

C3845Series[B]-MSDS\_US-English-01.pdf

C3845Series[C]-MSDS\_US-English-01.pdf

C3845Series[LC]-MSDS\_US-English-01.pdf



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Identification of the preparation** C3845Series[B]  
**Version #** 01  
**Revision date** 27-Jan-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

### Acute health effects

**Skin contact**  
*Alkyldiol*  
Contact with skin may result in irritation.  
*Alkyldiol ethoxylate*  
Contact with skin may result in severe irritation.

**Eye contact**  
*1-butanol*  
Risk of serious damage to eyes. Contact with eyes may result in irritation.  
*Alkyldiol*  
Contact with eyes may result in irritation.  
*Alkyldiol ethoxylate*  
Contact can cause moderate to severe irritation and possible injury to the eyes.

**Inhalation**  
*1-butanol*  
Inhalation may result in respiratory irritation. Inhalation may cause drowsiness or dizziness.  
*Alkyldiol*  
Inhalation may result in respiratory irritation.

**Ingestion**  
*1-butanol*  
Harmful if swallowed.  
*Alkyldiol ethoxylate*  
Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Water	7732-18-5	80 - 90
Alkyldiol	Proprietary	7.5 - 10
1-butanol	71-36-3	1 - 2.5
Alkyldiol ethoxylate	Proprietary	< 2.5

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## 4. First Aid Measures

### First aid procedures

<b>Eye contact</b>	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.

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## 5. Fire Fighting Measures

<b>Flammable properties</b>	None known.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	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.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific methods</b>	None established.
<b>Hazardous combustion products</b>	Refer to section 10.

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## 6. Accidental Release Measures

<b>Personal precautions</b>	Wear appropriate personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.
<b>Other information</b>	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.

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## 7. Handling and Storage

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
<b>Storage</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

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## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

Components	Type	Value
1-butanol (71-36-3)	TWA	20.0000 ppm

#### U.S. - OSHA

Components	Type	Value
1-butanol (71-36-3)	PEL	100.0000 ppm 300.0000 mg/m3

#### U.S. - Tennessee

Components	Type	Value
1-butanol (71-36-3)	Ceiling	50.0000 ppm 150.0000 mg/m3

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## 9. Physical & Chemical Properties

<b>Appearance</b>	Not available.
<b>Color</b>	Black.
<b>Odor</b>	Not available.

<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid
<b>Form</b>	Not available.
<b>pH</b>	6.5
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Not determined
<b>Flash point</b>	200 °F (93.3 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not determined
<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	1
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Soluble in water
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	2 cp
<b>VOC</b>	< 3 %

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## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Possibility of hazardous reactions</b>	Will not occur.

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## 11. Toxicological Information

<b>Serious eye damage/eye irritation</b>	Non - irritant in rabbit (OECD 405)	
<b>Symptoms and target organs</b>		
<b>Target Organs (NIOSH)</b>	1-butanol (CAS 71-36-3)	Central Nervous System Eyes Respiratory system Skin

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## 12. Ecological Information

<b>Aquatic toxicity</b>	Static acute toxicity (trout), survival (100 mg/L) = 100% Static acute toxicity (trout), survival (10 mg/L) = 100%
<b>Persistence and degradability</b>	Not available.

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## 13. Disposal Considerations

### Waste codes

#### US RCRA Hazardous Waste U List: Reference

1-butanol (CAS 71-36-3)	U031
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<b>Disposal instructions</b>	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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
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## 14. Transport Information

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

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

### RID

Not regulated as dangerous goods.

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## 15. Regulatory Information

### US federal regulations

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1-butanol (CAS 71-36-3) 1.0 %

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1-butanol (CAS 71-36-3) Listed.

### CERCLA (Superfund) reportable quantity

None

### Occupational Safety and Health Administration (OSHA)

**29 CFR 1910.1200** Yes  
**hazardous chemical**

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

### State regulations

#### US - New Jersey Community RTK (EHS Survey): Listed substance

1-butanol (CAS 71-36-3) Substance no. 1330

#### US - New Jersey Community RTK (EHS Survey): Reportable threshold

1-butanol (CAS 71-36-3) 500 LBS

#### US - Pennsylvania RTK - Hazardous Substances: Listed substance

1-butanol (CAS 71-36-3) Listed.

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## 16. Other Information

**Other information** This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

**HMIS® ratings** Health: 0  
Flammability: 2  
Physical hazard: 0

**NFPA ratings** Health: 0  
Flammability: 2  
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**

27-Jan-2012

**This data sheet contains changes from the previous version in section(s):**5. Fire Fighting Measures: Suitable extinguishing media  
14. Transport Information: Further 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**Explanation of abbreviations**

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Identification of the preparation** C3845Series[C]  
**Version #** 01  
**Revision date** 27-Jan-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  
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(Toll-free within the US) 1-800-474-6836  
(Direct) 1-208-323-2551  
Email: hpcustomer.inquiries@hp.com

## 2. Hazards Identification

### Acute health effects

**Skin contact**  
*Alkyldiol*  
Contact with skin may result in irritation.  
*Alkyldiol ethoxylate*  
Contact with skin may result in severe irritation.

**Eye contact**  
*1-butanol*  
Risk of serious damage to eyes. Contact with eyes may result in irritation.  
*Alkyldiol*  
Contact with eyes may result in irritation.  
*Alkyldiol ethoxylate*  
Contact can cause moderate to severe irritation and possible injury to the eyes.

**Inhalation**  
*1-butanol*  
Inhalation may result in respiratory irritation. Inhalation may cause drowsiness or dizziness.  
*Alkyldiol*  
Inhalation may result in respiratory irritation.

**Ingestion**  
*1-butanol*  
Harmful if swallowed.  
*Alkyldiol ethoxylate*  
Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea.  
*Substituted phthalocyanine salt # 2*  
Harmful if swallowed.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Water	7732-18-5	80 - 90
Alkyldiol	Proprietary	7.5 - 10
1-butanol	71-36-3	1 - 2.5
Substituted phthalocyanine salt # 2	Proprietary	1 - 2.5
Alkyldiol ethoxylate	Proprietary	< 2.5

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## 4. First Aid Measures

### First aid procedures

<b>Eye contact</b>	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.

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## 5. Fire Fighting Measures

<b>Flammable properties</b>	None known.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	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.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific methods</b>	None established.
<b>Hazardous combustion products</b>	Refer to section 10.

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## 6. Accidental Release Measures

<b>Personal precautions</b>	Wear appropriate personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.
<b>Other information</b>	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.

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## 7. Handling and Storage

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
<b>Storage</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

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## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

Components	Type	Value
1-butanol (71-36-3)	TWA	20.0000 ppm

#### U.S. - OSHA

Components	Type	Value
1-butanol (71-36-3)	PEL	100.0000 ppm 300.0000 mg/m3

#### U.S. - Tennessee

Components	Type	Value
1-butanol (71-36-3)	Ceiling	50.0000 ppm 150.0000 mg/m3

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## 9. Physical & Chemical Properties

<b>Appearance</b>	Not available.
<b>Color</b>	Cyan
<b>Odor</b>	Not available.

<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid
<b>Form</b>	Not available.
<b>pH</b>	6.5
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Not determined
<b>Flash point</b>	200 °F (93.3 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not determined
<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	1
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Soluble in water
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	2 cp
<b>VOC</b>	< 3 %

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## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Possibility of hazardous reactions</b>	Will not occur.

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## 11. Toxicological Information

<b>Serious eye damage/eye irritation</b>	Not available.
<b>Symptoms and target organs</b>	
<b>Target Organs (NIOSH)</b>	
1-butanol (CAS 71-36-3)	Central Nervous System Eyes Respiratory system Skin

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## 12. Ecological Information

<b>Aquatic toxicity</b>	LC50/96h/Fathead minnows =<400 mg/L Static acute toxicity (trout), survival (100 mg/L) = 100% Static acute toxicity (trout), survival (10 mg/L) = 100%
<b>Persistence and degradability</b>	Not available.

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## 13. Disposal Considerations

<b>Waste codes</b>	
<b>US RCRA Hazardous Waste U List: Reference</b>	
1-butanol (CAS 71-36-3)	U031

**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>.

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**14. Transport Information**

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

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**RID**

Not regulated as dangerous goods.

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**15. Regulatory Information****US federal regulations****US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration**

1-butanol (CAS 71-36-3) 1.0 %

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

1-butanol (CAS 71-36-3) Listed.

**CERCLA (Superfund) reportable quantity**

None

**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**State regulations****US - New Jersey Community RTK (EHS Survey): Listed substance**

1-butanol (CAS 71-36-3) Substance no. 1330

**US - New Jersey Community RTK (EHS Survey): Reportable threshold**

1-butanol (CAS 71-36-3) 500 LBS

**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

1-butanol (CAS 71-36-3) Listed.

---

**16. Other Information**

**Other information** This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

**HMIS® ratings** Health: 0  
Flammability: 2  
Physical hazard: 0

**NFPA ratings** Health: 0  
Flammability: 2  
Instability: 0

**Disclaimer**

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**Issue date**

27-Jan-2012

**This data sheet contains changes from the previous version in section(s):**

5. Fire Fighting Measures: Suitable extinguishing media  
14. Transport Information: Further 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

**Explanation of abbreviations**

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Identification of the preparation** C3845Series[LC]  
**Version #** 01  
**Revision date** 28-Jan-2012  
**CAS #** Mixture  
**Company identification** Hewlett-Packard Company  
3000 Hanover Street  
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Email: hpcustomer.inquiries@hp.com

## 2. Hazards Identification

### Acute health effects

**Skin contact**  
*Alkyldiol*  
Contact with skin may result in irritation.  
*Alkyldiol ethoxylate*  
Contact with skin may result in severe irritation.

**Eye contact**  
*1-butanol*  
Risk of serious damage to eyes. Contact with eyes may result in irritation.  
*Alkyldiol*  
Contact with eyes may result in irritation.  
*Alkyldiol ethoxylate*  
Contact can cause moderate to severe irritation and possible injury to the eyes.

**Inhalation**  
*1-butanol*  
Inhalation may result in respiratory irritation. Inhalation may cause drowsiness or dizziness.  
*Alkyldiol*  
Inhalation may result in respiratory irritation.

**Ingestion**  
*1-butanol*  
Harmful if swallowed.  
*Alkyldiol ethoxylate*  
Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Water	7732-18-5	80 - 90
Alkyldiol	Proprietary	7.5 - 10
1-butanol	71-36-3	1 - 2.5
Alkyldiol ethoxylate	Proprietary	< 2.5

---

## 4. First Aid Measures

### First aid procedures

<b>Eye contact</b>	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.

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## 5. Fire Fighting Measures

<b>Flammable properties</b>	None known.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	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.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific methods</b>	None established.
<b>Hazardous combustion products</b>	Refer to section 10.

---

## 6. Accidental Release Measures

<b>Personal precautions</b>	Wear appropriate personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.
<b>Other information</b>	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.

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## 7. Handling and Storage

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
<b>Storage</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

---

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### ACGIH

Components	Type	Value
1-butanol (71-36-3)	TWA	20.0000 ppm

#### U.S. - OSHA

Components	Type	Value
1-butanol (71-36-3)	PEL	100.0000 ppm 300.0000 mg/m3

#### U.S. - Tennessee

Components	Type	Value
1-butanol (71-36-3)	Ceiling	50.0000 ppm 150.0000 mg/m3

---

## 9. Physical & Chemical Properties

<b>Appearance</b>	Not available.
<b>Color</b>	Light Cyan
<b>Odor</b>	Not available.

<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid
<b>Form</b>	Not available.
<b>pH</b>	6.5
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Not determined
<b>Flash point</b>	200 °F (93.3 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not determined
<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	Not available.
<b>Specific gravity</b>	1
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Soluble in water
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	2 cp
<b>VOC</b>	< 3 %

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## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Possibility of hazardous reactions</b>	Will not occur.

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## 11. Toxicological Information

<b>Serious eye damage/eye irritation</b>	Not available.
<b>Symptoms and target organs</b>	
<b>Target Organs (NIOSH)</b>	
1-butanol (CAS 71-36-3)	Central Nervous System Eyes Respiratory system Skin

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## 12. Ecological Information

<b>Persistence and degradability</b>	Not available.
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## 13. Disposal Considerations

### Waste codes

#### US RCRA Hazardous Waste U List: Reference

1-butanol (CAS 71-36-3)	U031
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<b>Disposal instructions</b>	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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
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## 14. Transport Information

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

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

### RID

Not regulated as dangerous goods.

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## 15. Regulatory Information

### US federal regulations

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1-butanol (CAS 71-36-3) 1.0 %

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1-butanol (CAS 71-36-3) Listed.

### CERCLA (Superfund) reportable quantity

None

### Occupational Safety and Health Administration (OSHA)

**29 CFR 1910.1200** Yes  
**hazardous chemical**

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

### State regulations

#### US - New Jersey Community RTK (EHS Survey): Listed substance

1-butanol (CAS 71-36-3) Substance no. 1330

#### US - New Jersey Community RTK (EHS Survey): Reportable threshold

1-butanol (CAS 71-36-3) 500 LBS

#### US - Pennsylvania RTK - Hazardous Substances: Listed substance

1-butanol (CAS 71-36-3) Listed.

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## 16. Other Information

**Other information** This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

**HMIS® ratings** Health: 0  
Flammability: 2  
Physical hazard: 0

**NFPA ratings** Health: 0  
Flammability: 2  
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**

28-Jan-2012

**This data sheet contains changes from the previous version in section(s):**5. Fire Fighting Measures: Suitable extinguishing media  
14. Transport Information: Further 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**Explanation of abbreviations**

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds