CB337 Series[C]-MSDS_US-English-05.pdf

CB337 Series[M]-MSDS_US-English-04.pdf

CB337 Series[Y]-MSDS_US-English-03.pdf



| 1. Product and Company | ⁷ Identification |
|--------------------------------------|--|
| Identification of the preparation | CB337 Series[C] |
| Product use | Inkjet printing |
| Version # | 04 |
| Revision date | 13-Apr-2012 |
| CAS # | Mixture |
| Company identification | Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501 |
| | Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP 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 | 1 |
| Emergency overview | Contact with skin and eyes may result in irritation. |
| | Causes skin irritation. |
| Acute health effects | |
| | Any potential hazards are presumed to be due to exposure to the components. |
| Skin contact | 1,5-pentanediol Contact with skin may result in irritation. |
| | <i>2-pyrrolidone</i> Contact with skin may result in irritation. |
| | <i>Alkyldiol ethoxylate</i> Contact with skin may result in severe irritation. |
| | <i>Ethyl alkyldiol</i> Contact with skin may result in mild irritation. |
| | <i>Metal nitrate # 2</i> Contact with skin may result in irritation. |
| Eye contact | 1,5-pentanediol Contact with eyes may result in irritation. |
| | <i>2-pyrrolidone</i> Contact with eyes may result in irritation. |
| | <i>Alkyldiol ethoxylate</i> Contact can cause moderate to severe irritation and possible injury to the eyes. <i>Ethyl alkyldiol</i> Contact with eyes may result in mild irritation. |
| | Metal nitrate # 2 Contact with eyes may result in irritation. |
| Inhalation | <i>2-pyrrolidone</i> Inhalation may result in respiratory irritation. <i>Metal nitrate # 2</i> Inhalation may result in respiratory irritation. |

| Ingestion | 2-pyrrolidone Ingestion may result in nausea, vomiting and diarrhea. Alkyldiol ethoxylate Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea. Metal nitrate # 2 |
|----------------------------|---|
| | Contains nitrate salts, may cause methemoglobinemia. |
| Potential health effects | |
| Routes of exposure | 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 |
| Chronic health effects | None known. |
| Carcinogenicity | None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA. |
| 3. Composition / Informati | on on Ingredients |

| Components | | CAS # | Percent |
|---|--|---|---|
| 1,5-pentanediol | | 111-29-5 | < 10 |
| 2-pyrrolidone | | 616-45-5 | < 7.5 |
| Alkyldiol ethoxylate | | Proprietary | < 2.5 |
| Ethyl alkyldiol | | Proprietary | < 7.5 |
| Metal nitrate # 2 | | Proprietary | < 5 |
| Substituted phthalocyanine salt # | 4 | Proprietary | < 5 |
| Water | | 7732-18-5 | > 60 |
| Composition comments | This ink supply contains an aqueous ink formul This product has been evaluated using criteria Communication Standard). | | 1200 (Hazard |
| 4. First Aid Measures | | | |
| First aid procedures | | | |
| Eye contact | Do not rub eyes. Immediately flush with large | amounts of clean, warm w | uter (low pressure) for at |
| | least 15 minutes or until particles are removed | | |
| Skin contact | least 15 minutes or until particles are removed Wash affected areas thoroughly with mild soap attention. | . If irritation persists get n | nedical attention. |
| Skin contact Inhalation | Wash affected areas thoroughly with mild soap | . If irritation persists get n and water. If irritation pe | nedical attention. |
| | Wash affected areas thoroughly with mild soap attention. | . If irritation persists get n and water. If irritation pe dical attention. | nedical attention. |
| Inhalation | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get me If ingestion of a large amount does occur, see | . If irritation persists get n and water. If irritation pe dical attention. | nedical attention. |
| Inhalation Ingestion | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get me If ingestion of a large amount does occur, see | . If irritation persists get n and water. If irritation pe dical attention. | nedical attention. |
| Inhalation Ingestion 5. Fire Fighting Measures | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get me If ingestion of a large amount does occur, see | . If irritation persists get n and water. If irritation pe dical attention. | nedical attention. |
| Inhalation Ingestion 5. Fire Fighting Measures Flammable properties | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get me If ingestion of a large amount does occur, see | . If irritation persists get n o and water. If irritation pe dical attention. < medical attention. | nedical attention. ersists get medical |
| Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get me If ingestion of a large amount does occur, see None known. For small (incipient) fires, use media such as for | . If irritation persists get n o and water. If irritation pe dical attention. < medical attention. | nedical attention. ersists get medical |
| Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get men If ingestion of a large amount does occur, see None known. For small (incipient) fires, use media such as for For large fires use very large (flooding) quantit | . If irritation persists get n o and water. If irritation pe dical attention. < medical attention. | nedical attention. ersists get medical |
| Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing media | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get me If ingestion of a large amount does occur, see None known. For small (incipient) fires, use media such as for For large fires use very large (flooding) quantit None known. | . If irritation persists get n o and water. If irritation pe dical attention. < medical attention. | nedical attention. ersists get medical |
| Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Specific methods Hazardous combustion | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get men If ingestion of a large amount does occur, see None known. For small (incipient) fires, use media such as for For large fires use very large (flooding) quantit None known. None established. Refer to section 10. | . If irritation persists get n o and water. If irritation pe dical attention. < medical attention. | nedical attention. ersists get medical |
| Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Specific methods Hazardous combustion products | Wash affected areas thoroughly with mild soap attention. Move to fresh air. If symptoms persist, get men If ingestion of a large amount does occur, see None known. For small (incipient) fires, use media such as for For large fires use very large (flooding) quantit None known. None established. Refer to section 10. | . If irritation persists get n o and water. If irritation pe dical attention. < medical attention. | nedical attention. ersists get medical |

| Methods for containment | 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. |
|---|--|
| Methods for cleaning up | Soak up with inert absorbent material. |
| Other information | 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 | 2 |
| Handling | Avoid contact with skin, eyes and clothing. |
| Storage | Keep out of the reach of children. Keep away from excessive heat or cold. |
| 8. Exposure Controls / I | Personal Protection |
| Exposure guidelines | Exposure limits have not been established for this product. |
| Engineering controls | Use in a well ventilated area. |
| Personal protective equipme | nt |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |
| General | Use personal protective equipment to minimize exposure to skin and eye. |
| 9. Physical & Chemical | Properties |
| Appearance | Not available. |
| Color | Cyan |
| Odor | Not available. |
| Odor threshold | Not available. |
| Physical state | Liquid |
| Form | Not available. |
| рН | 6.2 |
| Melting point | Not available. |
| Freezing point | Not available. |
| Boiling point | Not determined |
| Flash point | 200 °F (93.3 °C) Pensky-Martens Closed Cup |
| Evaporation rate | Not determined |
| Flammability limits in air, upper, % by volume | Not available. |
| Flammability limits in air, lower, % by volume | Not determined |
| | |
| Vapor pressure | Not determined |

10. Chemical Stability & Reactivity Information

Not available.

Not available.

Not available.

Not available.

< 221 g/L

Soluble in water

1

2 cp

Vapor density

Specific gravity

Relative density

Viscosity

VOC

Solubility (water)

Auto-ignition temperature

Decomposition temperature

| Chemical stability | Stable under recommended storage conditions. |
|---------------------------------------|---|
| 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. |
| Possibility of hazardous reactions | Will not occur. |

| 11. Toxicological Informa | ation |
|---|---|
| Serious eye damage/eye irritation | Not available. |
| Further information | This ink formulation has not been tested for toxicological effects. Refer to Section 2 for potential health effects and Section 4 for first aid measures. |
| 12. Ecological Informatio | in and the second se |
| Aquatic toxicity | LC50/96h/Fathead minnows =< 400 mg/L |
| Persistence and degradability | Not available. |
| 13. Disposal Consideration | DNS |
| Disposal instructions | 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. |
| 14. Transport Informatio | n |
| Further information DOT | Not a dangerous good under DOT, IATA, ADR, IMDG, or RID. |
| Not regulated as dangerous goods. | |
| IATA | |
| Not regulated as dangerous goods. | |
| IMDG | |
| Not regulated as dangerous goods. | |
| RID | |
| Not regulated as dangerous goods. | |
| 15. Regulatory Informati | on |
| US federal regulations | US TSCA 12(b): Does not contain listed chemicals. |
| CERCLA (Superfund) reportable None | e quantity |
| Occupational Safety and Healt | h Administration (OSHA) |
| 29 CFR 1910.1200 hazardous chemical | Νο |
| Superfund Amendments and R Hazard categories | eauthorization Act of 1986 (SARA) Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
| Section 302 extremely hazardous substance | No |
| Section 311 hazardous chemical | No |
| State regulations | |
| • | azardous Substances: Listed substance |
| 2-pyrrolidone (CAS 616-4 | |
| 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. |

| Other | information | |
|-------|-------------|--|
| ounci | mormation | |

Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further rectifications and amendments). Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments). VOC content (less water, less exempt compounds) = < 697 g/L (U.S. requirement, not for

| 16. Other Information | |
|---|--|
| Other information | This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200). |
| HMIS® ratings | Health: 1 Flammability: 1 Physical hazard: 0 |
| NFPA ratings | Health: 1 Flammability: 1 Instability: 0 |
| Disclaimer | This Safety Data Sheet document is provided without charge to customers of Hewlett-Packarc Company. Data is the most current known to Hewlett-Packard Company 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. |
| Issue date | 13-Apr-2012 |
| This data sheet contains changes from the previous version in section(s): | Regulatory Information: Canada 15. Regulatory Information: Other information |
| Manufacturer information | Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304-1112 US (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209 |

emissions)

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 |
| | |



| 1. Product and Compa | ny Identification |
|-------------------------|--|
| Identification of the | CB337 Series[M] |
| preparation | |
| Product use | Inkjet printing |
| Version # | 04 |
| Revision date | 13-Apr-2012 |
| CAS # | Mixture |
| Company identification | Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501 |
| | Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com |
| 2. Hazards Identificati | ion |
| Emergency overview | Contact with skin and eyes may result in irritation. |
| | Causes skin irritation. |
| Acute health effects | |
| | Any potential hazards are presumed to be due to exposure to the components. |
| Skin contact | <i>1,5-pentanediol</i> Contact with skin may result in irritation. |
| | 2-pyrrolidone Contact with skin may result in irritation. |
| | <i>Alkyldiol ethoxylate</i> Contact with skin may result in severe irritation. |
| | <i>Ethyl alkyldiol</i> Contact with skin may result in mild irritation. |
| | <i>Metal nitrate # 2</i> Contact with skin may result in irritation. |
| Eye contact | 1,5-pentanediol Contact with eyes may result in irritation. |
| | <i>2-pyrrolidone</i> Contact with eyes may result in irritation. |
| | <i>Alkyldiol ethoxylate</i> Contact can cause moderate to severe irritation and possible injury to the eyes. |
| | <i>Ethyl alkyldiol</i> Contact with eyes may result in mild irritation. |
| | <i>Metal nitrate # 2</i> Contact with eyes may result in irritation. |
| | Substituted naphthalenesulfonate salt # 11 Contact with eyes may result in irritation. |
| Inhalation | <i>2-pyrrolidone</i> Inhalation may result in respiratory irritation. <i>Metal nitrate # 2</i> Inhalation may result in respiratory irritation. |

| Ingestion | <i>2-pyrrolidone</i> Ingestion may result in nausea, vomiting and diarrhea. <i>Alkyldiol ethoxylate</i> Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea. |
|----------------------------|--|
| | Metal nitrate # 2 Contains nitrate salts, may cause methemoglobinemia. |
| Potential health effects | |
| Routes of exposure | 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 |
| Chronic health effects | None known. |
| Carcinogenicity | None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA. |
| 3. Composition / Informati | on on Ingredients |

| Components | | CAS # | Percent |
|--|--|---|--------------------|
| 1,5-pentanediol | | 111-29-5 | < 10 |
| 2-pyrrolidone | | 616-45-5 | < 7.5 |
| Alkyldiol ethoxylate | | Proprietary | < 2.5 |
| Ethyl alkyldiol | | Proprietary | < 10 |
| Metal nitrate # 2 | | Proprietary | < 5 |
| Substituted naphthalenesulfonate | salt # 11 | Proprietary | < 5 |
| Water | | 7732-18-5 | > 60 |
| Composition comments | This ink supply contains an aqueous ink This product has been evaluated using c Communication Standard). | | 1200 (Hazard |
| 4. First Aid Measures | | | |
| | | | |
| First aid procedures | | | |
| First aid procedures Eye contact | Do not rub eyes. Immediately flush with least 15 minutes or until particles are rer | | |
| • | | noved. If irritation persists get n | nedical attention. |
| Eye contact | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil | noved. If irritation persists get n d soap and water. Get medical a | nedical attention. |
| Eye contact Skin contact | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures | least 15 minutes or until particles are ren Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures Flammable properties | least 15 minutes or until particles are ren Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. r, seek medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu None known. | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. r, seek medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu None known. Dry chemical, CO2, water spray or regula | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. r, seek medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing media | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu None known. Dry chemical, CO2, water spray or regula None known. | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. r, seek medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Specific methods Hazardous combustion | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu None known. Dry chemical, CO2, water spray or regula None known. None established. Refer to section 10. | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. r, seek medical attention. | nedical attention. |
| Eye contact Skin contact Inhalation Ingestion 5. Fire Fighting Measures Flammable properties Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Specific methods Hazardous combustion products | least 15 minutes or until particles are rer Wash affected areas thoroughly with mil develops or persists. Remove to fresh air. If symptoms persist If ingestion of a large amount does occu None known. Dry chemical, CO2, water spray or regula None known. None established. Refer to section 10. | noved. If irritation persists get n d soap and water. Get medical a c, get medical attention. r, seek medical attention. | nedical attention. |

| Methods for containment | 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. |
|-------------------------|--|
| Methods for cleaning up | Soak up with inert absorbent material. |
| Other information | 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 | |
|--|---|
| Handling | Avoid contact with skin, eyes and clothing. |
| Storage | Keep out of the reach of children. Keep away from excessive heat or cold. |
| 8. Exposure Controls / Personal Protection | |

| Exposure guidelines | None established. |
|-----------------------------------|--|
| Engineering controls | Use in a well ventilated area. |
| Personal protective equipment | |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

Use personal protective equipment to minimize exposure to skin and eye.

9. Physical & Chemical Properties

General

| Color Mag Odor Not | |
|---|--|
| Odor Not | t available. t available. uid |
| | uid |
| Odor threshold Not | uid |
| | |
| Physical state Liqu | , available |
| Form Not | t available. |
| pH 6.2 | |
| Melting point Not | t available. |
| Freezing point Not | t available. |
| Boiling point Not | t determined |
| Flash point200 |) °F (93.3 °C) Pensky-Martens Closed Cup |
| Evaporation rate Not | t determined |
| Flammability limits in air, Not upper, % by volume | t available. |
| Flammability limits in air, Not lower, % by volume | t determined |
| Vapor pressure Not | t determined |
| Vapor density Not | t available. |
| Specific gravity 1 | |
| Relative density Not | t available. |
| Solubility (water) Solu | uble in water |
| Auto-ignition temperature Not | t available. |
| Decomposition temperature Not | t available. |
| Viscosity 2 cp | p |
| VOC < 2 | 221 g/L |

10. Chemical Stability & Reactivity Information

| Chemical stability | Stable under recommended storage conditions. |
|---------------------------------------|---|
| 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. |
| Possibility of hazardous reactions | Will not occur. |

| 11. Toxicological Inform | | | |
|--|--|--|--|
| Serious eye damage/eye irritation | Not available. 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. | | |
| Further information | | | |
| 12. Ecological Information | on | | |
| Aquatic toxicity | LC50/96h/Fathead minnows =< 400 mg/L | | |
| Persistence and degradability | Not available. | | |
| 13. Disposal Considerati | ons | | |
| Disposal instructions | Dispose of in compliance with federal, state, and local 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. | | |
| 14. Transport Information | on | | |
| Further information | Not a dangerous good under DOT, IATA, ADR, IMDG, or RID. | | |
| DOT | | | |
| Not regulated as dangerous goods | S. | | |
| ΙΑΤΑ | | | |
| Not regulated as dangerous goods | 5. | | |
| IMDG | | | |
| Not regulated as dangerous goods | 5. | | |
| RID | | | |
| Not regulated as dangerous goods | 5. | | |
| 15. Regulatory Informat | ion | | |
| US federal regulations | US TSCA 12(b): Does not contain listed chemicals. | | |
| CERCLA (Superfund) reportab | le quantity | | |
| Occupational Safety and Heal | th Administration (OSHA) | | |
| 29 CFR 1910.1200 hazardous chemical | No | | |
| - | Reauthorization Act of 1986 (SARA) | | |
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No | | |
| Section 302 extremely hazardous substance | No | | |
| Section 311 hazardous chemical | No | | |
| State regulations | | | |
| - | lazardous Substances: Listed substance | | |
| 2-pyrrolidone (CAS 616-4 | | | |
| 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 | |
|---|--|
| Other information | This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200). |
| HMIS® ratings | Health: 1 Flammability: 1 Physical hazard: 0 |
| NFPA ratings | Health: 1 Flammability: 1 Instability: 0 |
| Disclaimer | This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company 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. |
| Issue date | 13-Apr-2012 |
| This data sheet contains changes from the previous version in section(s): | Regulatory Information: Canada |
| Manufacturer information | Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304-1112 US (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209 |

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 | |
| | | |



| 1. Product and Company | / Identification | | |
|--------------------------------------|--|--|--|
| Identification of the preparation | CB337 Series[Y] | | |
| Product use | Inkjet printing | | |
| Version # | 03 | | |
| Revision date | 13-Apr-2012 | | |
| CAS # | Mixture | | |
| Company identification | Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501 | | |
| | Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP 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 | n | | |
| Emergency overview | Contact with skin and eyes may result in irritation. | | |
| | Causes skin irritation. | | |
| Acute health effects | | | |
| | Any potential hazards are presumed to be due to exposure to the components. | | |
| Skin contact | <i>1,5-pentanediol</i> Contact with skin may result in irritation. | | |
| | <i>2-pyrrolidone</i> Contact with skin may result in irritation. | | |
| | <i>Alkyldiol ethoxylate</i> Contact with skin may result in severe irritation. | | |
| | <i>Ethyl alkyldiol</i> Contact with skin may result in mild irritation. | | |
| | <i>Metal nitrate # 2</i> Contact with skin may result in irritation. | | |
| | Substituted naphthalenesulfonate salt # 13 Contact with skin may result in irritation. | | |
| Eye contact | <i>1,5-pentanediol</i> Contact with eyes may result in irritation. | | |
| | <i>2-pyrrolidone</i> Contact with eyes may result in irritation. | | |
| | <i>Alkyldiol ethoxylate</i> Contact can cause moderate to severe irritation and possible injury to the eyes. | | |
| | <i>Ethyl alkyldiol</i> Contact with eyes may result in mild irritation. | | |
| | <i>Metal nitrate # 2</i> Contact with eyes may result in irritation. | | |
| | Substituted naphthalenesulfonate salt # 13 Contact with eyes may result in irritation. | | |

| Inhalation | <i>2-pyrrolidone</i> Inhalation may result in respiratory irritation. | |
|--------------------------|--|--|
| | <i>Metal nitrate # 2</i> Inhalation may result in respiratory irritation. | |
| | Substituted naphthalenesulfonate salt # 13 Inhalation may result in respiratory irritation. | |
| Ingestion | <i>2-pyrrolidone</i> Ingestion may result in nausea, vomiting and diarrhea. | |
| | <i>Alkyldiol ethoxylate</i> Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea. | |
| | <i>Metal nitrate # 2</i> Contains nitrate salts, may cause methemoglobinemia. | |
| Potential health effects | | |
| Routes of exposure | 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 | |
| Chronic health effects | None known. | |
| Carcinogenicity | None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA. | |

3. Composition / Information on Ingredients

| Components | - | CAS # | Percent |
|---------------------------------|--|---|--------------|
| 1,5-pentanediol | | 111-29-5 | < 10 |
| 2-pyrrolidone | | 616-45-5 | < 7.5 |
| Alkyldiol ethoxylate | | Proprietary | < 2.5 |
| Ethyl alkyldiol | | Proprietary | < 10 |
| Metal nitrate # 2 | | Proprietary | < 5 |
| Substituted naphthalenesulfonat | e salt # 13 | Proprietary | < 7.5 |
| Water | | 7732-18-5 | > 60 |
| Composition comments | This ink supply contains an aqueous ink fo This product has been evaluated using crit Communication Standard). | | 1200 (Hazard |
| 4. First Aid Measures | | | |
| First aid procedures | | | |
| 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. | |
| Skin contact | Wash affected areas thoroughly with mild a develops or persists. | Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists. | |
| Inhalation | Remove to fresh air. If symptoms persist, | get medical attention. | |
| Ingestion | If ingestion of a large amount does occur, | seek medical attention. | |
| 5. Fire Fighting Measur | es | | |
| Flammable properties | None known. | | |
| Extinguishing media | | | |
| Suitable extinguishing media | Dry chemical, CO2, water spray or regular | foam. | |
| Unsuitable extinguishing media | None known. | | |
| Specific methods | None established. | | |

| products | | | |
|---|--|--|--|
| 6. Accidental Release M | easures | | |
| Personal precautions | Wear appropriate personal protective equipment. | | |
| Environmental precautions | Do not let product enter drains. Do not flush into surface water or sanitary sewer system. | | |
| Methods for containment | Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay or diatomaceous earth, commercial sorbents, or recover using pumps. | | |
| Methods for cleaning up | Soak up with inert absorbent material. | | |
| Other information | 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 | | | |
| Handling | Avoid contact with skin, eyes and clothing. | | |
| Storage | Keep out of the reach of children. Keep away from excessive heat or cold. | | |
| 8. Exposure Controls / P | Personal Protection | | |
| Exposure guidelines | None established. | | |
| Engineering controls | Use in a well ventilated area. | | |
| Personal protective equipmer | nt | | |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. | | |
| General | Use personal protective equipment to minimize exposure to skin and eye. | | |
| 9. Physical & Chemical F | Properties | | |
| Appearance | Not available. | | |
| Color | Yellow | | |
| Odor | Not available. | | |
| Odor threshold | Not available. | | |
| Physical state | Liquid | | |
| Form | Not available. | | |
| рН | 6.2 | | |
| Melting point | Not available. | | |
| Freezing point | Not available. | | |
| Boiling point | Not determined | | |
| Flash point | 200 °F (93.3 °C) Pensky-Martens Closed Cup | | |
| Evaporation rate | Not determined | | |
| Flammability limits in air, upper, % by volume | Not available. | | |
| Flammability limits in air, lower, % by volume | Not determined | | |
| Vapor pressure | Not determined | | |
| Vapor density | Not available. | | |
| Specific gravity | 1 | | |
| Relative density | Not available. | | |
| Solubility (water) | Soluble in water | | |
| Auto-ignition temperature | Not available. | | |
| Decomposition temperature | Not available. | | |
| Viscosity | 2 cp | | |

10. Chemical Stability & Reactivity Information

VOC

| Chemical stability | Stable under recommended storage conditions. |
|------------------------|--|
| Incompatible materials | Incompatible with strong bases and oxidizing agents. |

< 221 g/L

| Hazardous decomposition products | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |
|--|--|
| Possibility of hazardous reactions | Will not occur. |
| 11. Toxicological Informa | ation |
| Serious eye damage/eye irritation | Not available. |
| Further information | This ink formulation has not been tested for toxicological effects. Refer to Section 2 for potential health effects and Section 4 for first aid measures. |
| 12. Ecological Informatio | on |
| Aquatic toxicity | LC50/96h/Fathead minnows =< 400 mg/L |
| Persistence and degradability | Not available. |
| 13. Disposal Consideration | ons |
| Disposal instructions | Dispose of in compliance with federal, state, and local 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. |
| 14. Transport Informatio | n |
| Further information | Not a dangerous good under DOT, IATA, ADR, IMDG, or RID. |
| DOT Not regulated as dangerous goods. | |
| ΙΑΤΑ | |
| Not regulated as dangerous goods. | |
| IMDG Not regulated as dangerous goods. | |
| RID | |
| Not regulated as dangerous goods. | |
| 15. Regulatory Informati | on |
| US federal regulations | US TSCA 12(b): Does not contain listed chemicals. |
| CERCLA (Superfund) reportabl None | e quantity |
| Occupational Safety and Healt | h Administration (OSHA) |
| 29 CFR 1910.1200 hazardous chemical | No |
| Superfund Amendments and R | eauthorization Act of 1986 (SARA) |
| Hazard categories | Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No |
| Section 302 extremely hazardous substance | No |
| Section 311 hazardous chemical | No |
| State regulations | |
| • | azardous Substances: Listed substance |
| 2-pyrrolidone (CAS 616-4 | |
| 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. |

| Other information | VOC content (less water, less exempt compounds) = < 663 g/L (U.S. requirement, not for emissions) |
|---|--|
| 16. Other Information | |
| Other information | This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200). |
| HMIS® ratings | Health: 1 Flammability: 1 Physical hazard: 0 |
| NFPA ratings | Health: 1 Flammability: 1 Instability: 0 |
| Disclaimer | This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company 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. |
| Issue date | 13-Apr-2012 |
| This data sheet contains changes from the previous version in section(s): | Product and Company Identification: Alternate Trade Names Composition / Information on Ingredients: Disclosure Overrides Regulatory Information: Canada |
| Manufacturer information | Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304-1112 US (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209 |
| Explanation of abbreviations | |

| CERCLAComprehensive Environmental Response Compensation and Liability ActCFRCode of Federal RegulationsCOCCleveland Open CupDOTDepartment of TransportationEPCRAEmergency Planning and Community Right-to-Know Act (aka SARA)IARCInternational Agency for Research on CancerNIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | ACGIH | American Conference of Governmental Industrial Hygienists |
|---|--------|---|
| CFRCode of Federal RegulationsCOCCleveland Open CupDOTDepartment of TransportationEPCRAEmergency Planning and Community Right-to-Know Act (aka SARA)IARCInternational Agency for Research on CancerNIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELSuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | CAS | Chemical Abstracts Service |
| COCCleveland Open CupDOTDepartment of TransportationEPCRAEmergency Planning and Community Right-to-Know Act (aka SARA)IARCInternational Agency for Research on CancerNIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELSuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | CERCLA | Comprehensive Environmental Response Compensation and Liability Act |
| DOTDepartment of printingDOTDepartment of TransportationEPCRAEmergency Planning and Community Right-to-Know Act (aka SARA)IARCInternational Agency for Research on CancerNIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELSuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | CFR | Code of Federal Regulations |
| EPCRAEmergency Planning and Community Right-to-Know Act (aka SARA)IARCInternational Agency for Research on CancerNIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELSuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | COC | Cleveland Open Cup |
| IARCInternational Agency for Research on CancerNIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELSuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | DOT | Department of Transportation |
| NIOSHNational Institute for Occupational Safety and HealthNTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | EPCRA | Emergency Planning and Community Right-to-Know Act (aka SARA) |
| NTPNational Toxicology ProgramOSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | IARC | International Agency for Research on Cancer |
| OSHAOccupational Safety and Health AdministrationPELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | NIOSH | National Institute for Occupational Safety and Health |
| PELPermissible Exposure LimitRCRAResource Conservation and Recovery ActRECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | NTP | National Toxicology Program |
| RCRAResource Conservation and Recovery ActRECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | OSHA | Occupational Safety and Health Administration |
| RECRecommendedRELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | PEL | Permissible Exposure Limit |
| RELRecommended Exposure LimitSARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | RCRA | Resource Conservation and Recovery Act |
| SARASuperfund Amendments and Reauthorization Act of 1986STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | REC | Recommended |
| STELShort-Term Exposure LimitTCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | REL | Recommended Exposure Limit |
| TCLPToxicity Characteristics Leaching ProcedureTLVThreshold Limit ValueTSCAToxic Substances Control Act | SARA | Superfund Amendments and Reauthorization Act of 1986 |
| TLV Threshold Limit Value TSCA Toxic Substances Control Act | STEL | Short-Term Exposure Limit |
| TSCA Toxic Substances Control Act | TCLP | Toxicity Characteristics Leaching Procedure |
| | TLV | Threshold Limit Value |
| VOC Volatile Organic Compounds | TSCA | Toxic Substances Control Act |
| Volatic organic compounds | VOC | Volatile Organic Compounds |