



SAFETY DATA SHEET

1. Product and Company Identification

Product identifier C9446 Series
Issue date 14-Nov-2014
Revision date 03-Oct-2015
Version # 03
Product use Inkjet printing
CAS # Mixture
Company identification HP Canada Co.
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HP health effects line
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2. Hazards Identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

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.

3. Composition / Information on Ingredients

Hazardous components	CAS #	Percent
2-pyrrolidone	616-45-5	<7.5
Alkyldiol	Proprietary	<5
Glycerol	56-81-5	<5
Diethylene glycol	111-46-6	<2.5
Non-hazardous components	CAS #	Percent
Water	7732-18-5	75-85
Trade secret colorant	Proprietary	<2.5

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

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.
Skin contact	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
Inhalation	Move to fresh air. If symptoms persist, get medical attention.
Ingestion	If material is ingested, immediately contact a physician or poison control center.

5. Fire Fighting Measures

Flash point	> 230.0 °F (> 110.0 °C) Setflash Closed Cup
Flammable properties	None known.
Extinguishing media	
Suitable extinguishing media	CO ₂ , water, dry chemical, or 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

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

Components	Type	Value	Form
Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Mist.

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

Components	Type	Value	Form
Glycerol (CAS 56-81-5)	TWA	3 mg/m ³	Respirable mist.
		10 mg/m ³	Mist.

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

Components	Type	Value	Form
Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Mist.

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

Components	Type	Value	Form
Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Mist.

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

Components	Type	Value	Form
Glycerol (CAS 56-81-5)	PEL	5 mg/m ³ 15 mg/m ³	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	Blue
Odor	Not available.
Odor threshold	Not available.
pH	9.2
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	> 230.0 °F (> 110.0 °C) Setafash 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	136.8 g/l
Evaporation rate	Not determined
Partition coefficient (n-octanol/water)	Not available.
Other data	
Oxidizing properties	Not determined

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Not available.
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 effects	Based on available data, the classification criteria are not met.
Skin irritation and corrosion	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 or skin sensitization	
Skin sensitization	Based on available data, the classification criteria are not met.
Respiratory sensitization	Based on available data, the classification criteria are not met.

Carcinogenicity	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	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.
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 aid measures.

Toxicological data

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
<i>Oral</i>		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 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
	Rabbit	2000 mg/kg
	Rat	7700 mg/kg
		7.7 g/kg

12. Ecological Information

Environmental effects	Not available.
Aquatic toxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	Not available.

Partition coefficient

2-pyrrolidone	-0.85
Glycerol	-1.76

Ecotoxicological data

Product	Species	Test Results
C9446 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

Components	Species	Test Results
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 (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.

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
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NFPA ratings	Health: 1 Flammability: 1 Instability: 0
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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