



MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

A. Product name Q7445Series

B. Recommended use and Limitations on use
Recommended use Inkjet printing

C. Supplier information
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2. Hazards identification

A. Hazard category/Classification
Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.

B. Warning label items including precautionary statement
• **Pictogram** None.
• **Signal word** None.
• **Hazard statement** None.
• **Precautionary statement** None.

C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard) 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.

Supplemental information None.

3. Composition/information on ingredients

Chemical identity	Common and alternative names	CAS number	ID number	Content in percent (%)
Water		7732-18-5	KE-35400	75-85
Ethyl alkyldiol		Proprietary	Proprietary	< 15
2-pyrrolidone		616-45-5	KE-29978	< 7.5
Alkyldiol ethoxylate		Proprietary	Proprietary	< 2.5
Cyan colorant		Proprietary	Proprietary	< 2.5

Composition comments This ink supply contains an aqueous ink formulation.

4. First aid measures

A. In case of 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.

B. In case of skin contact Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

C. In case of inhalation	Move to fresh air. If symptoms persist, get medical attention.
D. In case of swallowing	If ingestion of a large amount does occur, seek medical attention.
E. Note to physician	Not available.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media	CO ₂ , water, dry chemical, or foam
Unsuitable extinguishing media	None known.
B. Specific hazards arising from the chemical (example: hazardous combustion products)	
	Not available.
C. Specific methods of fire-fighting	
	Not available.
Specific methods	None established.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency measures	Wear appropriate personal protective equipment.
B. Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
C. Methods and 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.

7. Handling and storage

A. Precautions for safe handling	Avoid contact with skin, eyes and clothing.
B. Conditions for safe storage (including any incompatibilities)	Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls/personal protection

A. Exposure limit values, biological limit values, etc	
	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
B. Appropriate engineering controls	
	Use in a well ventilated area.
C. Personal protective equipment	
• Respiratory protection	Not available.
• Eye protection	Not available.
• Hand protection	Not available.
• Body protection	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

A. Appearance	
Physical state	Liquid.
Form	Not available.
Color	Light Cyan
B. Odor	
	Not available.
C. Odor threshold	
	Not available.
D. pH	
	7.8 - 8.3
E. Melting point/freezing point	
	Not available.
F. Boiling point, initial boiling point, and boiling range	
	Not determined
G. Flash point	
	200.0 °F (93.3 °C) Pensky-Martens Closed Cup
H. Evaporation rate	
	Not determined

I. Flammability (solid, gas)	Not available.
J. Upper/lower limit on flammability or explosive limits	
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
K. Vapor pressure	Not determined
L. Solubility	
Solubility (water)	Soluble in water
M. Vapor density	>= 1 (air = 1.0)
N. Specific gravity	Not available.
O. n-octanol/water partition coefficient	Not available.
P. Auto-ignition temperature	Not available.
Q. Decomposition temperature	Not available.
R. Viscosity	Not available.
S. Molecular weight	Not available.
Other data	
Oxidizing properties	Not determined
VOC	< 90 g/l

10. Stability and reactivity

A. Stability and hazardous reaction potential	
Stability	Stable under recommended storage conditions.
Hazardous reaction potential	Will not occur.
B. Conditions to avoid (e.g. static discharge, shock or vibration, etc)	Not available.
C. Incompatible materials	Incompatible with strong bases and oxidizing agents.
D. Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

A. Information on likely routes of exposure		
• Respiratory organs	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.	
• Skin	Contact with skin may result in mild irritation.	
• Eyes	Contact with eyes may result in mild irritation.	
• Mouth	Health injuries are not known or expected under normal use.	
B. Information on health hazards		
• Acute toxicity (list all possible routes of exposure)	Based on available data, the classification criteria are not met.	
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
• Corrosivity or irritation to the skin	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. Not classified as an irritant according to, OECD 405.	
• Respiratory sensitization	Based on available data, the classification criteria are not met.	
• Skin sensitization	Based on available data, the classification criteria are not met.	

• Carcinogenic properties /Carcinogenicity	Based on available data, the classification criteria are not met.
• Mutagenic properties /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.

12. Ecological information

A. Ecotoxicity Information given is based on data on the components and the ecotoxicology of similar products

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex)
		13.21 mg/l, 48 hours
Cyan colorant (CAS Proprietary)		
Aquatic		
Crustacea	EC50	Daphnia
		50 - 100 mg/l, 48 Hours
		102, 48 Hours
Fish	LC50	Fish
		1000, 96 Hours

Aquatic toxicity Static acute toxicity (trout), survival (100 mg/L) = 100%
 Static acute toxicity (trout), survival (10 mg/L) = 100% ALC/inhalation/ min/mouse = LC50/96h/rainbow trout => 100 mg/l
 EC50/48h/daphnia => 100mg/l, OECD 202
 EC50/72h/algae => 100 mg/l , OECD 201

B. Persistence/degradability Not available.

C. Bioaccumulative potential

Octanol/water partition coefficient log Kow
 2-pyrrolidone -0.85

D. Mobility in soil Not available.

E. Other adverse effects Not available.

13. Disposal considerations

A. Method of disposal 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>.

B. Disposal considerations (including disposal of contaminated containers or packaging) Not available.

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

A. Restrictions under the Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacturing

Not regulated.

Harmful Substances Requiring Permission for Manufacture or Use

Not regulated.

Controlled Hazardous Substances

Not regulated.

Harmful Substances Requiring Special Medical Examination

Not regulated.

Workplace Environmental Monitoring Harmful Materials

Not regulated.

Occupational Exposure Limit

Not regulated.

B. Restrictions under the Chemicals Control Law (Previously Toxic Chemicals Control Law)

Accidental Release Prevention Substances

Not regulated.

Observational Chemicals

Not regulated.

C. Restrictions under the Dangerous Substance Safety Management Act

D. Restrictions under the Wastes Control Act

Halogenated Materials in Waste Organic Solvents

Not regulated.

Hazardous Substances

Not regulated.

E. Restrictions under other foreign or domestic laws

Clean Air Conservation Act

Air Pollutants

Not regulated.

Specific Air Pollutants

Not regulated.

Act on the Registration and Evaluation of Chemicals

Banned Toxic Chemicals

Not regulated.

Designated Existing Chemicals Subject to Registration (PEC) (MoE No. 2015-92)

Not listed.

Restricted Chemical Substances

Not regulated.

Toxic Chemicals

Not regulated.

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

A. Source of information	Not available.
B. Issue date	28-May-2015
C. Number of revisions and date of most recent revision	05-Jan-2019 (04 revision)
D. Other	Not available.

Disclaimer

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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