

overseas locations adequately.

[Supplemental environmental information]

- Certified Environmental Standards
 - Japan Eco Mark
 - International Energy Star Program
- ●Conforming to Japanese Law on Promoting Green Purchasing

PCR review was conducted by : PCR Deliberation Committee, January 01, 2008, Name of reprentative : Youji Uchiyama, University of Tsukuba, Graduate School

Programme operator: Japan Environmental Management Association for Industry, ecoleaf@jemai.or.jp

* In the case of an business entity certified as an Ecoleaf-data-collection system, the names of certification auditors are written.

Product Environmental Information Data Sheet (PEIDS)

D	ocum	ent control	no.	F-	02B-03		Unit Fu	nction DB version	v2.1	1 1.	ECO	
Product vendor KONICAMINOLTA BUSINESS TECH					Characterization Factor DB version v2.1							
EcoLeaf registration no. AD-12-185					85		,			猖環境情報 www.jemai.or.jp		
	PC	R name		EP and IJ print	or	Product type	bizhub PRESS1250					
					Product weight[kg]	375.0	Package[kg]	42.5	Weight total[kg]	417.5		
								i dokago[kg]	12.0	Wolght total[tg]	117.0	
Life Cycle Stage Unit Raw material							Product	Distribution	Use	Disposal	Recycle	
	ut no	-			MJ	2.54E+04	5.36E+03	9.61E+02	7.00E+04	2.51E+02	-9.62E+03	
		Energy (Consi	umption	Mcal	6.06E+03	1.28E+03	2.29E+02	1.67E+04	5.98E+01	-2.30E+03	
			Coa	al	kg	3.48E+02	3.45E+01	2.24E-03	4.20E+02	1.14E+00	-1.46E+02	
		Energy	Cru	ide oil (as a fuel)	kg	1.96E+02	4.32E+01	2.10E+01	4.67E+02	2.83E+00	-5.85E+01	
		Energy	_	ural Gas	kg	4.53E+01	1.74E+01	3.24E-01	1.91E+02	5.98E-01	-1.37E+01	
			Ura	inium ore	mg	4.79E-03	2.34E-03	1.52E-07	2.37E-02	7.74E-05	-6.86E-04	
				Crude oil (as an ingredients)	kg	3.59E+01	0	0	6.18E+01	0	-3.29E+01	
				Iron ore	kg	3.22E+02	0	0	2.33E+01	0	-1.38E+02	
				Copper ore	kg	5.77E+00	0	0	2.71E-03	0	-1.83E+00	
				Bauxite	kg	3.66E+00	0	0	1.97E+01	0	-9.34E+00	
	ption	tible		Nickel ore	kg	2.51E+00	0	0	8.86E-01	0	-1.36E+00	
	ironn	sourc		Chromium ore	kg	3.50E+00	0	0	1.21E+00	0	<u>-1.89E+00</u>	
	e Col	EX.	-	Manganese ore	kg	2.03E+00	0	0	2.66E-01	0	-2.81E-01	
	source m the	Exhaustible resources Waterial		Plumbous ore	kg	2.40E-01	0	0	0	0	<u>-5.97E-02</u>	
	Res			Tin ore Zinc ore	kg kg	0 2.36E+00	0	0	<u> 0 </u>	0	0 -5.88E-01	
				Gold ore	kg kg	2.302+00	0	0	0	0	<u>-5.66E-01</u> 0	
			-	Silver ore	kg	0	0	0	0	0	0	
				Silica sand	kg	8.56E+00	0	ů 0	4.84E-01	0	-2.01E+00	
				Rock salt	kg	2.83E+01	4.26E-03	0	4.94E+00	1.65E-01	-1.19E+01	
Inventory analyses				Limestone	kg	6.50E+01	0	0	5.62E+00	8.25E-01	-2.27E+01	
anal				Natural soda ash	kg	4.68E-01	0	0	2.52E-02	0	-1.17E-01	
ntory		Renewable		Wood	kg	6.33E+01	0	0	5.64E+01	0	-4.79E+01	
Inve		resources		Water	kg	1.13E+05	3.12E+04	1.69E+00	3.08E+05	9.08E+02	-3.42E+04	
				CO2	kg	1.66E+03	2.82E+02	6.82E+01	3.23E+03	7.80E+01	-5.89E+02	
			_	SOx	kg	1.02E+00	2.11E-01	4.11E-02	2.99E+00	4.43E-02	-5.82E-01	
				NOx N2O	kg	1.54E+00	1.92E-01	3.15E-01	2.70E+00	1.35E-01	-7.05E-01	
		to Atmosphere	-	CH4	kg kg	9.77E-02 1.27E-02	6.05E-03 6.24E-03	1.16E-02 4.07E-07	8.90E-02 6.31E-02	2.53E-04 2.07E-04	-4.23E-02 -1.66E-03	
			-	CO	kg	2.57E-01	4.08E-02	8.10E-02	5.99E-01	3.53E-02	-1.40E-01	
				NMVOC	kg	2.49E-02	1.22E-02	7.96E-07	1.24E-01	4.06E-04	-3.25E-03	
	nge			CxHy	kg	5.15E-02	2.11E-03	9.62E-03	3.08E-02	1.33E-03	-2.14E-02	
	ischa			dust	kg	2.04E-01	1.24E-02	3.04E-02	1.96E-01	8.39E-03	-9.68E-02	
	on/D envir	to Water system		BOD	kg	-	_	—	_	_	-	
	Emission/Discharge to the environment			COD	kg	-	_	-	-	-	-	
	шş		n	N total	kg	-	-	-	-	-	-	
				P total	kg	-	-	_	<u> </u>	-	-	
			11.	SS ss	kg	-	-	-	-	-	-	
			Uns	specified solid waste	kg ka	6.24E+00	7.42E-02	0	4.39E+01	2.03E+02	-4.88E+00	
		to Soil system	-	Slag Sludge	kg kg	1.02E+02 5.16E+00	0	0	7.63E+00 4.23E+01	0	-4.09E+01	
				Low emission	kg	5.16E+00				1	-1.90E+01	
			_	radioactive waste	kg	3.35E-03	1.63E-03	1.06E-07	1.65E-02	5.40E-05	-4.80E-04	
	95			Energy resources rude oil equivalent)	kg	5.12E+02	1.05E+02	2.14E+01	1.16E+03	4.91E+00	-1.74E+02	
	by Resource Consumption	Exhaustible	• i	Mineral resources	k-	2 505+02	0	0	9.04E+02	0		
ent	by R(Const	resources	(lı	ron ore equivalent)	kg	3.58E+03	0	0	8.04E+02	0	-1.60E+03	
assesment				Global warming								
sse		to		(CO2 equivalent) Acidification	kg	1.69E+03	2.84E+02	7.13E+01	3.26E+03	7.81E+01	-6.01E+02	
ct a	ion	Atmospher	e	(SO2 equivalent)	kg	2.10E+00	3.46E-01	2.62E-01	4.88E+00	1.39E-01	-1.08E+00	
Impact a	misi											
=	by Emision Consumption	to Water system										
	^ي م	to Soil										
		system										

[Notes for readers: EcoLeaf common rules]

I. Stage related

A. "Production" stage is intended for two sub-stages listed below. (1) "Raw material" production: consists of mining, transportation and raw material production.

(2) "Product" production: consists of the parts processing, assembly and installation. B. "Distribution" stage is intended for transportation of produced product. Transportation of consumables and maintenance goods (e.g. replacement parts)

- C. "Use" stage is intended for use of the product (active mode, standby mode, etc.) and production, transportation to disposal/recycle of consumables
- D. "Disposition/Recycle" stage is intended for environmental impacts by product disposition/recycle, and deduction by recycling E. "Recycle Effect" illustrates an indirect environmental influences to other products/services by use of reclaimed materials/parts, and/or by supply of
- Case 1: Use of reclaimed materials/parts: Sum of increase of environmental impact by collection activities of used materials/parts, and decrease Case 2: Supply of used products to other businesses for material reclaim/parts reuse: Sum of increase of environmental impact by materials/parts
- II. Inventory analyses

A. Data of mineral ore on "Exhaustible resources" are presented in weight of pure ingredients (e.g. iron, aluminum) in the ore. B. Data on energy resources are presented based on origin in calorific value. e.g. Data on uranium ore presents weight of uranium concentrate,

- C. Data of discharge to water system are in actual figure (not calculated using unit function in inventory analyses).

III Impact analyses Result of the "Impact analyses" is found in converting results of inventory analyses into total amount of a reference material (e.g. CO2 in case of "Global Warming"

- A. Impact "by resource consumption" represents magnitude of impacts to resource depletion. B. Impact "by emission/discharge to environment" represents magnitude of impacts to Atmosphere, Water and Soil system.
- IV Data entry format
- A. Exponential notation, after the decimal point to two, should be used.
- B. Indicate "0" instead exponential notation, if the result of calculation or estimation is considered as "zero" or negligible in comparison to related results. C. Indicate "-" if calculation nor estimation can not be done, in order to differentiate to indicate "zero".
- (BGD for material production are for production from mineral ore. Those data do not include reclaiming processes like recovery from scrap.)

[Notes for readers: Target product specific]

- A."Raw material" in "Production" includes environmental impacts generated during mining transportation material production phases of the main body B. " Product" in "production" includes environmental impacts of processing of the parts (injection, blow-, press- and glass-molding).
- C. Regarding the basis and the basic units for calculations during distribution stages
- D. Regarding the basis and the basic units for calculations during use and consumption stage E. The recycling impacts are calculated assuming that 40% of the end-of-life printers are recovered from users according to PCR (AD-04).
- F. The impacts of material production of recycled materials are included in the values with minus as a recycling effect.

Form3 (F-03-03)

Product data sheet (Input data and parameters for LCA)



417.5

bizhub PRESS1250

42.5

Weight total[kg]

	Document control no	p. F-03-03				
Product vendor		KONICAMINOLTA BUSINESS TECHNOL	OGIES,INC.			
	EcoLeaf registration r	no. AD-12-185				
Γ	PCR name	EP and IJ printer (PCR-ID:AD-	04)	Product type		
	CA/LCIA in units of:	1	Product weight[kg]	375.0	Package[kg]	

1. Product information (per unit): parts etc. by material and by process/assembly method

	Brea	akdown of primary materials	Math breakdown of parts, which need to apply Processing / Assembly Base Units (Parts B, C)					
Material name	Material name Weight (kg) Material name			Process name	Weight (kg)	Process name	Weight (kg)	
Ordinary steel	Ordinary steel 3.04E+02 Rubber		1.82E+00	Press molding:Iron	3.05E+02	Parts assembly	6.35E-01	
Stainless steel	1.58E+01	Semiconductor circuit board	1.23E+01	Press molding:Nonferrou s metal	6.45E+00			
Aluminium	2.27E+00			Injection molding	3.44E+01			
Other metals	4.18E+00			Blow molding	3.73E-01			
Glass	1.95E+00			Glass molding	1.95E+00			
Thermoplastic resin	3.70E+01							
Wood	1.51E+01							
Paper	Paper 2.26E+01							
Subtotal	4.03E+02	Subtotal	1.41E+01					
	Tota	al	4.18E+02	Subtotal	3.48E+02	Subtotal	6.35E-01	

2. Production site information (per unit): Consumption and discharge/emission for production/processing/assembly within the site.

SOx and NOx should be indicated in SO2, NO2 equivalent. Energy Furnace urban gas (m3) Classification Energy Energy Energy Material Material Consumption Distribution Electricity (kWh) Heavy oil as fuel(kg) Diesel oil as fuel(kg) urban water(kg) Groundwater (kg) 4.02E+00 4.52E+03 3.62E+02 Quantity 2.16E+02 1.16E-01 1.20E-01 Note Classification To Water system Emission/ Discharge Distribution Sewage (kg) 7.34E+02 Quantity Note

3. Distribution stage information (per unit): means, distance, loading ratio, consumptions and emissions/discharges.

	Means of transportation	Freight by ship	Diesel truck	Diesel truck			
tion	wears or transportation	Freight by ship	:20ton	:2ton			
ribu	Conditions	Load(kg•km)	Load(kg•km)	Load(kg•km)			
Dis	Quantity	1.07E+06	1.99E+05	1.50E+03			
	Note						

4. Use stage (per unit): use condition (mode, term) including active mode, standby mode and maintenance.

4.1 Product and accessories subject to this analysis

-		nee easjeet te tine t							
	Classification	Consumption	Consumption	Consumption	Consumption	Consumption	Consumption	Consumption	Consumption
Product	Distribution	Electricity (kWh)	Heavy oil as fuel(kg)	Diesel oil as fuel(kg)	Gasoline as fuel(kg)	Furnace urban gas (m3)	Groundwater (kg)	Ordinary steel (kg)	Stainless steel (kg)
۵.	Quantity	6.21E+03	6.51E-01	1.88E-02	9.35E-01	3.39E-01	1.95E+03	2.07E+01	5.61E+00
	Note								
	Classification	Consumption	Consumption	Consumption	Consumption	Consumption	Consumption	Processing	Processing
Product	Distribution	Aluminium (kg)	Copper(kg)	Glass (kg)	Thermoplastic resin(kg)	Paper(kg)	Rubber (kg)	Press:Iron(kg)	Press: Nonferrous(kg)
۵.	Quantity	1.87E+01	9.00E-03	3.00E-01	5.20E+01	2.65E+01	1.11E+01	2.02E+01	5.21E+00
	Note								
	Classification	Processing	Processing	Processing	Assembly	To Water system	Distribution		
Product	Distribution	Injection molding (kg)	Blow molding (kg)	Glass molding(kg)	Parts assembly (kg)	Sewage (kg)	Diesel truck: 10ton (kg•km)		
	Quantity	4.02E+01	5.65E+01	3.00E-01	5.65E+01	1.75E+02	1.48E+04		
	Note								
	Classification								
Product	Distribution								
-	Quantity								
	Note								
4.2 Dis	position/Recycle i	nformation on cons	umables and replace	ement parts					
<i>w</i>	Classification	Consumption	Consumption	Treatment	Treatment	Treatment	Treatment	Treatment	Treatment
Consumables	Distribution	Electricity (kWh)	Kerosene(kg)	Recycle: to iron(kg)	Recycle: to Aluminum(kg)	Recycle: to copper(kg)	Recycle: to Glass(kg)	Recycle: to plastics(kg)	Recycle: to Paper(kg)
suo	Quantity	3.69E+00	4.80E-02	1.05E+01	7.46E+00	3.60E-03	1.20E-01	2.06E+01	1.06E+01
0	Note								
	Classification	Treatment	Treatment	Treatment	Treatment	Deduction	Deduction	Deduction	Deduction
Consumables	Distribution	Industrial waste destruction by fire(kg)	Industrial waste inning(kg)	Waste destruction by fire(kg)	Waste inning(kg)	lron(kg)	Aluminum(kg)	Copper(kg)	Glass(kg)
Cor	Quantity	4.45E+00	2.08E-01	5.38E+01	2.71E+01	-1.05E+01	-7.46E+00	-3.60E-03	-1.20E-01
	Note								
	Classification	Deduction	Deduction	Distribution	Distribution				
Consumables	Distribution	Plastics(kg)	Paper(kg)	Diesel truck: 10ton (kg∙km)	Diesel truck: 4ton (kg•km)				
8	Quantity	-2.06E+01	-1.06E+01	6.47E+03	7.83E+03				
	Note								

5. Disposition/Recycle stage information (per product): process method and scenarios

	ŝ	Classification	Consumption	Consumption	Treatment	Treatment	Treatment	Treatment	Treatment	Treatment
l	umables	Distribution	Electricity (kWh)	Kerosene(kg)	Recycle: to iron(kg)	Recycle: to Aluminum(kg)	Recycle: to copper(kg)	Recycle: to Glass(kg)	Recycle: to plastics(kg)	Recycle: to Paper(kg)
	onsui	Quantity	1.14E+01	1.49E-01	1.28E+02	9.10E-01	3.34E+00	7.78E-01	1.47E+01	1.68E+01
	Ũ	Note								
		Classification	Treatment	Treatment	Treatment	Treatment	Treatment	Deduction	Deduction	Deduction
a al da ser o a	nsumables	Distribution	Recycle: to Assembled circuit board(kg)	Incineration: Industrial waste(kg)	Landfill: Industrial waste(kg)	Incineration to landfill (as ash)(kg)	Landfill: General waste(kg)	lron(kg)	Aluminium (kg)	copper(kg)
	S	Quantity	1.67E+00	3.73E+00	5.64E-01	4.59E+01	1.95E+02	-1.28E+02	-9.10E-01	-3.34E+00
		Note								
		Classification	Deduction	Deduction	Deduction	Deduction	Distribution	Distribution		
	nsumables	Distribution	Glass(kg)	Plastics(kg)	Paper(kg)	Recycle: to Assembled circuit board(kg)	Diesel truck: 10ton (kg•km)	Diesel truck: 4ton (kg•km)		
	Š	Quantity	-7.78E-01	-1.47E+01	-1.68E+01	-1.67E+00	2.00E+04	2.42E+04		
		Note								

6. Others

A.Product information:

All the parts mass per unit sorted by materials and by processes/assembly are included. The motor mass is included in ordinary steel.

B.Production site information:

The energy consumption & material use during the main body assemby and cartridge & toner shipment are included. The environmental impacts that are exhausted from the production site in the atmosphere and the water system are included.

C.Distribution stage information:

The total distance of the transportation in Japan of 100km is used according to PCR (AD-04) and the transportation overseas includes the transportation by track in China and by ship between China and Japan.

D. Product and accessories subject to this analysis: The power consumption is calculated assuming the use period of five years and 9,375,000 sheets printed during the use period according to the . PCR (AD-04).

The toner consumption is summed up over the five years from the toner consumption data per sheet using our print pattern with 5% coverage. The production impacts of the cartridges and toner used during the use period of five years are included. The impacts of the maintenance parts used and the transportation impacts of the maintenace during the use period of five years are included in this stage.

E. Disposal/Recycle information on the consumables and the maintenance parts during use stage:

The recycling information of the toner, the developer, the drums and the maintainance parts used during the use period of five years are included . The recycling processing impacts are included as plus and the production impacts of the recycled materials are included as minus.

F.Disposal/Recycle stage information: The information on the products recovered from users is included.

The recycling processing impacts are included as plus and the production impacts of the recycled materials are included as minus.