



# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** 51645 Series  
**Registration number** -  
**Synonyms** None.  
**Issue date** 21-Jun-2013  
**Version number** 03  
**Revision date** 14-Aug-2015  
**Supersedes date** 01-Apr-2015

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Inkjet printing  
**Uses advised against** None known.  
**Company identification** HP Inc UK Limited  
Cain Rd., Amen Corner, Pt 2nd Floor (Bldg BRA03)  
Bracknell, United Kingdom RG12 1HN  
Telephone 44 (0) 879 013 0790  
  
HP health effects line  
(Toll-free within the US) 1-800-457-4209  
(Direct) 1-760-710-0048  
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(Direct) 1-208-323-2551  
Email: hpcustomer.inquiries@hp.com  
Poison Information Center 0207771 5307

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** 2-pyrrolidone, Carbon black, Isopropyl alcohol, Water  
**Hazard pictograms** None.  
**Signal word** None.  
**Hazard statements** The mixture does not meet the criteria for classification.  
**Precautionary statements**  
**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.  
**Supplemental label information** Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

### 2.3. Other hazards

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.

Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water	75-85	7732-18-5 231-791-2	-	-	
<b>Classification:</b>	-				
2-pyrrolidone	<15	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
<b>Classification:</b>	Eye Irrit. 2;H319				
Carbon black	<5	1333-86-4 215-609-9	01-2119384822-32-XXXX	-	
<b>Classification:</b>	-				
Isopropyl alcohol	<2.5	67-63-0 200-661-7	01-2119457558-25-XXXX	603-117-00-0	
<b>Classification:</b>	Flam. Liq. 2;H225, Eye Irrit. 2;H319, STOT SE 3;H336				

**Composition comments** This ink supply contains an aqueous ink formulation.

Carbon black is present only in a bound form in this preparation.

## SECTION 4: First aid measures

**General information** Not available.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. If symptoms persist, get medical attention.

**Skin contact** Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

**Eye contact** Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.

**Ingestion** If ingestion of a large amount does occur, seek medical attention.

**4.2. Most important symptoms and effects, both acute and delayed** Contact with skin and eyes may result in irritation.

**4.3. Indication of any immediate medical attention and special treatment needed** Not available.

## SECTION 5: Firefighting measures

**Notes** No ignition, sustained combustion or flashing detected using the Sustained Combustibility Test (method in US 49CFR173, Appendix H).

**General fire hazards** Contact with skin and eyes may result in irritation.

### 5.1. Extinguishing media

**Suitable extinguishing media** CO<sub>2</sub>, water, dry chemical, or foam

**Unsuitable extinguishing media** None known.

**5.2. Special hazards arising from the substance or mixture** Not available.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** None established.

<b>Special fire fighting procedures</b>	Not available.
<b>Specific methods</b>	None established.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Wear appropriate personal protective equipment.
<b>For emergency responders</b>	Not available.

**6.2. Environmental precautions** Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

**6.3. Methods and material 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. Slowly vacuum or sweep the material into a bag or other sealed container.  
Dispose of in compliance with federal, state, and local regulations.

**6.4. Reference to other sections** Not available.

## SECTION 7: Handling and storage

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

**7.2. Conditions for safe storage, including any incompatibilities** Keep out of the reach of children. Keep away from excessive heat or cold.

**7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Carbon black (CAS 1333-86-4)	STEL	7 mg/m <sup>3</sup>
Isopropyl alcohol (CAS 67-63-0)	TWA	3.5 mg/m <sup>3</sup>
	STEL	1250 mg/m <sup>3</sup>
		500 ppm
	TWA	999 mg/m <sup>3</sup> 400 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Not available.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines** Exposure limits have not been established for this product.

### 8.2. Exposure controls

**Appropriate engineering controls** Use in a well ventilated area.

#### Individual protection measures, such as personal protective equipment

**General information** Use personal protective equipment to minimize exposure to skin and eye.

**Eye/face protection** Not available.

##### Skin protection

- **Hand protection** Not available.

- **Other** Not available.

**Respiratory protection** Not available.

**Thermal hazards** Not available.

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

Environmental exposure controls Not available.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid.
Color	Black.
Odor	Not available.
Odor threshold	Not available.
pH	7.8 - 8.4
Melting point/freezing point	Not available.
Initial boiling point and boiling range	200 °F (93.33 °C)
Flash point	131.0 - 136.0 °F (55.0 - 57.8 °C)
Evaporation rate	Not determined
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not determined
Solubility(ies)	
Solubility (water)	Soluble in water
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not determined
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	> 2 cp
Explosive properties	Not available.
Oxidizing properties	Not determined
9.2. Other information	
Bulk density	1 - 1.2 gm/ml
Specific gravity	1 - 1.2
VOC (Weight %)	< 116.6 g/l

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## SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Not available.
10.5. Incompatible materials	Incompatible with strong bases and oxidizing agents.
10.6. Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

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## SECTION 11: Toxicological information

General information Not available.

### 11.1. Information on toxicological effects

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

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

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

**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.

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Carbon black (CAS 1333-86-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 8000 mg/kg
Isopropyl alcohol (CAS 67-63-0)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	12800 mg/kg
<i>Oral</i>		
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
<i>Other</i>		
LD50	Mouse	1509 mg/kg
	Rat	1099 mg/kg

**Mixture versus substance information** Not available.

**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.

**SECTION 12: Ecological information**

**Aquatic toxicity** Not expected to be harmful to aquatic organisms.

**12.1. Toxicity**

Product	Species	Test Results
51645 Series (CAS Mixture)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) > 750 mg/l, 96 hours
<b>Components</b>		
<b>Species</b>		
<b>Test Results</b>		
2-pyrrolidone (CAS 616-45-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> ) 13.21 mg/l, 48 hours

Components	Species	Test Results
Isopropyl alcohol (CAS 67-63-0)		
<b>Aquatic</b>		
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> ) > 1400 mg/l, 96 hours
<i>Acute</i>		
Algae	EC50	Algae > 1000 mg/l, 72 hours
Crustacea	EC50	Daphnia 13299 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 9460 mg/l, 96 hours
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>12.3. Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol/water (log Kow)</b>		
2-pyrrolidone		-0.85
Isopropyl alcohol		0.05
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	Not available.	
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.	
<b>12.6. Other adverse effects</b>	Not available.	

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Not available.
<b>Contaminated packaging</b>	No special precautions.
<b>EU waste code</b>	Not available.
<b>Disposal methods/information</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> .

## SECTION 14: Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

### ADR

Not regulated as dangerous goods.

### Further information

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

No ignition, sustained combustion, or flashing detected, using the Sustained Combustibility Test prescribed in the UN Manual of Tests and Criteria, Part III subsection 32.5.2. Refer to Dangerous Goods Regulations Section 3.3.1.3.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

##### Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

##### Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

**Authorizations**

**Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorization**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

**Other EU regulations**

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Isopropyl alcohol (CAS 67-63-0)

**Directive 94/33/EC on the protection of young people at work**

Not regulated.

**Other regulations**

All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

**Other information**

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

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 (EEC) 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).

**National regulations**

Not available.

**15.2. Chemical safety assessment**

Not available.

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**SECTION 16: Other information**

**References**

Not available.

<b>Information on evaluation method leading to the classification of mixture</b>	Not available.
<b>Issue date</b>	21-Jun-2013
<b>Revision information</b>	1. Product and Company Identification: Alternate Trade Names SECTION 16: Other information: Disclaimer
<b>Training information</b>	Not available.
<b>Disclaimer</b>	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.
<b>Manufacturer information</b>	HP 1501 Page Mill Road Palo Alto, CA 94304-1112 US Direct 1-650-857-5020

#### 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

**List of abbreviations** Not available.