Form 1 (F-01s-02)

Product Environmental Aspects Declaration

Interphone (PCR No.AX-03)

No. AX-09-029

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Panasonic

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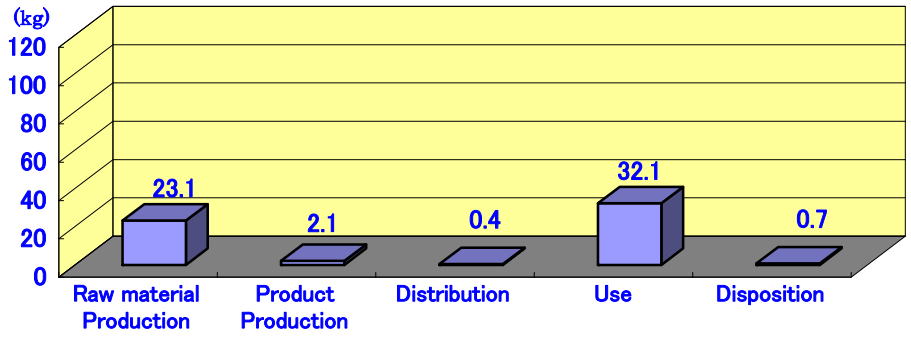
VL-SV500KL

Product Specification

- Personal use
- Hand free mutual telephone call
- With a camera function
- Main monitor station mass[catalogue] 0.58 kg
- Door station mass[catalogue] 0.17 kg
- The intercom 1set, and the color monitor 1set

	Total,all stage
Global warming(CO_2 equivalent)	58.5 kg
Acidification(SO_2 equivalent)	0.064 kg
Energy Consumption	1,073 MJ

Global warming Impact (CO_2 equivalent)



The manuals, accessories, packing material, and the set box are contained in the range of this declaration.
The environmental burden of use stage is calculated using assumption of seven years-usage and 30minutes/day-operation.

Notes:

1. Original LCA data is available on PEIDS: Product Environmental Information Declaration Sheet, and Product Data Sheet.
2. Unified rules and requirements for EcoLeaf LCA, for intended product category, are available as a PCR: Product Specification Criteria. Visit EcoLeaf website under JEMAI homepage at http://www.jemai.or.jp/ecoleaf_e/ for details.
3. Although this product is manufactured in Vietnam, Japanese data have been used as EcoLeaf generic data, instead of Vietnam data that have not been developed.

[Supplemental environmental information]

Assembly production of this product is performed at the ISO 14001 authorization acquisition factory.
Specific brominated flame retardants(PBB and PBDE) are not used in appearance plastic material.
Pb-free solder is used for the main circuit board.
A chrome free surface treated steel plate that doesn't contain the hexavalent chromium is used for the sheet metal of the product.

PCR review was conducted by:the chair Mr.Hisashi Ishitani, KEIO University at PCR Deliberation Committee in January 1, 2008.
Independent verification of the declaration and data, according to ISO14025:2006 ☐internal ■external
Third party verifier: name of the third party verifier *was Mr.Keiichi Aramaki.

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.

Form 2-A(F-02As-02)

Product Environmental Information Data Sheet (PEIDS)

Document control no.	F-02As-02
Product vendor	Panasonic System Networks Co.,Ltd.
EcoLeaf registration no.	AX-09-029

Unit Function DB version	v2.1
Characterization Factor DB version	v2.1

PSC name	Interphone (PCR-ID: AX-03)		Product type	VL-SV500KL			
PSC code	AX-03	Product weight (kg)	1.02	Package (kg)	0.24	Weight total (kg)	1.26

In/Out items \ Life Cycle Stage					Unit	Production		Distribution	Use	Disposition	Total
						Raw material	Product				
Energy Consumption					MJ	2.95E+02	4.79E+01	5.05E+00	7.24E+02	1.18E+00	1.07E+03
					Mcal	7.04E+01	1.14E+01	1.21E+00	1.73E+02	2.82E-01	2.56E+02
Inventory anaiyses	Impact by Resource Consumption	Exhaustible resources	Energy resources	Coal	kg	1.22E+00	2.73E-01	1.18E-05	4.12E+00	5.60E-03	5.62E+00
				Crude oil (for fuel)	kg	2.28E+00	3.08E-01	1.10E-01	4.66E+00	1.54E-02	7.38E+00
				LNG	kg	1.35E+00	1.36E-01	1.70E-03	2.06E+00	2.96E-03	3.55E+00
				Uranium content of an ore	kg	7.67E-05	1.85E-05	8.00E-10	2.79E-04	3.78E-07	3.75E-04
			Mineral resources	Crude oil (for material)	kg	3.58E-01	0	0	0	0	3.58E-01
				Iron content of an ore	kg	9.05E-02	0	0	0	0	9.05E-02
				Cu content of an ore	kg	2.33E-02	0	0	0	0	2.33E-02
				Al content of an ore	kg	-	-	-	-	-	
				Ni content of an ore	kg	1.84E-06	0	0	0	0	1.84E-06
				C content of an ore	kg	3.36E-05	0	0	0	0	3.36E-05
				Mn content of an ore	kg	4.81E-04	0	0	0	0	4.81E-04
				Pb content of an ore	kg	1.89E-03	0	0	0	0	1.89E-03
				Sn content of an ore	kg	-	-	-	-	-	
				Zn content of an ore	kg	1.86E-02	0	0	0	0	1.86E-02
				Au content of an ore	kg	-	-	-	-	-	
				Ag content of an ore	kg	-	-	-	-	-	
				Silica Sand	kg	1.02E-01	0	0	0	0	1.02E-01
				Halite	kg	1.77E-01	0	0	0	6.32E-04	1.78E-01
				Limestone	kg	7.22E-02	0	0	0	6.60E-03	7.88E-02
				Natural soda ash	kg	1.08E-02	0	0	0	0	1.08E-02
				Wood	kg	1.14E+00	0	0	0	0	1.14E+00
				Water	kg	1.10E+03	2.06E+02	8.94E-03	3.12E+03	4.66E+00	4.43E+03
	Impact by Emission/Discharge to the environmen	to Atmosphere		CO2	kg	2.23E+01	2.12E+00	3.59E-01	3.20E+01	7.38E-01	5.75E+01
				Sox	kg	1.06E-02	1.62E-03	2.18E-04	2.44E-02	4.01E-04	3.73E-02
				Nox	kg	1.49E-02	1.28E-03	1.71E-03	1.94E-02	1.08E-03	3.83E-02
				N2O	kg	3.18E-03	2.31E-05	6.00E-05	3.50E-04	1.76E-06	3.62E-03
				CH4	kg	2.05E-04	4.93E-05	2.14E-09	7.46E-04	1.01E-06	1.00E-03
				CO	kg	1.91E-03	3.13E-04	4.55E-04	4.73E-03	2.58E-04	7.67E-03
				NMVOC	kg	4.01E-04	9.66E-05	4.19E-09	1.46E-03	1.98E-06	1.96E-03
				CxHy	kg	6.66E-04	5.04E-06	5.18E-05	7.62E-05	8.57E-06	8.07E-04
				Dust	kg	8.59E-04	6.91E-05	1.62E-04	1.05E-03	6.79E-05	2.20E-03
		to Water system	to Water domain	BOD	kg	4.10E-04	-	-	-	-	
				COD	kg	1.57E-03	-	-	-	-	
				N total	kg	-	-	-	-	-	
				P total	kg	-	-	-	-	-	
				SS	kg	-	-	-	-	-	
		to Soil system		Unspecified Solid Waste	kg	5.81E-02	0	0	0	7.91E-01	8.49E-01
				Slag	kg	8.85E-02	0	0	0	0	8.85E-02
				Sludge	kg	-	-	-	-	-	
				Low level radio-active waste	kg	5.35E-05	1.29E-05	5.59E-10	1.94E-04	2.64E-07	2.61E-04
Impact assessment	by Res			Energy resources (crude oil equivalent)	kg	5.33E+00	7.98E-01	1.12E-01	1.21E+01	2.56E-02	1.83E+01
				Mineral resources (Iron ore equivalent)	kg	7.24E+00	0	0	0	0	7.24E+00
	by Emission / Discharge to environment	to Atmosphere		Global Warming (CO2 equivalent)	kg	2.31E+01	2.13E+00	3.75E-01	3.21E+01	7.38E-01	5.85E+01
				Acidification (SO2 equivalent)	kg	2.10E-02	2.51E-03	1.41E-03	3.80E-02	1.16E-03	6.41E-02
				Photochemical Oxidant	kg	7.77E-04	7.12E-05	8.68E-05	1.08E-03	3.23E-05	2.04E-03

[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) for use of the product are included into "Use" stage.

C. "Use" stage is intended for use of the product (active mode, standby mode, etc.) and production, transportation to disposal of consumables/maintenance goods (e.g. replacement parts).

D. "Disposition" stage is intended for environmental impacts by product disposition.

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, which is available for use as an atomic fuel.

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".

D. Row total of the data is automatically calculated, excluding a row includes " — " item. Row total of such is presented as a blank (no data).
(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]

As a general rule, the generic data of materials are numerical data of material production from ores and do not include scraps.

Form 3(F-03s-02)

Product data sheet

(Input data and parameters for LCA)

Document control no.	F-03s-02
Product vendor	Panasonic System Networks Co.,Ltd.
EcoLEaf registration no.	AX-09-029

PCR name	Interphone (PCR-ID: AX-03)	Product type	VL-SV500KL				
LCA/LCIA in units of:	1	Product weight (kg)	1.02	Package (kg)	0.24	Weight total (kg)	1.26

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

	Breakdown of primary materials				Math breakdown of parts, which need to apply Processing / Assembly Base Units (Parts B, C)			
	Material name	Weight (kg)	Material name	Weight (kg)	Process name	Weight (kg)	Process name	Weight (kg)
Product	Steel	8.59E-02						
	Electromagnetic steel plate	1.47E-03						
	Copper	3.44E-02						
	Glass	9.92E-02						
	Thermoplastic resin	3.94E-01						
	Rubber	1.21E-03						
	Paper	5.18E-01						
	Assembled circuit board	9.82E-02						
	Subtotal	1.23E+00	Subtotal	0.00E+00				
	Total			1.23E+00	Subtotal	0.00E+00	Subtotal	0.00E+00

Note It has appropriated for product mass including the intercom, wireless monitor and an color monitor. Accessories, such as packing material and a handling description, are appropriated for packing etc.

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

SOx and NOx should be indicated in SO_2, NO_2 equivalent.

Consumption	Classification	Energy	Energy	Energy	Energy	Energy	Material	Material	
	Distribution	Electricity (kWh)	Gasoline (kg)	Heavy oil as fuel (kg)	LPG (kg)	Furnace urban gas (13A) (m3)	Industrial water (kg)	Clean water (kg)	
	Quantity	2.10E+01	1.48E-05	1.40E-04	8.57E-06	9.71E-01	1.80E-02	6.48E-04	
	Note								
Emission/Discharge	Classification	Atmosphere	Atmosphere	Atmosphere	Water system	Water system			
	Distribution	CO2	Sox	Nox	BOD	COD			
	Quantity	8.19E+00	2.64E-03	4.36E-07	4.10E-04	1.57E-03			
	Note								

Note On the manufacture stage, the manufacture load of an LCD and an speaker and the manufacture load of a main part assembly are added up.

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

Distribution	Means of transportation	Consumption	Consumption	Consumption	Consumption				
	Conditions	Diesel oil as fuel (kg)	Freight by ship (kg.km)	Diesel truck:10 ton (kg.km)	Diesel truck:4 ton (kg.km)				
	Quantity	3.10E-03	5.34E+03	3.72E+02	3.99E+02				
	Note								

Note The land from an overseas manufacture site to Japan and marine transportation load are added up. Moreover, domestic transportation distance is set to 500km based on PSC regulation.

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

Product	Classification	Consumption							
	Distribution	Electricity (kWh)							
	Quantity	7.69E+01							
	Note								

Note Based on PSC regulation, usable years are made into seven years and intercom call：30 minute / one day.
Moreover, it is standby mode all the time except the time of use.

4.2 Disposition/Recycle information on consumables and replacement parts

Consumables	Classification								
	Distribution								
	Quantity								
	Note								

Note The abandonment load of the battery consumed in seven years.

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

Scenario	Classification	Consumption	Consumption	Discharge	Discharge				
	Distribution	Diesel truck:4 ton (kg.km)	Shredding (kg)	Incineration to landfill(as ash) (kg)	Landfill:General waste (kg)				
	Quantity	2.47E+02	1.23E+00	5.20E-01	7.10E-01				
	Note								

Note As wastes, combustibles are added up after crush and incineration and incombustibles are added up as reclamation.

6. Others