

## Company environmental profile - THE ECO DECLARATION

Brand	RICOH	Logo
Company name *	RICOH Company Ltd.	-
Contact information	Ricoh Europe Plc 20 Triton Street, London NW1 3BF, United Kingdom	nashuatec
	emo@ricoh-europe.com	
Internet site *	www.ricoh.com	
Issue date *	05 January 2011	
Intended market *	☐ Global ☐ Europe ☐ Asia, Pacific & Japan ☐ Americas	Other
Additional information		

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Quality	control	Requireme	nt met
Item		Yes	No
QC1 *	The company enforces an internal quality control system to ensure the correctness of this eco declaration	$\boxtimes$	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control.	$\boxtimes$	

Compan	y environmental profile - Legal requirements	Require	ement	met
Item		Yes	No	n.a.
C1	Product recycling			
C1.1*	The company participates in a system or has its own system for collection and recycling of end of life products in countries where the company puts them on the market and where required (2002/96/EC WEEE directive).			
C2	Battery recycling			
C2.1*	The company participates in a system or has its own system for collection and recycling of batteries in countries where the company puts products on the market (2006/66/EC Battery and accumulators Directive) or pays eco tax / fee where required.			
C3	Packaging recycling			
C3.1*	The company participates in a system or has its own system for collection and recycling of packaging material in countries where the company puts products on the market and where required (2004/12/EC Directive on packaging and packaging waste)			

Compa	ny environmental profile - Market requirements	Requir	emen	t me
Item		Yes	No	n.a
C4	Environmental policy and environmental management			
C4.1*	The company has a documented environmental policy approved by the management.	$\boxtimes$		
C4.2*	The company has an environmental management system covering: Product development Manufacturing If so certified according to: ☑ISO 14001 ☑ Other as specified in C6	$\boxtimes$		
C4.3	The company regularly publishes an environmental report.  If so, it meets the recommendations of The Global Reporting Initiative Other as specified in C6			
C5	Recycling			
C5.1*	Information about the product, battery & packaging take back system (C1, C2, C3) is available in printed or electronic format.	$\boxtimes$		
C6	Additional information			

## Product environmental attributes – THE ECO DECLARATION

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.					
Type of product *	Printer				
Commercial name *	SP C320DN				
Model number *	Aficio SP C320DN				
Issue date *	05 January 2011				

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Product	roduct environmental attributes - Legal requirements					
Item		Yes	No	n.a.		
P1	Hazardous substances and preparations					
P1.1*	Products do not contain lead max 0.1%, cadmium max 0.01%, mercury max 0.1%, hexavalent chromium max 0.1%, polybrominated biphenyls (PBB) max 0.1% and polybrominated diphenyl ethers (PBDE) max 0,1% (2002/95/EC ROHS Directive) see note B1					
P1.2*	Products do not contain Asbestos (REACH, Annex XVII). Comment: Legal reference has no maximum concentration value.					
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	X				
	hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide ( <i>Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000)</i> . Comment: Legal reference has no maximum concentration values.					
P1.4*	Products do not contain polychlorinated biphenyl (PCB) max 0.005% by weight, polychlorinated terphenyl (PCT) max 0.005% by weight (REACH, Annex XVII).					
P1.5*	Products do not contain short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP max 0.1% (Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002).					
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2, 3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (REACH, Annex XVII). Comment: Legal reference has no maximum concentration values.					
P1.7*	Textile and leather parts with direct skin contact do not contain Azo colorants that split aromatic amines max 0.003% by weight (REACH, Annex XVII and Note B1).			$\boxtimes$		
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (REACH, Annex XVII). Comment: Legal reference has no maximum concentration values.					
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm2/week (REACH, Annex XVII). Comment: Max limit in legal reference when tested according to EN1811:1998.					
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact) (REACH Regulation 1907/2006, Annex VII)					
P2	Batteries					
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is					
D0.0*	provided in user manual (2006/66/EC Battery and accumulators Directive).					
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium (2006/66/EC Battery and accumulators Directive).		Ш			
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable" (2006/66/EC Battery and accumulators Directive).	ш				
P3	Safety, EMC connection to the telephone network and labeling					
P3.1*	The product complies with legally required safety standards as specified (2006/95/EC Low Voltage Directive).					
P3.2*	The product complies with legally required standards for electromagnetic compatibility (2004/108/EEC New EMC Directive).					
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (1999/5/EC (R&TTE Directive).					
P3.4*	The product is labeled to show conformance with applicable legal requirements (2006/66/EC Battery and accumulators Directive, 2006/95/EC Low Voltage Directive, 2004/108/EEC New EMC Directive, 1999/5/EC R&TTE Directive, 2002/96/EC WEEE directive)					
P4	Consumable materials					
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (2002/95/EC ROHS Directive).					
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (REACH, Annex XVII).	$\boxtimes$				
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS/MSDS) in accordance with these requirements (EC No. 1272/2008 regulation on classification, labeling and packaging CLP, REACH article 31, annex II).					
P5	Product packaging		_			
P5.1*	Packaging and packaging components do not contain lead, mercury, cadmium and hexavalent chromium max 0.01% by weight of this together (2004/12/EC Directive on packaging and packaging waste).		<u> </u>			
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (97/129/EC Commission Decision on Identification System for Packaging Materials).					
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (2037/2000/EC Regulation on Substances that Deplete the Ozone Layer). Comment: Legal reference has no maximum concentration values.			_ 		

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %

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Produc		Require	emen	t met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
<b>P6</b> P6.1*	Treatment information  Information for recorders/treatment feetilities is excitable (2002/06/EC WEEE directive)		_	
	Information for recyclers/treatment facilities is available (2002/96/EC WEEE directive).		Ш	Ш
P7	Design Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable			$\overline{\Box}$
P7.2*	Plastic materials in covers/housing have no surface coating.	$\overline{\mathbb{X}}$	∺	∺
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.		∺	∺
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.	$\overline{X}$	+	+
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.		∺	∺
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	$\overline{X}$	╬	╬
1 7.0	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives			$\overline{}$
P7.8*	Upgrading can be done using commonly available tools	$\overline{X}$	∺	∺
P7.9.	Spare parts are available after end of production for: 7 years		╫	╫
P7.10	Service is available after end of production for: 7 years		╫	╫
F7.10	Material and substance requirements		<u> Ш</u>	<u> Ш</u>
P7.11*	Product cover/housing material type:			
	Material type: PC + ABS Material type: PC + PS Material type:			
P7.12	Electrical cable insulation material of power cables are PVC free.	$\boxtimes$		
P7.13	Electrical cable insulation materials of signal cables are PVC free.		Ħ	T
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.		一百	$\overline{}$
P7.15	All printed circuit boards (without components) >25g are halogen free, as defined in IEC61249-2-21 (see note B2)			
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4: Marking: FR (40)			
P7.17	Alt. 1  Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive) , TBBPA (reactive) , Other; chemical name: , CAS #:			
	Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: FR (17)			
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:			
	Comment: No legal limits exist, this is a market requirement.			
	1. Chemical name: , CAS #:			
	2. Chemical name: , CAS #:			
	3. Chemical name: , CAS #:			
	Alt. 2			
	Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4: FR (40)			
P7.19	Plastic parts>25g are free from flame retardant substances/preparations above 0.1% classified as R45,			
	R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (see note B3)(EC No. 1272/2008 regulation on classification, labeling and packaging CLP)			
P7.20	Of total plastic parts' weight >25g, recycled material content is 0% [pls see P14 for additional information]			
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.  Light sources are free from mercury			_
P7.22	Ignt sources are free from mercury  If mercury is used specify: Number of lamps:  and max. mercury content per lamp:  mg			Ш
P8	Batteries			
P8.1*	Battery chemical composition (2006/66/EC Battery and accumulators Directive): Manganese dioxide lithium	7		
P8.2	Batteries meet the requirements of the following voluntary program/s: <i>European eco-label (EU Flower)</i>			

Note B2: IEC61249-2-21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

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Produc	t environmenta	l attribu	t <mark>es - Market requi</mark>	rements (c	ontinu	ied)			R	equire	ment No	met n.a.
P9	Energy consum	ption								100	110	11.0.
9.1		-	ng power levels or en	ergy consum	nptions I	nave been	measure	<u>d:</u>				
Energy r			Power level at 100 V AC	Power level	lat	Power le	vel at	Reference /	Standard fo test method		y	
Maximu	m Energy Consu	mption	VV	VV		1300 W	l					
Operation	ng Mode		VV	VV		498.9 V	V					
Ready I			VV	W		60.3 W						
Off/Slee	p Mode		VV	W		5.3 W						
			VV	W								Щ
EPS No-	lood		W	W			W					
(Externa plugged	l power supply / ch in the wall outlet b ected from the prod	ut	VV	VV								
PTEC * Typical E	Energy Consumption	on	W	W		W						
TEC * Typical E	Energy Consumption	on	kWh/week	kWh	/week	2.829 kW	/h/week					
ETEC *	Energy Consumption	on	kWh/year	kWh	/year	135.8 kW	/h/year					
	resolution * : dpi		1									
	eed *: 25 pages	•										
	ime to enter energ	•										Щ.
P9.2*			gy save function is p									
P9.3*			ergy requirements of 1.1 Tier: 2 Produ			ry program	1/5:					
P10	Emissions											
D40.4			ed according to ISO 9	9296				<u> </u>				
P10.1	Mode	Mode de	escription		A-we	clared eighted d power	so	Declared ound pressure	I A-weighted e level $L_{p{\sf Am}}$			
					level	$L_{W\!Ad}^{\cdot}$ (B)	Operato	r position X	Bystander			
							or E	Desktop Desk side	(only if popera	itor atte		
	Idle	* Stand-	by		* 4.2				30.4			
	Operation	* Operat	ting Mode		* 6.4				53.6			
	Other mode											
	Measured accord	ding to:	ISO7779 🗌 ECMA	x-74	I							
								asurement di	stance	m)		
P10.2	·		oustic noise requirem	ents of the fo	ollowing	voluntary	program/s	В	lue Angel lordic Swan			
D40 0t			n printing products									
P10.3*			to ECMA-328 (ISO/IE	EC 28360) sta	andard	, other	specify: R	AL-UZ				
P10.4	P10.4 Typical emission rate (print phase) is (mg/h):  Dust (monochrome 1.03 colour 2.05) Ozone (monochrome < limit of detection colour < limit of detection) Styrene (monochrome 0.19 colour 0.66) Benzene (monochrome < limit of detection) TVOC (monochrome 6.94 colour 9.46)											
P10.5	Chemical emission requirements of the following voluntary program/s are met for :  Dust Ozone Styrene Benzene TVOC  Blue Angel Nordic Swan											
D40.0	Electromagnetic			<b>f</b> ua c	alact:	-4! C	dala -£!!	fallación (	ta.e.			
P10.6	Computer display program/s:	y meets th	ne requirement for lov	v trequency e	electrom	iagnetic fie	eias of the	ioliowing vol	untary			$\boxtimes$

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P11   Consumable materials for printing products	met
P11.1* A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).  P11.2* Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.  P11.3* 2-sided (duplex) printing/copying is an integrated product function.  P12 Ergonomics for computing products  P12.1* The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.  P12.2* The physical input device meets the requirements of ISO 9995 and ISO 9241-410.  P13 Packaging and documentation  P13.1* Product packaging material type(s): Corrugated Paper Weight (kg): 3.74 Weight (kg): 0.511 Product packaging material type(s): Weight (kg): 0.511 Weight (kg): Plastic Product plastic packaging is free from PVC	n.a.
P11.2* Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.  P11.3* 2-sided (duplex) printing/copying is an integrated product function.  P12 Ergonomics for computing products  P12.1* The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.  P12.2* The physical input device meets the requirements of ISO 9995 and ISO 9241-410.  P13 Packaging and documentation  P13.1* Product packaging material type(s): Corrugated Paper Product packaging material type(s): Plastic Product packaging material type(s): Weight (kg): 0.511 Product packaging material type(s): Weight (kg): Product plastic packaging is free from PVC	
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Product packaging material type(s): Plastic Product packaging material type(s): weight (kg): 0.511 weight (kg):  P13.2* Product plastic packaging is free from PVC	
P13.3* Specify media for user and product documentation (tick hox):	
Electronic Paper Other C	
P13.4* For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber. %	$\boxtimes$
P14 Additional information	
This product is designed to utilise recycled plastic materials wherever available	