Product Environmental Aspects Declaration

Interphone (PCR No.AX-03)



No. AX-10-032

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Panasonic

http://panasonic.jp/door/

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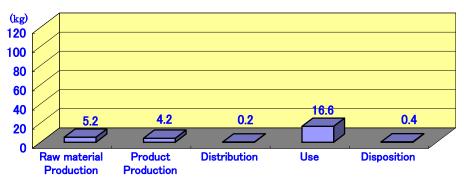
Product Specification

VL-SV20X

- · Personal use
- · Hand free mutual telephone call
- · With a camera function
- · Main monitor station mass_[catalogue] 0.41 kg
- Door station mass[catalogue] 0.20 kg
- · The intercom 1set, and the color monitor 1set

	Total,all stage			
Global warming(CO ₂ equivalent)	26.6 kg			
Acidification(SO ₂ equivalent)	0.034 kg			
Energy Consumption	569 MJ			

Global warming Impact (CO₂ 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

- $1. \ \ Original\ LCA\ data\ is\ available\ on\ PEIDS:\ Product\ Environmental\ Information\ Declaration\ Sheet,\ and\ Product\ Data\ Sheet.$
- 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.
- 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.

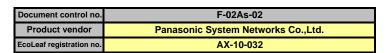
PCR review was conducted by the chair Mr.Hisashi Ishitani, KEIO University at PCR Deliberation Committee in January 1, 2008.

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.

Product Environmental Information Data Sheet (PEIDS)





v2.1

Characterization Factor DB version

PSC name	Interphone		Product type	VL-SV20X			
PSC code	AX-03	Product weight (kg)	0.55	Package (kg)	0.26	Weight total (kg)	0.81

	Life Cycle St					Produ	uction	- 1			
In/O	ut iten	ns			Unit	Raw material	Product	Distribution	Use	Disposition	Total
		E.	oray C	Consumption	MJ	9.70E+01	9.43E+01	2.86E+00	3.75E+02	6.95E-01	5.69E+02
			lergy C	onsumption	Mcal	2.32E+01	2.25E+01	6.83E-01	8.95E+01	1.66E-01	1.36E+02
			rces	Coal	kg	3.77E-01	5.36E-01	6.67E-06	2.13E+00	3.09E-03	3.05E+00
			nose	Crude oil (for fuel)	kg	1.16E+00	6.06E-01	6.24E-02	2.41E+00	9.43E-03	4.25E+00
			Energy n	LNG	kg	1.74E-01	2.68E-01	9.64E-04	1.07E+00	1.65E-03	1.51E+00
			Ene	Uranium content of an ore	kg	2.09E-05	3.63E-05	4.52E-10	1.44E-04	2.09E-07	2.02E-04
	Ë			Crude oil (for material)	kg	3.32E-01	0	0	0	0	3.32E-01
	Ę	ဟ		Iron content of an ore	kg	6.84E-02	0	0	0	0	6.84E-02
	Ē	e e		Cu content of an ore	kg	1.85E-02	0	0	0	0	1.85E-02
	nsı	ΙĦ		Al content of an ore	kg	-	-	-	-	-	
	ō	esc	S	Ni content of an ore	kg	8.04E-05	0	0	0	0	8.04E-05
	Impact by Resource Consumption	0	ğ	C content of an ore	kg	1.32E-04	0	0	0	0	1.32E-04
		ğ	no	Mn content of an ore	kg	3.76E-04	0	0	0	0	3.76E-04
		ıst	resources	Pb content of an ore	kg	1.50E-03	0	0	0	0	1.50E-03
		Exhaustible resources		Sn content of an ore	kg	-	-	-	-	-	
		EX	Mineral	Zn content of an ore	kg	1.47E-02	0	0	0	0	1.47E-02
	9		i≣	Au content of an ore	kg	-	-	-	-	-	
	act		2	Ag content of an ore	kg	-	-	-	-	-	
S G	npe			Silica Sand	kg	4.43E-02	0	0	0	0	4.43E-02
)SK	드			Halite	kg	1.13E-01	0	0	0	4.72E-04	1.13E-01
ai i				Limestone	kg	5.65E-02	0	0	0	3.30E-03	5.98E-02
ਲ				Natural soda ash	kg	4.36E-03	0	0	0	0	4.36E-03
S				Wood	kg	5.55E-01	0	0	0	0	5.55E-01
Inventory anaiyses			Amount I	Water	kg	4.76E+02	4.06E+02	5.06E-03	1.61E+03	2.55E+00	2.50E+03
ξ	art	eut		CO2	kg	5.07E+00	4.17E+00	2.03E-01	1.66E+01	3.76E-01	2.64E+01
=	Ĕ		Φ	Sox	kg	3.01E-03	3.18E-03	1.22E-04	1.26E-02	2.07E-04	1.92E-02
	ī		je	Nox	kg	6.96E-03	2.52E-03	9.43E-04	1.00E-02	6.05E-04	2.10E-02
	2		ď	N2O	kg	4.89E-04	4.55E-05	3.43E-05	1.81E-04	1.09E-06	7.50E-04
	e e		ĕ	CH4	kg	5.60E-05	9.71E-05	1.21E-09	3.86E-04	5.59E-07	5.39E-04
	ŧ		to Atmosphere	CO	kg	5.73E-04	6.16E-04	2.48E-04	2.45E-03	1.54E-04	4.04E-03
	e tc		0	NMVOC	kg	1.10E-04	1.90E-04	2.37E-09	7.55E-04	1.09E-06	1.06E-03
	arge		_	СхНу	kg	2.29E-04	9.93E-06	2.90E-05	3.94E-05	5.62E-06	3.13E-04
	Impact by Emission/Discharge to the environment			Dust	kg	6.52E-04	1.36E-04	8.94E-05	5.41E-04	3.90E-05	1.46E-03
	Ois	tem	nair	BOD	kg	-	-	-	-	-	
	J/IC	sys	don	COD	kg	-	-	-	-	-	
	ssic	o Water system	o Water domain	N total	kg	-	-	-	-	-	
	mis	Š	×	P total	kg	-	-	-	-	-	
	_ H	ţ		SS	kg	- F 00F 02	-	-	-	- E 00E 01	6.415.01
	t b		system	Unspecified Solid Waste	kg	5.08E-02 6.92E-02	0	0	0	5.90E-01 0	6.41E-01 6.92E-02
	act		il sy	Slag	kg	6.92E-02	-	U	U	U	6.92E-02
	E		to Soil	Sludge	kg	1.47E-05	2.53E-05	3.16E-10	1.01E-04	1.46E-07	1.41E-04
+			7	Low level radio-active waste Energy resources (crude oil equivalent)	kg	1.79E+00	1.57E+00	6.36E-02	6.24E+00	1.51E-02	9.68E+00
Impact assessment	by Res		40.00	Energy resources (crude oil equivalent) Mineral resources (Iron ore equivalent)	kg	5.82E+00	0	0.36E-02	0.24E+00	0	5.82E+00
SSIT	-		6	Global Warming (CO2 equivalent)	kg	5.20E+00	4.18E+00	2.12E-01	1.66E+01	3.76E-01	2.66E+01
ses	inices		pher	Acidification (SO2 equivalent)	kg	7.88E-03	4.16E+00 4.95E-03	7.82E-04	1.97E-02	6.31E-04	3.39E-02
as	arge to e		hdsom	Acidification (SO2 equivalent)	kg	7.00E-U3	4.90E-03	7.02E-04	1.97 E-02	0.31E-04	3.39E-02
act	n Disd	to Atmc		Dhotophomical Ovident	lea	4.04E-04	1.40E-04	4.81E-05	5.57E-04	1.88E-05	1.17E-03
du	Emissio		=	Photochemical Oxidant	kg	4.04⊑-04	1.400-04	4.01E-05	5.57 ⊑-04	1.00E-U0	1.17 E-03
=	£		- 1								

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.

- 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.
- $\textbf{C. Data of discharge to water system are in actual figure } \ (\textbf{not calculated using unit function in inventory analyses}) \, .$

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.

Product data sheet

(Input data and parameters for LCA)

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Document control no.	F-03s-02
Product vendor	Panasonic System Networks Co.,Ltd.
EcoLEaf registration no.	AX-10-032



PCR name	Interphone (PCR-ID: AX-03)	Product type	VL-SV20X				
LCA/LCIA in units of:	1	Product weight (kg)	0.55	Package (kg)	0.26	Weight total (kg)	0.81

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

	Bro	eakdown of p	rimary materials		Math breakdown of parts, which	h need to apply	Processing / Assembly Base U	nits (Parts B, C)
	Material name	Weight (kg)	Material name	Weight (kg)	Process name	Weight (kg)	Process name	Weight (kg)
	Steel	6.44E-02	Assembled circuit board	1.22E-01				
	Electromagnetic steel plate	1.47E-03						
+	stainless	5.00E-04						
ge	Copper	7.73E-03						
P S	Glass	1.58E-02						
	Thermoplastic resin	3.40E-01						
	Rubber	2.76E-03						
	Paper	2.57E-01						
	Subtotal	6.90E-01	Subtotal	1.22E-01				
		Total		8.12E-01	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 SO₂, NO₂ equivalent.

ţi	Classification	Energy				
	Distribution	Electricity (kWh)				
S	Quantity	1.00E+01				
Con	Note					
arge	Classification					
Disch	Distribution					
sion/	Quantity					
Emis	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.

		· · · · · · · · · · · · · · · · · · ·	<u>, , , , , , , , , , , , , , , , , , , </u>	, ,			
0	Means of transportation	Consumption	Consumption	Consumption	Consumption		
þ	Conditions	Diesel oil as fuel (kg)	Freight by ship (kg.km)	Diesel truck:10 ton (kg.km)	Diesel truck:4 ton (kg.km)		
istril	Quantity	2.40E-03	3.01E+03	2.07E+02	2.12E+02		
ä	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

4.1110	auct and ac	ocosonico subjet	ot to tills allalysis	•			
t	Classification	Consumption					
Produc	Distribution	Electricity (kWh)					
	Quantity	3.98E+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

7.2	2.0	3001110117110	oyolo illiorillatioi	i on concamable	o ana ropiacemo	nt parto		
		Classification						
nsuma	map	Distribution						
	⊆ _	Quantity						
	ပိ	Note						

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

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

.0	Classification	Consumption	Consumption	Discharge	Discharge		
<u>a</u>	Distribution	Diesel truck:4 ton (kg.km)	Shredding (kg)	Incineration to landfill(as ash) (kg)	Landfill:General waste (kg)		
Scer	Quantity	1.62E+02	8.10E-01	2.60E-01	5.50E-01		
	Note						

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

6. Others