

Product Environmental Profile

BUS/SCS nurse call units
call devices for rooms and bathrooms



LEGRAND'S ENVIRONMENTAL COMMITMENTS

• Incorporate environmental management into our industrial sites

Of all Legrand sites worldwide, over 85% are ISO 14001-certified (sites belonging to the Group for more than five years).

• Offer our customers environmentally friendly solutions

Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.

• Involve the environment in product design and provide informations in compliance with ISO 14025

Reduce the environmental impact of products over their whole life cycle.

Provide our customers with all relevant information (composition, consumption, end of life, etc.).



REFERENCE PRODUCT

Function	Triggering a nurse call from the patient's bed. This function is provided for 10 years.
Reference Product	
	Cat.No 0 782 42
	Call and lighting control hand-held remote control unit - White antimicrobial.

The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be held binding on the company.



PRODUCTS CONCERNED

The environmental data is representative of the following products:

Cat. No	IP	Designation
0 782 42	IP 67	Call and lighting control hand-held remote control unit - White antimicrobial
0 782 40		Hand-held remote control unit Mosaic - for call only - White antimicrobial
0 782 44		Hand-held control unit for calls and controlling lighting and roller shutters - White antimicrobial

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■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/EU.

Total weight of Reference Product		391 g (with unit packaging)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PVC	9.6 %	Steel	5.8 %	Cables / Electric wires	14.2 %
ABS	8.1 %	Silver alloy	< 0.1 %	Electronic card	2.3 %
PA	1.8 %			Various electronic components	0.4 %
SBS	1.1 %				
PC	0.2 %			Packaging as % of weight	
PP	< 0.1 %			Wood (packaging)	31.9 %
Various plastic	< 0.1 %			Paper (packaging)	24.1 %
				PE (packaging)	0.3 %
				PP (packaging)	0.2 %
Total plastics	20.8 %	Total metals	5.8 %	Total other and packaging	73.4 %

Estimated recycled material content: 24 % by mass.

For products other than the Reference Product, following materials' tables applies:

Total weight of Reference Product 0 782 40		349 g (with unit packaging)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PVC	10.4 %	Steel	6.5 %	Cables / Electric wires	5.3 %
ABS	8.9 %	Silver alloy	< 0.1 %	Electronic card	2.0 %
PA	2.0 %			Various electronic components	< 0.1 %
SBS	1.2 %				
PC	0.2 %			Packaging as % of weight	
PP	< 0.1 %			Wood (packaging)	36.0 %
Various plastic	< 0.1 %			Paper (packaging)	27.0 %
				PE (packaging)	0.3 %
				PP (packaging)	0.2 %
Total plastics	22.7 %	Total metals	6.5 %	Total other and packaging	70.8 %

Estimated recycled material content: 26 % by mass.

Total weight of Reference Product 0 782 44		385 g (with unit packaging)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PVC	9.6 %	Steel	5.8 %	Cables / Electric wires	14.1 %
ABS	8.0 %	Silver alloy	< 0.1 %	Electronic card	2.5 %
PA	1.8 %			Various electronic components	0.2 %
SBS	1.1 %				
PC	0.2 %			Packaging as % of weight	
PP	< 0.1 %			Wood (packaging)	31.9 %
Various plastic	< 0.1 %			Paper (packaging)	24.1 %
				PE (packaging)	0.3 %
				PP (packaging)	0.2 %
Total plastics	20.7 %	Total metals	5.8 %	Total other and packaging	73.5 %

Estimated recycled material content: 24 % by mass.

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■ MANUFACTURE

This Reference Product comes from a site that has received ISO14001 certification.



■ DISTRIBUTION

Products are distributed from logistics centres located with a view to optimize transport efficiency. The Reference Product is therefore transported over an average distance of 780 km by road from our warehouse to the local point of distribution into the market in Europe. Packaging is compliant with european directive 2004/12/EU concerning packaging and packaging waste. At their end of life, its recyclability rate is 96 % (in % of packaging weight).



■ INSTALLATION

For the installation of the product, only standard tools are needed.



■ USE

Under normal conditions of use, this product requires no servicing, no maintenance or additional products.

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END OF LIFE

The product end-of-life factors are taken into account during the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse.

• Elements to process specifically:

The following may be subject to specific treatments in appropriate channels to reduce the environmental impact of the end of product life:
- electronic card: 9 g

• Extended producer responsibility:

The sale of this product is subject to a contribution to eco-organisations in each country responsible for managing end-of-life products in the field of application of the European Waste Electronic and Electrical Equipment Directive.

• Recyclability rate:

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 86 %. This value is based on data collected from a technological channel operating on an industrial basis. It does not pre-validate the effective use of this channel for the end of life of this product.

Separated into:

- plastic materials (excluding packaging) : 19 %
- metal materials (excluding packaging) : 6 %
- other materials (excluding packaging) : 6 %
- packaging (all types of materials) : 55 %

For products covered by the PEP other than the Reference Product, the recyclability rates are :	0 782 40	0 782 44
- Estimated recyclability rate of the product:	91 %	85 %
- Plastic materials (excluding packaging) :	20 %	19 %
- Metal materials (excluding packaging) :	7 %	6 %
- Other materials (excluding packaging) :	3 %	6 %
- Packaging (all types of materials) :	61 %	54 %



ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end-of-life. It is representative from products marketed and used in Europe, in compliance with the local current standards.

For each phase, the following modelling elements were taken in account:

Manufacture	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
Distribution	Transport between the last Group distribution centre and an average delivery point in the sales area.
Installation	The end of life of the packaging.
Use	• Product category: active product. • Use scenario: for a 10 years working life, in continuous operation at 100 % of rates load, 99.67 % of time 594 mW and 54 mW for the remaining time. This modelling duration does not constitute a minimum durability requirement • Energy model: Electricity Mix; Europe 27 - 2002.
End of life	The default end of life scenario maximizing the impacts.
Software and database used	EIME V5 and its database «CODDE-2015-04»

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SELECTION OF ENVIRONMENTAL IMPACTS

	Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Global warming	3.20E+01	kgCO ₂ eq.	1.32E+00	4 %	1.52E-02	< 1 %	1.23E-02	< 1 %	3.06E+01	96 %	1.90E-02	< 1 %
Ozone depletion	7.61E-06	kgCFC-11 eq.	1.68E-07	2 %	3.08E-11	< 1 %	5.87E-11	< 1 %	7.44E-06	98 %	4.58E-10	< 1 %
Acidification of soils and water	2.34E-01	kgSO ₂ eq.	2.22E-03	< 1 %	6.83E-05	< 1 %	5.75E-05	< 1 %	2.32E-01	99 %	7.31E-05	< 1 %
Water eutrophication	9.38E-03	kg[PO ₄] ³⁻ eq.	5.60E-04	6 %	1.57E-05	< 1 %	3.83E-05	< 1 %	8.68E-03	93 %	8.66E-05	< 1 %
Photochemical ozone formation	1.12E-02	kgC ₂ H ₄ eq.	2.62E-04	2 %	4.85E-06	< 1 %	4.08E-06	< 1 %	1.09E-02	98 %	5.69E-06	< 1 %
Depletion of abiotic resources - elements	1.83E-04	kgSb eq.	1.82E-04	99 %	6.08E-10	< 1 %	5.18E-10	< 1 %	1.40E-06	< 1 %	1.19E-09	< 1 %
Total use of primary energy	6.55E+02	MJ	3.41E+01	5 %	2.15E-01	< 1 %	1.75E-01	< 1 %	6.21E+02	95 %	2.91E-01	< 1 %
Net use of fresh water	9.16E-02	m ³	1.17E-02	13 %	1.36E-06	< 1 %	2.59E-06	< 1 %	7.99E-02	87 %	1.59E-05	< 1 %
Depletion of abiotic resources - fossil fuels	3.36E+02	MJ	2.02E+01	6 %	2.14E-01	< 1 %	1.72E-01	< 1 %	3.16E+02	94 %	2.70E-01	< 1 %
Water pollution	1.42E+03	m ³	1.25E+02	9 %	2.50E+00	< 1 %	1.95E+00	< 1 %	1.29E+03	91 %	2.19E+00	< 1 %
Air pollution	1.48E+03	m ³	1.60E+02	11 %	6.23E-01	< 1 %	1.02E+00	< 1 %	1.31E+03	89 %	2.17E+00	< 1 %

The values of the 27 impacts defined in the PCR-ed3-EN-2015 04 02 are available in the digital database of pep-ecopassport.org website.

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SELECTION OF ENVIRONMENTAL IMPACTS (CONTINUED)

For products covered by the PEP other than the Reference Product, the environmental impacts of each phase of the lifecycle are calculated with following tables:

The use phase, and installation phase do not represent significant differences with the Reference Product	Rate 0 782 42 Rate 0 782 44	Rate 0 782 40		
		Manufacturing	Use	End of life
Global warming	1	0.8	0.9	0.7
Ozon depletion		0.7		
Acidification of soil and water		0.8		
Water eutrophication				
Photochemical ozon creation				
Depletion of abiotic resources - elements		0.7		
Total use of primary energy during the life cycle		0.8		
Net use of fresh water				
Depletion of abiotic resources - fossil fuels				
Water pollution				
Air pollution				

Registration N°: LGRP-00185-V01.01-EN	Drafting rules: «PEP-PCR-ed3-EN-2015 04 02» Supplemented by «PSR-0005-ed1-2012 12 11»
Verifier accreditation N°: VH23	Information and reference documents : www.pep-ecopassport.org
Date of issue: 08-2016	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025:2010 Internal ☒ External ☐	
The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
The elements of the present PEP cannot be compared with elements from another program	
Document in compliance with ISO 14025 : 2010: «Environmental labels and declarations. Type III environmental declarations»	
Environmental data in alignment with EN 15804 : 2012 + A1 : 2013	

