Environmental Data Sheet for bizhub 4700i

1	Company		
	Manufacturer/Supplier:	Konica Minolta Business Solutions Europe GmbH	Tel.:+49/511/7404-0
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2	**Tests / Approvals / Declarations**			
2.1	CE Conformity:	Declaration of Conformity	For this product an EU Declaration of Conformity according to EN17050-1 is available. It can be obtained from the editor on request.	
2.2	EU-Directives:		This product is in compliance with the listed EU directives:	
		2014/35/EU	- Low Voltage Directive / Product Safety	
		2014/30/EU	- EMC Directive / Electromagnetic Compatibility	
		2009/125/EC	- ErP Directive / Eco Design	
		2011/65/EC	- RoHS2 Directive and amendments	
2.3	Safety Tests:	GS Mark S 504 256 29	TUEV Rheinland	EN 62368-1
		Nemko Mark P 202 245 30 /A1	NEMKO, Norway	EN 62368-1
2.4	EAC Certification:	RU C-JP AR46 B14119 (0252561)	EAC certificate	
2.5	Electromagnetic Compatibility (EMC):	EMC Mark CJ 504 671 59	TUEV Rheinland	EN55032:2012, EN61000-3-2:2014, EN61000-3-3:2013, EN55024:2010, CISPR 32:2012, CISPR 24:2010
2.6	ENERGY STAR:	ENERGY STAR program compliance	EPA based (version 3.0)	This product is listed in ENERGY STAR databases
2.7	Eco Design Directive:	2009/125/EC	Framework for the setting of ecodesign requirements for energy-related products	
		1275/2008/EC	Requirements for electrical power consumption in standby and off-mode	
		Voluntary Agreement on Lot 4	Konica Minolta is signatory of the EVAP	
2.8	Blue Angel Mark:	German environmental label is applied	RAL	RAL-UZ 205
2.9	Document Authenticity:	PTS certificate will be applied Printer:	Papiertechnische Stiftung (PTS)	Ordinance for Lawyers and Notaries in Germany (DONot), § 29;
		ISO 11798 will be applied	RISE (Sweden)	According Swedish National Archive Regulations relevant test conditions were noted down in the according test certificate!
2.10	Laser safety	EN 60825-1 : 2014	Class 1 laser	
2.11	Quality and Environmental Management:	ISO 9001 certification ISO 14001 certification	This product was manufactured under a certified Quality Management System according to ISO 9001 and under a certified Environmental Management System according to ISO 14001.	

3	**General Information**			
3.1	Speed:	Pages per minute Printing Copying	Black and White 47 (ISO 24734)	Colour
3.2	Weight:	About 29 kg	Basic System only	
3.3	Dimensions / Volume:	420 mm 528 mm 473 mm 104.9 litre	Width Depth Height Volume (calculated)	Basic System only
3.4	Environmental programmes:	This product conforms to the following voluntary environmental programme requirements:	Konica Minolta Environmental Policy Konica Minolta Product Environmental Assessment All production sites have ISO 14001 certification. Konica Minolta Environmental Report including environmental accounting report is published annually. https://www.konicaminolta.com/about/csr/environment/index.html	
3.5	Extension of product lifetime:	The manufacturer offers on a voluntary base:	Spare parts availability: Service availability: Warranty:	5 years after end of production 5 years after end of production (depends on service level agreement, business to business) Depends on service level agreement, business to business
3.6	Materials:	This product contains no*:	Cadmium (< 0.01%) Lead Hexavalent chromium Mercury (except for a fluorescent lamp) PBB and PBDE (Polybrominated biphenyls and their ethers contained in mechanical plastic parts in concentrations exceeding the natural background levels) Ozone depletion substances, according to those categories that are already banned in the Montreal protocol Chloroparaffines with chain length 10-13 atoms, chlorination greater than 50% contained in mechanical plastic parts PCB or PCT Large-size plastic case parts (weighing more than 25g) do not contain the halogenated flame proofing agents. Asbestos * Impurity threshold level: less than 0.1%	

4 Emissions / Consumption

4.1 Operation noise: (Measured values)

	Black and White	Colour
Sound power, Lwa [1]	Standby nm Printing 68.1 dB(A)	Standby dB(A) Printing dB(A)
Sound power declared, Lwad	Standby nm Printing 71.1 dB(A)	Standby dB(A) Printing dB(A)
Sound pressure, operator position, Lpa [2]	Standby 29.7 dB(A) Printing 57.1 dB(A)	Standby dB(A) Printing dB(A)

Basic unit without accessories

1) measured and declared according to ISO7779, RAL-UZ 205

2) workspace related emission value, operator test position: height=1.50m; distance=0.25m in front of the panel position

nm Not measured

nd There is no noise in ready mode two minutes after the last printout

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4 Emissions / Consumption

4.2 Energy (measured values)

Power

Max power consumption [3]
Average power consumption [4]

	Power [Watt]	Mode (230V)
Max.	1019	Starting
Printing	540	Operating
Standby	42	Without energy-save
	36.5	With energy-save
	0.5	Sleep mode
	0.129	Plug-in off mode

Recovery times

Time [seconds]	Recovery from mode
6	Energy-save mode
6	Sleep mode

Applied standard test method: RAL-UZ 205

3) Short-term maximum value, for mains fuse calculation

4) Calculation basis for power consumption

TEC

Version 3.0: 0.56 kWh/week
Only for reference:
Version 2.0: 2.0 kWh/week

Typical Energy Consumption value, weekly base, according to the definitions of ENERGY STAR (230V)

Heat Generation (calculated)

Printing	1,944 kJ/h	
	11.4 BTU/h	BTU 230V, based on the TEC value of this product (24 h x 7 days)
Standby	151.2 kJ/h	Without energy-save

4.3 Emissions: (Measured values)

Substances

Operation (Printing)	Emission rate [mg/h]	Concentration [5] [mg/m³]
Ozone		
Standby	nm	
Operating b/w	0.270 mg/h	0.014 mg/m³
Styrene		
Standby	nm	
Operating b/w	0.849 mg/h	0.042 mg/m³
Benzene		
Standby	nm	
Operating b/w	0.001 mg/h	<0.001 mg/m³
TVOC		
Standby	0.031 mg/h	0.002 mg/m³
Operating b/w	5.541 mg/h	0.277 mg/m³
Fine dust		
Standby	nm	
Operating b/w	0.830 mg/h	0.042 mg/m³

Test conditions

Basic system without options / accessories

Test conditions according to RAL-UZ 205. Emission rate in mg/h.

5) - Calculation to evaluate the ambient air concentration rate in mg/m³: Room size 40 m³, Air exchange rate 0.5/h, and Multi operating cycles.

nd = not detectable (below the detection limit)

nm = not measured

Regular maintenance assumed. Measured values were evaluated on basis of one machine. Values many vary within production.

5	**Consumables and other items**		
5.1	Toner:	black, for bizhub 4700i (TNP91)	Components: Styrene acrylic resin, polyester resin, ferrite (iron oxide and manganese oxide), carbon black, wax, amorphous silica, organic pigment (<1%). Flashpoint over 350 °C. When used as intended (toner for office copies) no danger for health and environment. Avoid dusting. Test on mutagenic activity (AMES) showed negative results. Classification class for endangerment of water: WGK = 1 (Germany, slightly endangering water) Waste toner classification no.(EWC): 080318, GC020, green list, not hazardous waste Polymerized toner reduces environmental impacts (CO2, NOx and SOx emissions during production of toner) by about 40% compared to conventional toners.
5.2	Waste toner box:	1 box	Must be replaced after 36,000 printouts
5.3	Photoconductor:	Photoconductor for: bizhub 4700i	Aluminium tube coated with organic material.
5.4	Filters:	This product contains 1 filter	Must be replaced after 200,000 printouts
5.5	Batteries:	1 lithium battery (CR2032)	The batteries are in conformity with: 2006/66/EC (battery and accumulators). The product documentation contains information about proper disposal, which should be followed
5.6	Light source:	No Scanner lamp	
5.7	Recycling paper	Papers according to EN 12281:2002 are suitable for use	Storage in climate-proof packaging recommended
5.8	Packaging material:	Material Paper / Cardboard Plastic Foamed PE Plastic PE Others Packaging material is free of PVC	Weight [kg] x.42 x.39 x.13 x.03
5.9	Disassembly/Recycling:	Mechanical plastic parts weighing more than 25g are marked according to ISO 11469. Of total plastic parts' weight >25g, recycled material content percentage is between 5% to 10%.	
5.10	Take back information:	The supplier offers take back and recycling services for products and consumables in many locations throughout the world. Customers are advised to contact their supplier representatives for additional information.	
5.11	Documentation:	The documentation is available as printout on Totally Chlorine Free bleached paper or as electronic file. https://manuals.konicaminolta.eu/konicaminolta	