

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	CN633Series		
Registration number	N/A		
Synonyms	None.		
Issue date	03-Jul-2013		
Version number	01		
1.2. Relevant identified uses of	f the substance or mixture and uses advised against		
Identified uses	Inkjet printing		
Uses advised against	None known.		
Company identification	Hewlett-Packard, Ltd. Cain Road, Amen Corner Bracknell, Berkshire, RG12 1HN Telephone 44 (0) 879 013 0790		
	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 Poison Information Center 0207771 5307		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Emergency overview	Contact with skin and eyes may result in irritation. Ingestion may result in nausea, vomiting and diarrhea. May cause sensitization of susceptible persons.
Hazard summary	
Physical hazards	Not classified for physical hazards.
Health hazards	Not classified as a health hazard.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Not available.
Main symptoms	Not available.
2.2. Label elements	

Label according to Directive 67/548/EEC or 1999/45/EC as amended

Contains:	2-pyrrolidone, Alkyldiol, Carbon black, Diethylene glycol, Triethanolamine, Water		
R-phrase(s)	Not available.		
S-phrase(s)	Not available.		
Authorization number	Not available.		
Supplemental label information	Not applicable.		
2.3. Other hazards	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. This black ink is not classified according to EU Directive 1999/45/EC. 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 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. Miz

3.2. Mixtures					
General information					
Chemical name		%	CAS-No. / EC No. RE	EACH Registration No.	Index No. Notes
Water		<80	7732-18-5 231-791-2	-	-
Classification:	DSD:	-			
	CLP:	-			
2-pyrrolidone		<7.5	616-45-5 210-483-1	-	-
Classification:	DSD:	Xi;R36			
	CLP:	Eye Irrit. 2;H31	9		
Alkyldiol		<5	Proprietary 230-029-6	-	-
Classification:	DSD:	Xi;R36/37/38			
	CLP:	Skin Irrit. 2;H3	15, Eye Irrit. 2;H319, ST0	DT SE 3;H335	
Diethylene glycol		<5	111-46-6 203-872-2	-	603-140-00-6
Classification:	DSD:	Xn;R22			
	CLP:	Acute Tox. 4;H	302		
Carbon black		<2.5	1333-86-4 215-609-9	-	-
Classification:	DSD:	-			
	CLP:	-			
Triethanolamine		<1	102-71-6		
methanolamine		~1	203-049-8		
Classification:	DSD:	-			
	CLP:	-			
Composition comments	•	This product has 1999/45/EC, as a For the full text of		eria specified in the EU I ed in this Section, see Se	Directives 67/548/EEC anc
SECTION 4: First aid m	easure	S			
General information		Not available.			
4.1. Description of first ai	d meas	sures			
Inhalation			If symptoms persist, get		
Skin contact	i	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		-	sted, immediately contac	t a physician or poison c	ontrol center.
4.2. Most important symptoms and effects, bo acute and delayed		Not available.			
4.3. Indication of any immediate medical attent and special treatment needed		No notes to physi	cians.		

SECTION 5: Firefighting measures

General fire hazards	Not available.
5.1. Extinguishing media	
Suitable extinguishing media	CO2, 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	Not available.
Special fire fighting procedures	Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	Wear appropriate personal protective equipment.		
For emergency responders	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	Not available.		
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. Remove and wash contaminated clothing before re-use.
7.2. Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Keep away from excessive heat or cold. Store away from strong oxidizers.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exp Components	osure Limits (WELs) Type	Value	
Carbon black (CAS 1333-86-4)	STEL	7 mg/m3	
-	TWA	3.5 mg/m3	
Diethylene glycol (CAS 111-46-6)	TWA	101 mg/m3	
		23 ppm	
iological limit values	No biological exposure limits noted for the ingredient(s).		
ecommended monitoring rocedures	Not available.		
erived no-effect level DNEL)	Not available.		
redicted no effect oncentrations (PNECs)	Not available.		
2. Exposure controls			
ppropriate engineering ontrols	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 required under intended use.	
Skin protection		
- Hand protection	Not available.	
- Other	Protected gloves not required under intended use.	
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.	
Thermal hazards	Not available.	
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance		
Physical state	Not available.	
Form	Not available.	
Color	Black.	
Odor	Not available.	
Odor threshold	Not available.	
рН	9.3	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not determined	
Flash point	200.00 °F (93.33 °C) Pensky-Martens Closed Cup	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or explosive limits		
Flammability limit - lower (%)	Not determined	
Flammability limit - upper (%)	Not available.	
Vapor pressure	Not determined	
Relative density	Not available.	
Solubility(ies)	Soluble in water	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	Not determined	
Decomposition temperature	Not available.	
Viscosity	Not applicable.	
Explosive properties	Not available.	
Oxidizing properties	Not determined	
9.2. Other information		
Specific gravity	1 - 1.1	
VOC (Weight %)	< 192 g/L	

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. aldehydes, ketones, hydrogen fluoride, fluorinated hydrocarbons

SECTION 11: Toxicologica	I information	
General information	Not available.	
Information on likely routes		
Ingestion	Not available.	
Inhalation	Not available.	
Skin contact	Not available.	
Eye contact	Not available.	
Symptoms	Not available.	
11.1. Information on toxicol		
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Carbon black (CAS 1333-86-4)		
Acute		
Oral	Dat	> 9000
LD50	Rat	> 8000 mg/kg
Diethylene glycol (CAS 111-46-6 Acute	<i>)</i>)	
Dermal		
LD50	Rabbit	11890 mg/kg
Oral		
LD50	Cat	3300 mg/kg
	Dog	9000 mg/kg
	Guinea pig	8700 mg/kg
		14 g/kg
	Mouse	23700 mg/kg
		13.3 g/kg
	Rabbit	26.9 g/kg
	Rat	12565 mg/kg
	nat	12505 mg/kg 15.6 g/kg
Other		12.0 Å/kÅ
LD50	Mouse	22500 mg/kg
2000		9.6 g/kg
	Rabbit	2000 mg/kg
	Rat	7700 mg/kg
Triathanalamina (CAC 102 71 C	N	7.7 g/kg
Triethanolamine (CAS 102-71-6))	
Dermal		
LD50	Rabbit	> 20000 mg/kg
Oral		
LD50	Guinea pig	5300 mg/kg
	Rat	8 g/kg
Other		
LD50	Mouse	1450 mg/kg
Skin corrosion/irritation	Not available.	
Serious eye damage/eye irritation	Not available.	

Respiratory sensitization	Not available.		
Skin sensitization	Not available.		
Germ cell mutagenicity	Not available.		
Carcinogenicity	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.		
IARC Monographs. Overal	l Evaluation of	Carcinogenicity	
Carbon black (CAS 1333-		2B Possibly carcinogenic	to humans.
Reproductive toxicity	Not available.		
Specific target organ toxicity - single exposure	Not available.		
Specific target organ toxicity - repeated exposure	Not available.		
Aspiration hazard	Not available.		
Mixture versus substance information	Not available.		
Other 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.		
SECTION 12: Ecological info	ormation		
Aquatic toxicity	LC50/96h/Fath	nead minnows => 750 mg/L	
12.1. Toxicity			
Components		Species	Test Results
2-pyrrolidone (CAS 616-45-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Diethylene glycol (CAS 111-46-6)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 32000 mg/l, 96 hours
Triethanolamine (CAS 102-71-6)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours
12.2. Persistence and degradability	Not available.		
12.3. Bioaccumulative potential	Not available.		
Partition coefficient n-octanol/water (log Kow)			
2-pyrrolidone Triethanolamine		-0.85 -1	
Bioconcentration factor (BCF)	Not available.		
12.4. Mobility in soil	Not available.		
12.5. Results of PBT and vPvB	Not a PBT or vPvB substance or mixture.		
assessment 12.6. Other adverse effects	Not available.		
SECTION 13: Disposal cons	iderations		
13.1. Waste treatment metho			

13.1. Waste treatment methodsResidual wasteNot available.Contaminated packagingNot available.EU waste codeNot available.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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
Diethylene glycol (CAS 111-46-6)

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.		
National regulations	Not available.		
15.2. Chemical Safety Assessment	Not available.		
SECTION 16: Other information	tion		
References	Not available.		
Full text of any statements or	R22 Harmful if swallowed.		
R-phrases and H-statements	R36 Irritating to eyes.		
under Sections 2 to 15	R36/37/38 Irritating to eyes, respiratory system and skin. H302 Harmful if swallowed.		
	H315 Causes skin irritation.		
	H319 Causes serious eye irritation.		
	H335 May cause respiratory irritation.		
Revision information	None.		
Fraining information	Not available.		
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.		
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		