



MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

A. Product name Q7444A

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 | 70-80 |
| Ethyl alkyldiol | | Proprietary | Proprietary | <15 |
| 2-pyrrolidone | | 616-45-5 | KE-29978 | <5 |
| Yellow colorant | | Proprietary | Proprietary | <5 |
| ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol | | 9014-85-1 | KE-11245 | <1 |

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. Get medical attention if irritation develops or persists.

| | |
|---------------------------------|--|
| C. In case of inhalation | Remove 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 | Dry chemical, CO ₂ , water spray or regular 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 Not available.

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 | Not available. |
| Form | Not available. |
| Color | Yellow |

B. Odor Not available.

C. Odor threshold Not available.

D. pH 7.3 - 8

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) Setaflash Closed Tester

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 available. |
| L. Solubility | |
| Solubility (water) | Soluble in water |
| M. Vapor density | >= 1 (air = 1.00) |
| 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 | < 60 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. | |
| • 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 |
| Ethyl alkyldiol (CAS Proprietary) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 102, 48 Hours |
| Fish | LC50 | Fish | 1000, 96 Hours |

Aquatic toxicity Static acute toxicity (trout), survival (100 mg/L) = 97%
 Static acute toxicity (trout), survival (10 mg/L) = 100%
 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 | 05-Sep-2015 |
| C. Number of revisions and date of most recent revision | 06-Jan-2019 (02 revision) |
| D. Other | Not available. |

Disclaimer

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Revision information

Toxicological information: • Eyes
Toxicological information: • Mouth
Toxicological information: • Respiratory organs
Toxicological information: • Skin
Ecological Information: Ecotoxicity
Ecological information: Aquatic toxicity
Regulatory information: Regulatory information
Other information: Disclaimer

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 |