



SAFETY DATA SHEET

1. Identification

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|--|---|--|
| 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) | C4990Series | |
| 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) | 1-800-474-6836 | |
| (Direct) | 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. | |
| 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.

| | |
|---------------------------------|---|
| Supplemental information | 2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11. |
|---------------------------------|---|

3. Composition/information on ingredients

Mixture

| Common chemical name or technical name | CAS number | Concentration or concentration range |
|--|-------------|--------------------------------------|
| Water | 7732-18-5 | 80-90 |
| 2-pyrrolidone | 616-45-5 | <10 |
| Substituted naphthalenesulfonate salt | Proprietary | <5 |
| Trimethylolpropane | 77-99-6 | <5 |

| | |
|-----------------------------|--|
| Composition comments | This ink supply contains an aqueous ink formulation. 2-pyrrolidone: Specific Concentration Limit 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11. |
|-----------------------------|--|

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. Get medical attention if irritation develops or persists. |
| 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 | CO2, water, dry chemical, or 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 | 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. |
| 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

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|---|---|
| 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. Provide adequate ventilation. |
| 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 | For use other than intended use (such as in the event of a large spill), goggles and respirators may be required. |
| 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 | Liquid. |
| Color | Black. |
| Odor | Not available. |
| Odor threshold | Not available. |
| pH | 7.5 - 8 |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling temperature range | Not determined |
| Flash point | > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup |
| Evaporation rate | Not determined |
| 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 | >= 1 (air = 1.0) |
| Solubility(ies) | |
| Solubility (water) | Soluble in water |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other physical and chemical parameters | |
| Oxidizing properties | Not determined |

VOC < 86 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.

| 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 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 doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).

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

12. Ecological information

Aquatic toxicity LC50/96h/Fathead minnows =>750mg/l
 EC50/48h/daphnia => 100mg/l, OECD 202
 EC50/72h/algae => 100 mg/l, OECD 201

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

| Components | Species | Test Results |
|--------------------------------------|----------------|----------------|
| Trimethylolpropane (CAS 77-99-6) | | |
| Aquatic | | |
| Crustacea | EC50 | Daphnia |
| | | 102, 48 Hours |
| Fish | LC50 | Fish |
| | | 1000, 96 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

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|-----------------------------------|--|
| 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

Chemical Products for the Manufacture and Synthesis of Narcotics and Psychotropic Subject to Control of the Ministry of Justice (Resolution No. 169 of 15 August 2017, Annex I, List D2)

Not listed.

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

Not applicable.

Drug precursors (Ordinance No. 1.274)

Not applicable.

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

Not applicable.

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

Not listed.

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

Not applicable.

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.

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

Revision information 1. Product and Company Identification: Alternate Trade Names

Disclaimer 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.

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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 |