Sep-2015

**Version #** 02

**This data sheet contains changes from the previous version in section(s):** Hazards Identification: Other hazards  
Composition / Information on Ingredients: Composition comments  
16. Other Information: Disclaimer

**Manufacturer information** HP  
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### Explanation of abbreviations

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