

1. Product and Company Id	lentification			
Material name	51645 Series			
Version #	03			
Issue date	03 08-Apr-2010			
Revision date	21-Jun-2013			
Product use	Inkjet printing			
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) 760-710-0048 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				
Emergency overview	Contact with skin and eyes may result in irr	ritation.		
Other hazards	Complete toxicity data are not available for this specific formulation			
	Potential routes of overexposure to this pro Inhalation of vapor and ingestion are not ex product under normal use conditions. Carbon black is classified by the IARC as a carcinogenic to humans). Carbon black in th this carcinogenic risk. None of the other ing carcinogens according to ACGIH, EU, IARC,	xpected to be significant rout Group 2B carcinogen (the sul his preparation, due to its bo gredients in this preparation a	es of exposure for this ostance is possibly und form, does not present	
3. Composition / Information	on on Ingredients			
Hazardous components		CAS #	Percent	
2-pyrrolidone		616-45-5	<15	
Carbon black		1333-86-4	<5	
Isopropyl Alcohol		67-63-0	<2.5	
Non-hazardous components		CAS #	Percent	
Water		7732-18-5	<80	
Composition comments	This ink supply contains an aqueous ink for This product has been evaluated using crite Communication Standard).		1200 (Hazard	
	Carbon black is present only in a bound for	m in this preparation.		
	· ,			
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 soap and water. If irritation persists get medical attention.		
Inhalation	Move to fresh air. If symptoms persist, get medical attention.		
Ingestion	If ingestion of a large amount does occur, seek medical attention.		
5. Fire Fighting Measures			
Flammable properties	None known.		
Extinguishing media			
Suitable extinguishing media	CO2, water, dry chemical, or foam		
Unsuitable extinguishing	None known.		

media	-
Fire fighting equipment/instructions	Not available.
Specific methods	None established.
Hazardous combustion	Refer to section 10.

6. Accidental Release Measures

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 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

Storage

Avoid contact with skin, eyes and clothing. Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Va Components	Туре	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
US. OSHA Table Z-1 Limits for	Air Contaminants (29 CFR 191	.0.1000)	
Components	Туре	Value	
Carbon black (CAS 1333-86-4)	PEL	3.5 mg/m3	
Isopropyl alcohol (CAS 67-63-0)	PEL	980 mg/m3	
-		400 ppm	
US. NIOSH: Pocket Guide to C	hemical Hazards		
Components	Туре	Value	
Carbon black (CAS 1333-86-4)	TWA	0.1 mg/m3	
Isopropyl alcohol (CAS 67-63-0)	STEL	1225 mg/m3	
		500 ppm	
	TWA	980 mg/m3	

Components	Туре	Value				
		400 ppm				
US. Tennessee. OELs. Occu	upational Exposure Limits, Table 2	21A				
Components	Туре	Value				
Carbon black (CAS 1333-86-4)	TWA 3.5 mg/m3					
Isopropyl alcohol (CAS 67-63-0)	STEL	1225 mg/m3				
	TWA	500 ppm 980 mg/m3 400 ppm				
posure guidelines	Exposure limits have not been estab	lished for this product.				
gineering controls	Use in a well ventilated area.					
rsonal protective equipmen	t					
General	Use personal protective equipment t	o minimize exposure to skin and eye.				
General hygiene considerations	Handle in accordance with good ind	ustrial hygiene and safety practice.				
Physical & Chemical Prop	erties					
pearance	Not available.					
ysical state	Liquid.					
rm	Not available.					
lor	Black.					
lor	Not available.					
l	7.8 - 8.4					
por pressure	Not determined					
iling point	200 °F (93.33 °C)					
elting point/Freezing point	ι γ	Not available.				
lubility (water)	Soluble in water					
ecific gravity	1 - 1.2					
ash point	131.00 - 136.00 °F (55.00 - 57.78 °	C); No ignition, sustained combustion or flashing detected Test (method in US 49CFR173, Appendix H).				
scosity	> 2 cp					
)C	< 116.6 g/l					
her information	For other VOC regulatory data/infor	mation see Section 15.				
). Chemical Stability & Rea	activity Information					
emical stability	Stable under recommended storage	conditions.				
nditions to avoid	No information available					
compatible materials	Incompatible with strong bases and oxidizing agents.					
zardous decomposition oducts	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.					
ssibility of hazardous actions	Will not occur.					
Toxicological Informatio	n					
xicological data						
mponents	Species	Test Results				
byrrolidone (CAS 616-45-5)	-					
Acute						
Oral						

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. ACGIH Carcinogens 2-PROPANOL (CAS 67-63-0) A4 Not classifiable as a human carcinogen. CARBON BLACK, INHALABLE FRACTION (CAS 1333-86-4) A3 Confirmed animal carcinogen with unknown relevance to humans. IARC Monographs. Overall Evaluation of Carcinogenicity 2B Possibly carcinogenic to humans. Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans. Serious eye damage/eye Not available. irritation Complete toxicity data are not available for this specific formulation. Refer to Section 2 for potential health effects and Section 4 for first aid measures. 12. Ecological Information Cosponents Aquatic Species Test Results 2-pyrrolidone (CAS 616-45-5) Aquatic Aquatic Crustacea EC50 Vater flea (Daphnia pulex) 13.21 mg/l, 48 hours Isopropyl Alcohol (CAS 67-63-0) Aquatic Fish LC50 Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours	Components	Specie	S	Test Results	
Acute Ora/ LDSO Rat > 8000 mg/kg Isopropyl Alcahol (CAS 67-63-0)		Rat		6500 mg/kg	
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Isopropyl Alcohol (CAS 67-63-0) Acute Dermal LD50 Rabbi LD50 Rabbi LD50 Rabbi LD50 Rabbi LD50 Rabbi Rabbi LD50 Rabbi Rabbi Rabbi Rabbi Rabbi Rabbi Rabbi Rabbi Rabbi Rat Rabbi Rat		Det		0000	
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Demnal L250 Rabbit L2800 mg/kg Oral 4797 mg/kg L250 Dog 3600 mg/kg L250 Mouse 4.5 g/kg Mouse 4.5 g/kg Rabbit 6410 mg/kg L250 Rabbit 5045 mg/kg Rat 5095 mg/kg L250 Mouse 5095 mg/kg Cheer 1509 mg/kg L250 Mouse 1509 mg/kg Carbon black is classified as a carcinogen by the LNAC (possibly carcinogenic to humans, Group 28) and by the State of Calformia under Proposition 65. In their evaluations of carbon black, body organizations indicate that exposure to carbon black, proposition regioned to busing the set of calformia under Proposition 65. In their evaluations of carbon black, body organizations indicate that exposure to carbon black, proposition regioned to busing the set of calformia under Proposition 65. In their evaluations of carbon black, proposition regioned that exposure to carbon black, proposition regioned to busing the set of calformia under Proposition F3. In their evaluations of carbon black proposition regioned with a protect matrix, specifically, rubber, int, or paint. Carbon black (CAS 67-63-0) Al Not classified as a human carcinogen. CARBON BLACK, INHALABLE FRACTION (CAS 1333-86') So Confirmed animover sector of the specifically, rubber, interverse the state sector 1 for first aid measures. Forther informat)			
LD50 Rabbit 2800 mg/kg <i>Oral</i> LD50 Dog 4797 mg/kg Mouse 4797 mg/kg Mouse 45 g/kg Rabbit 6410 mg/kg Rabbit 503 g/kg Rabbit 503 g/kg At 5045 mg/kg <i>Other</i> LD50 Aft 1999 mg/kg <i>Other</i> LD50 Aft 1999 mg/kg <i>Other</i> LD50 Aft 1999 mg/kg <i>Other</i> LD50 Aft 1999 mg/kg <i>Carbon black</i> is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 28) and by the State of California under Proposition 65. In their evaluations of carbon black, boat organizations indicate that exposure to carbon black was bound within a product matrix, specifically, rubber, ink, or paint. <i>ACGIH Carcinogens</i> <i>2</i> -PROPANOL (CAS 57-63-) CARBON BLACK, INHAL-KBLE FRACTION (CAS 1333-86-4) A3 Confirmed animal carcinogen with unknown relevance to humans. <i>ACGIH Carcinogens</i> <i>2</i> -PROPANOL (CAS 163-64-6) Na cavilable: <i>Eventer information</i> <i>Carbon black</i> (CAS 1333-86-4) A3 Confirmed animal carcinogen with unknown relevance to humans. <i>Eventer information</i> <i>Carbon black</i> (CAS 1333-86-4) <i>A3</i> Confirmed animal carcinogen. <i>Carbon black</i> (CAS 1333-86-4) <i>A3</i> Confirmed animal carcinogen. <i>Carbon black</i> (CAS 1333-86-4) <i>A3</i> Confirmed animal carcinogen with unknown relevance to humans. <i>Eventer information</i> <i>Carbon black</i> (CAS 1333-86-4) <i>A3</i> Confirmed animal carcinogen. <i>Carbon black</i> (CAS 197-97) <i>Carbon black</i> (CAS 197-97) <i>Carbon black Carbon Carbon black Carbon Carbon black Carbon Carbon black Carbon Carbon Carbon black Carbon Carbon Carbon Carbo</i>					
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Refer to Section 2 for potential health effects and Section 4 for first aid measures. 12. Ecological Information LC50/96h/Fathead minnows =>750 mg/L Ecotoxicological data Species Components Species 2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea EC50 Vater flea (Daphnia pulex) 13.21 mg/l, 48 hours Isopropyl Alcohol (CAS 67-63-0) Aquatic Fish LC50 Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours		Not availa	able.		
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FishLC50Bluegill (Lepomis macrochirus)> 1400 mg/l, 96 hours)			
	-	1 (50	Bluegill (Lenomis macrochirus)	> 1400 mg/l 96 hours	
Development and development of the state of			2		
	Bioaccumulation / Accumula	ation			

2-pyrrolidone	-0.85		
Isopropyl Alcohol	0.05		
Partition coefficient	0.05		
2-pyrrolidone Isopropyl Alcohol	-0.85 0.05		
13. Disposal Consideration	<u> </u>		
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 Information			
DOT			
Not regulated as dangerous	goods.		
ΙΑΤΑ			
Not regulated as dangerous	goods.		
IMDG	de		
Not regulated as dangerous	goods.		
RID			
Not regulated as dangerous good Further information			
rurther 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. No ignition, sustained combustion or flashing detected using the sustained combustibility test (method in US CFR173, Appendix H).		
15. Regulatory Information			
US federal regulations	US TSCA 12(b): Does not contain listed chemicals.		
Chemical Code Number	istration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and		
-	istration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))		
Not regulated. DEA Exempt Chemical Mi	xtures Code Number		
Not regulated. TSCA Section 12(b) Expo	rt Notification (40 CFR 707, Subpt. D)		
Not regulated.			
CERCLA (Superfund) reportal	ble quantity		
None			
Superfund Amendments and	Reauthorization Act of 1986 (SARA)		
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No		
SARA 302 Extremely hazardous substance	No		
SARA 311/312 Hazardous chemical	Νο		

Other information	Nov. 29, 2002 concerning the h): Executive regulation of Minister of Labour and Social Policy dated nighest exposure limits and volume of factors harmful for health and ournal of Laws no 217/2002 item 1833 with further amendments).	
	VOC content (less water, less exempt compounds) = <592.5 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)		
Other regulations	All chemical substances in this under chemical substances not	HP product have been notified or are exempt from notification ification laws in the following countries: US (TSCA), EU	
	(EINECS/ELINCS), Switzerland, New Zealand, and China.	Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea,	
State regulations			
US - California Proposition	65 - CRT: Listed date/Carcin	ogenic substance	
CARBON BLACK (AIRBORI RESPIRABLE SIZE [<= 10 1333-86-4)	NE, UNBOUND PARTICLES OF MICROMETERS]) (CAS	Listed: February 21, 2003 Carcinogenic.	
US - New Jersey RTK - Sub	stances: Listed substance		
Carbon black (CAS 1333-8		Listed.	
Isopropyl Alcohol (CAS 67		Listed.	
US. Massachusetts RTK - S			
2-pyrrolidone (CAS 616-4 Carbon black (CAS 1333-8			
Isopropyl Alcohol (CAS 67	,		
US. Pennsylvania RTK - Ha	zardous Substances		
2-pyrrolidone (CAS 616-4		Listed.	
Carbon black (CAS 1333-8 Isopropyl Alcohol (CAS 67		Listed. Listed.	
US. Rhode Island RTK	-05-0)		
Carbon black (CAS 1333-8 Isopropyl Alcohol (CAS 67	,		
16. Other Information			
HMIS® ratings	Health: 1		
	Flammability: 2 Physical hazard: 0		
NFPA ratings	Health: 1 Flammability: 2 Instability: 0		
Disclaimer	•	ent is provided without charge to customers of Hewlett-Packard	
	Company. Data is the most cu of this document and is believe specific properties of the produ document was prepared to the	rrent known to Hewlett-Packard Company at the time of preparation ed to be accurate. It should not be construed as guaranteeing lets as described or suitability for a particular application. This requirements of the jurisdiction specified in Section 1 above and	
	may not meet regulatory require	rements in other countries.	
Other information	This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).		
Issue date	08-Apr-2010		
This data sheet contains changes from the previous version in section(s):	Product and Company Identific Physical & Chemical Properties Regulatory Information: Risk P GHS: Classification	: Multiple Properties	
Manufacturer information	Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304-11: (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-		

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