




SAFETY DATA SHEET

Issue date: 27-Feb-2014
Revision date: 19-Jun-2020
Version #: 08

1. Chemical and company 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 chemical (Product name) | CZ688Series |
| | HP Japan Inc. 5F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711 |
| Poison Information Centre Telephone | 0120-50-3024 (+81) 3 5628-1101 |
| HP Inc. health effects line (Toll-free within the US) (Direct) | 1-800-457-4209 1-760-710-0048 |
| HP Inc. Customer Care Line (Toll-free within the US) (Direct) | 1-800-474-6836 1-208-323-2551 |
| Email: | hpcustomer.inquiries@hp.com |
| Recommended use of the chemical and restrictions on use | |
| Intended use | Inkjet printing |

2. Hazards identification

| | |
|--|---|
| GHS classification | |
| Physical hazards | The product is not classified according to GHS. |
| Health hazards | Reproductive toxicity (fertility, the unborn child) Category 1B |
| Environmental hazards | The product is not classified according to GHS. |
| GHS label elements | |
| Symbols |  |
| Signal words | Danger |
| Hazard statement | May damage fertility or the unborn child. |
| Precautionary statement | |
| 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. |
| 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

| | |
|-----------------------------|---------|
| Substance or mixture | Mixture |
|-----------------------------|---------|

| Components | CAS Number | Gazette notification | | Concentration (%) |
|------------------|-------------|----------------------|-------------|-------------------|
| | | ENCS no. | ISHL no. | |
| Water | 7732-18-5 | (9)-447 | | 50-70 |
| 2-pyrrolidone | 616-45-5 | (5)-112 | (5)-112 | <15 |
| Substituted diol | Proprietary | Proprietary | Proprietary | <15 |
| Black Pigment | Proprietary | Proprietary | Proprietary | <2.5 |

Chemical formula H₂O (7732-18-5), C₄H₇N-O (616-45-5), C₄H₇N-O (616-45-5)

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

| | |
|---------------------|---|
| If inhaled | Move to fresh air. If symptoms persist, get medical attention. |
| If on skin | Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention. |
| 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. |

5. Fire-fighting measures

| | |
|-------------------------------------|---|
| Extinguishing media | CO ₂ , water, dry chemical, or foam For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray. |
| Extinguishing media to avoid | None known. |
| Specific methods | None established. |

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. |

7. Handling and storage

| | |
|--|---|
| Handling | |
| Technical measures (e.g. Local and general ventilation) | Not available. |
| Safe handling advice | Avoid contact with skin, eyes and clothing. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. |
| | Under extreme work place conditions, ink vapors may condense outside of the printing system. The Waste Profile Datasheet for your printer at https://hplatexknowledgecenter.com/applications/wasteprofiles contains more information on how to properly handle and dispose of the condensate. |
| Storage | |
| Safe storage conditions | Keep out of the reach of children. Keep away from excessive heat or cold. |
| Safe packaging materials | Not available. |

8. Exposure controls/personal protection

Occupational exposure limits

Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

| Components | Type | Value | Form |
|---------------|------|---------------------|------------------|
| Black Pigment | TWA | 4 mg/m ³ | Total dust. |
| | | 1 mg/m ³ | Respirable dust. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--------------------------------------|---|---------------------|---------------------|
| Black Pigment | TWA | 3 mg/m ³ | Inhalable fraction. |
| 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. | | |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. | | |
| | Under extreme work place conditions, ink vapors may condense outside of the printing system. The Waste Profile Datasheet for your printer at https://hpllatexknowledgecenter.com/applications/wasteprofiles contains more information on how to properly handle and dispose of the condensate. | | |
| Personal protective equipment | | | |
| Eye protection | Not available. | | |
| Skin and body protection | Use personal protective equipment to minimize exposure to skin and eye. | | |

9. Physical and chemical properties**Appearance****Physical state** Liquid.**Color** Black.**Odor** Not available.**pH** 9**Melting point/Freezing point** Not available.**Boiling point, initial boiling point, and boiling range** Not available.**Flash point** > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup**Upper/lower flammability or explosive limits****Flammability limit - lower (%)** Not available.**Flammability limit - upper (%)** Not available.**Explosive limit - lower (%)** Not available.**Explosive limit - upper (%)** Not available.**Vapor pressure** Not available.**Vapor density** Not available.**Specific gravity** 1 g/cm³**Solubility(ies)****Solubility (water)** Not available.**Partition coefficient (n-octanol/water)** Not available.**Auto-ignition temperature** Not available.**Decomposition temperature** Not available.**Viscosity (Coefficient of viscosity)** Not available.**Other information****Percent volatile** 14 % estimated**VOC** 294 g/l Method 24/ASTM D403-93**10. Stability and reactivity****Reactivity** Not available.**Chemical stability** Stable under recommended storage conditions.**Possibility of hazardous reactions** Will not occur.**Conditions to avoid** None.**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., hydrogen fluoride, fluorinated hydrocarbons.

11. Toxicological information

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 |
| Black Pigment | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | > 10000 mg/kg |
| Skin corrosion/irritation | 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 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. Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium) | |
| Carcinogenicity | Based on available data, the classification criteria are not met. | |
| Reproductive toxicity | 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 Refer to Section 2 for potential health effects and Section 4 for first aid measures. | |

12. Ecological information**Ecotoxicological data**

| Product | Species | Test Results |
|--|---|------------------------|
| CZ688Series | | |
| Aquatic | | |
| Acute | | |
| Fish | LC50 Fathead minnow (Pimephales promelas) | < 531.3 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 |
| Ecotoxicity | Not available. | |
| Persistence and degradability | Not available. | |
| Bioaccumulation | Not available. | |
| Bioaccumulative potential | | |
| Octanol/water partition coefficient log Kow | | |
| 2-pyrrolidone | -0.85 | |
| Mobility in soil | Not available. | |
| Hazardous to the ozone layer | Not available. | |

13. Disposal considerations

| | |
|-----------------------------------|--|
| Local disposal regulations | 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 http://www.hp.com/recycle . |
|-----------------------------------|--|

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. |
| 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 | Yes |
| 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 | Yes |
| 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

Industrial Safety and Health Act

Notifiable substances
Not regulated.

Labeling substances
CARBONBLACK

0 - 2.5 %

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.

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.

Fire Service Act

Not dangerous goods under Fire Service Law

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

Substituted diol

Category: Z

Substituted diol

Category: Z

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

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 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.

Revision information

1. Product and Company Identification: Alternate Trade Names
Hazards identification: Supplemental information
Composition/information on ingredients: Composition comments
Toxicological information: Reproductivity

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 |