



SAFETY DATA SHEET

1. Identification

Important information	*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***	
Name of the substance or mixture (trade name)	CH616Series	
Major recommended uses for the substance or mixture	Inkjet printing	
Specific restrictions for use of the substance or mixture	Not available.	
Manufacturer/Importer/Distributor information	HP Brasil Indústria e Comércio de Equipamentos Eletrônicos Ltda. Al. Xingu, 350 – andar 8 Barueri, São Paulo, Brazil 06.455-030	
Telephone	Telefone 55 (11) 4197.8907	
HP Inc. health effects line (Direct)	+55 11 4349 1907 Access code 9519	
HP Inc. Customer Care Line (Toll-free within the US) (Direct)	1-800-474-6836 1-208-323-2551	
Email:	hpcustomer.inquiries@hp.com	

2. Hazards identification

Classification of the substance or mixture

Physical hazards	Not classified.	
Health hazards	Reproductive toxicity (fertility, the unborn child)	Category 1B
Environmental hazards	Not classified.	

GHS labeling elements, including precautionary statements

Hazard symbol(s)



Signal word Danger
Hazard statement(s) May damage fertility or the unborn child.

Precautionary statement(s)

- Prevention** Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.
- Response** IF exposed or concerned: Get medical advice/attention.
- Storage** Store locked up.
- Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification

Complete toxicity data are not available for this specific formulation.
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.

GHS Supplemental information

2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%.

3. Composition/information on ingredients

Mixture

Common chemical name or technical name	CAS number	Concentration or concentration range
Water	7732-18-5	60-80
2-pyrrolidone	616-45-5	<20

Composition comments This ink supply contains an aqueous ink formulation.
2-pyrrolidone: Specific Concentration Limit 3%.

4. First-aid measures

First-aid measures

Inhalation	Move to fresh air. If symptoms persist, get medical attention.
Skin contact	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
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.
Ingestion	If ingestion of a large amount does occur, seek medical attention.
Most important symptoms/effects, acute and delayed	Not available.
Notes to physician	Not available.

5. Fire-fighting measures

Means of fire extinguishing

Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not available.
Protective measures taken by firefighting crews	Not available.
Specific methods	None established.

6. Control measures for spills and leaks

Personal precautions, protective equipment and emergency procedures

To be taken by those who are not involved in rendering emergency services	Wear appropriate personal protective equipment.
To be taken by those who are involved in rendering emergency services	Not available.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods and materials for containment and cleaning up	Not available.
Other issues relating to spills and releases	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

Precautions for safe handling	Avoid contact with skin, eyes and clothing.
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

Control parameters

Occupational exposure limits	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.
Appropriate engineering controls	Use in a well ventilated area.

Personal protective measures

Eyes and face protection	Not available.
Skin protection	
Hand protection	Not available.
Other	Use personal protective equipment to minimize exposure to skin and eye.
Respiratory protection	Not available.
Thermal hazards	Not available.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Not available.
Color	Cyan

Odor Not available.

Odor threshold Not available.

pH 8.2 - 8.7

Melting point/freezing point Not determined

Initial boiling point and boiling temperature range Not determined

Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not determined

Vapor density Not available.

Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not determined

Decomposition temperature Not available.

Viscosity Not available.

Other physical and chemical parameters

Oxidizing properties Not determined

Percent volatile 19 % estimated

VOC < 306 g/L

10. Stability and reactivity

Reactivity Not available.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions Will not occur.

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.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Contact with skin may result in mild irritation.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Health injuries are not known or expected under normal use.

Symptoms Not available.

Acute toxicity Based on available data, the classification criteria are not met.

Product	Species	Test Results
Cyan ink		
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg

Skin irritation and corrosion Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Not classified as an irritant according to, OECD 405. Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.

Germ cell mutagenicity Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium) Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Toxic to reproduction May damage fertility or the unborn child.

2-pyrrolidone: This component showed developmental effects only at high, maternally toxic doses in test animals. Uptake by people of small doses is not expected to cause developmental toxicity.

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.

Other 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.

12. Ecological information

Ecotoxicity

Product	Species	Test Results
Cyan ink		
Aquatic		
Acute		
Fish	LC50	Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex) 13.21 mg/l, 48 hours
Persistence and degradability	Not available.	

Bioaccumulative potential

**Partition coefficient
n-octanol / water (log Kow)**
2-pyrrolidone -0.85

**Bioconcentration factor
(BCF)** Not available.

Mobility in soil Not available.

Other adverse effects Not available.

13. Considerations on final disposal**Recommended methods for final destination**

Residual waste Not available.

Contaminated packaging Not available.

Local disposal regulations Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

14. Transport information**DOT**

UN number Not available.

UN proper shipping name Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk -

Packing group Not available.

Environmental hazards

Marine pollutant No

Special precautions for user Not available.

IATA

UN number Not available.

UN proper shipping name Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk -

Packing group Not available.

Environmental hazards No

Special precautions for user Not available.

IMDG

UN number Not available.

UN proper shipping name Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk -

Packing group Not available.

Transport hazard class(es)

Marine pollutant No

EmS Not available.

Special precautions for user Not available.

ADR

UN number Not available.

UN proper shipping name Not Regulated

Transport hazard class(es)

Class Not available.

Subsidiary risk -

Hazard No. (ADR) Not available.

Tunnel restriction code Not available.

Packing group Not available.

Environmental hazards No

Special precautions for user Not available.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

15. Regulatory information

Federal regulations

Brazil. Controlled products that must be reported to the Army (Decree No. 3655, Annex 1, as amended)

Not applicable.

Brazil. Drug precursors (Ordinance No. 1.274)

Not applicable.

Brazil. Ozone depleting substances (Decree No. 99.280, Annexes A, B, C and E, as amended)

Not applicable.

Brazil. Use and physiological effects of chemical products (Decree No. 3665, Annex 3)

Not applicable.

POPs (Decree No. 5.472 promulgates the Stockholm Convention on persistent organic pollutants)

Not listed.

International 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.

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections Not available.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

Other information This Safety Data Sheet for Chemical Products (FISPQ) was prepared in compliance with ABNT NBR 14725:2005.

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This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

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