



# SAFETY DATA SHEET

Issue date: 01-Oct-2013  
Revision date: 09-Sep-2015  
Version #: 03

## 1. Chemical and company identification

**Name of chemical (Product name)** C9447 Series

### Recommended use of the chemical and restrictions on use

**Intended use** Inkjet printing

**Company identification** HP Japan Inc.  
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HP health effects line  
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Poison Information Centre 0120-50-3024

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## 2. Hazards identification

### GHS classification

The product is not classified according to GHS.

### GHS label elements

**Symbols** None.

**Signal words** None.

**Hazard statement** None.

### Precautionary statement

**Prevention** None.

**Response** None.

**Storage** None.

**Disposal** None.

### 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

**Substance or mixture** Mixture

Components	CAS #	Percent
Water	7732-18-5	80-90
2-pyrrolidone	616-45-5	<5
Alkyldiol	Proprietary	<5

**Composition comments** This ink supply contains an aqueous ink formulation.

## 4. First aid measures

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

**If on skin** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

**If in eyes** 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.

If swallowed

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

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## 5. Fire-fighting measures

Flash point	> 230.0 °F (> 110.0 °C) Setaflash Closed Cup
Extinguishing media	Dry chemical, CO <sub>2</sub> , water spray or regular foam.
Extinguishing media to avoid	None known.
Specific methods	None established.

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## 6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Wear appropriate personal protective equipment.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods or materials for containment and cleaning up	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.

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## 7. Handling and storage

### Handling

Technical measures (e.g. Local and general ventilation)	Not available.
Local and general ventilation	Not available.
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.
Safe storage conditions	Not available.
Safe packaging materials	Not available.

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## 8. Exposure controls/personal protection

**Occupational exposure limits** No exposure limits noted for ingredient(s).

### Recommended monitoring procedures

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

**Exposure guidelines** Exposure limits have not been established for this product.

**Engineering measures** Use in a well ventilated area.

### Personal protective equipment

Respiratory protection	Not available.
Hand protection	Not available.
Eye protection	Not available.
Skin and body protection	Not available.
General	Use personal protective equipment to minimize exposure to skin and eye.

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## 9. Physical and chemical properties

Appearance	Clear liquid
Physical state	Not available.
Color	Clear.
Odor	Not available.
pH	9.2
Melting point/Freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not determined
Flash point	> 230.0 °F (> 110.0 °C) Setaflash Closed Cup
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.

<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not determined
<b>Evaporation rate</b>	Not determined
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not determined
<b>Decomposition temperature</b>	Not available.
<b>Viscosity (Coefficient of viscosity)</b>	Not available.
<b>Other information</b>	
<b>Oxidizing properties</b>	Not determined
<b>VOC (Weight %)</b>	< 108 g/l

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	None.
<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.

## 11. Toxicological information

<b>General information</b>	Not available.	
<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.	
<b>Components</b>	<b>Species</b>	<b>Test Results</b>

2-pyrrolidone (CAS 616-45-5)

### Acute

*Oral*

LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg

<b>Skin corrosion/irritation</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 sensitizer</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitizer</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Toxic to reproduction</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>Other 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.

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## 12. Ecological information

### Ecotoxicological data

Product	Species	Test Results
C9447 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
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulation</b>	Not available.	
<b>Bioaccumulative potential</b>		
<b>Octanol/water partition coefficient log Kow</b>		
2-pyrrolidone		-0.85
<b>Mobility in soil</b>	Not available.	
<b>Hazardous to the ozone layer</b>	Not available.	

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## 13. Disposal considerations

<b>Local disposal regulations</b>	Do not dispose of together with general office waste. Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Ensure collection and disposal with an appropriately licensed waste contractor. 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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
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## 14. Transport information

### International regulations

#### 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

### Poisonous and Deleterious Substances Control Act

#### Specified poisonous substances

Not regulated.

#### Poisonous substances

Not regulated.

#### Deleterious substances

Not regulated.

### Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

#### Class I specified chemical substances

Not regulated.

#### Class II specified chemical substances

Not regulated.

#### Monitoring chemical substances

Not regulated.

#### Priority Assessment Chemical Substances (PACs)

Not regulated.

#### Reporting Exempted Substances

Not regulated.

## Industrial Safety and Health Act

### Notifiable substances

Not regulated.

### Labeling substances

Not regulated.

## Law concerning Pollutant Release and Transfer Register

### Specified class 1 substances (substance name, ordinance number and content)

Not regulated.

### Class 1 substances (substance name, ordinance number and content)

Not regulated.

### Class 2 substances (substance name, ordinance number and content)

Not regulated.

**Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule** Not regulated.

**Air Law, Enforcement Rule** Not regulated.

### Explosives Control Act

Not regulated.

## Act on Prevention of Marine Pollution and Maritime Disaster

WATER

Category: Other Substances

**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.

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## 16. Other information

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.

**This data sheet contains changes from the previous version in section(s):** Other information: Disclaimer

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**Manufacturer information** HP  
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Direct 1-650-857-5020

## 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