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# **Product Environmental Profile**

**Zeffia<sup>™</sup> -** 2 x 2 P+E - 10 A 250V~ Socket Outlets with Screw Terminals - White





### ■ 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	Connect/Disconnect during 20 years the plug of a load consuming 10A under a voltage of 250V while protecting the user from direct contact with live parts.
Reference Product	
	Cat. No 680111
	2 x 2 P+E - 10 A 250V~ Socket Outlets with Screw Terminals - White

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 are representative of the following products:

Catalogue Numbers (complete product)	Catalogue Numbers (only mechanism)	Catalogue Numbers (support and plate)				
• 680111	• 680160	• 680182				



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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	103 g (all packaging included)

Plastics as % of weight		Metals as % of weight		Other as % of weight			
PS	35 %	Steel	10.4 %				
PC	15.7 %	Copper alloys	8.1 %				
PP	6.2 %	Other metals <0.1%					
	Packaging as % of weight						
PE (Packaging)	2.3 %			Wood	15.1 %		
				Paper	7.2 %		
Total plastics	59.2 %	Total metals	18.5 %	Total others	22.3 %		

Estimated recycled material content: 11 % by mass.



### MANUFACTURE

This Reference Product comes from a site that have 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 775 km, by road from our warehouse to the local point of distribution into the market in Brazil.

Packaging is compliant with applicable regulation. At their end of life the recyclability rate is 88 % (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 I

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.

#### • Recyclability rate:

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 95%. 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 end-of-life of this product.

Separated into

plastic materials (excluding packaging)
metal materials (excluding packaging)
packaging (all types of materials)
22%



#### ■ 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 Brazil.

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 general by the manufacturing.					
Distribution	Transport between the last Group distribution centre and an average delivery point in the sales area.					
Installation	nstallation The end of life of the packaging.					
Use	<ul> <li>Product category: PSR0005-ed2-EN-2016 03 29 - § 3.8 Sockets.</li> <li>Use scenario: non-continuous operation for 20 years at 50% of rated load, during 50% of the time. This modelling duration does not constitute a minimum durability requirement.</li> <li>Energy model: Electricity Mix; Brazil - 2009</li> </ul>					
End of life	nd of life The default end of life scenario maximizing the environmental impacts					
Software and database used EIME & database CODDE-2018-11						



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## ■ SELECTION OF ENVIRONMENTAL IMPACTS ■

	Total for L	ife cycle	Raw material and manufacture		Distribution		Installation		Use		End of life	
Global warming	4.56E+00	kgCO₂eq.	4.28E-01	9%	3.99E-03	< 1%	1.53E-03	< 1%	4.12E+00	90%	8.28E-03	< 1%
Ozone depletion	5.37E-07	kgCFC-11 eq.	1.67E-08	3%	8.08E-12	< 1%	1.21E-11	< 1%	5.20E-07	97%	1.88E-10	< 1%
Acidification of soils and water	3.85E-03	kgS0₂eq.	7.52E-04	20%	1.79E-05	< 1%	6.86E-06	< 1%	3.04E-03	79%	3.20E-05	< 1%
Water eutrophication	1.83E-03	kg(PO̯)³-eq.	9.74E-04	53%	4.12E-06	< 1%	4.50E-06	< 1%	8.12E-04	44%	3.93E-05	2%
Photochemical ozone formation	8.97E-04	kgC₂H₄eq.	7.04E-05	8%	1.27E-06	< 1%	4.94E-07	< 1%	8.22E-04	92%	2.49E-06	< 1%
Depletion of abiotic resources - elements	1.15E-05	kgSb eq.	1.12E-05	97%	1.60E-10	< 1%	6.97E-11	< 1%	2.98E-07	3%	5.06E-10	< 1%
Total use of primary energy	1.30E+02	MJ	8.93E+00	7%	5.64E-02	< 1%	2.05E-02	< 1%	1.21E+02	93%	9.23E-02	< 1%
Net use of fresh water	3.50E-02	m³	2.94E-02	84%	3.57E-07	< 1%	4.67E-07	< 1%	5.64E-03	16%	6.52E-06	< 1%
Depletion of abiotic resources - fossil fuels	3.17E+01	MJ	6.24E+00	20%	5.60E-02	< 1%	1.99E-02	< 1%	2.53E+01	80%	8.37E-02	< 1%
Water pollution	2.47E+02	m3	7.28E+01	30%	6.56E-01	< 1%	2.32E-01	< 1%	1.72E+02	70%	9.72E-01	< 1%
Air pollution	3.48E+02	m3	7.60E+01	22%	1.63E-01	< 1%	1.24E-01	< 1%	2.70E+02	78%	9.05E-01	< 1%

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

The environmental impacts and data published in this PEP refer to a complete configuration composed of two 10A 250V~ sockets, a frame and a cover plate.

Registration N°: LGRP-00911-V1.01-EN	Drafting rules: «PEP-PCR-ed3-EN-2015 04 02» Supplemented by «PSR-0005-ed2-EN-2016 03 29»
Verifier accreditation N°: VH23	Information and reference documents: www.pep-ecopassport.org
Date of issue: 07-2019	Validity period: 5 years
Independent verification of the declaration and data, in collinternal ☑ External ☐	mpliance with ISO 14025 : 2010
The PCR review was conducted by a panel of experts chair	red by Philippe Osset (SOLINNEN)
PEP are compliant with XP C08-100-1 : 2014 The elements of the present PEP cannot be compared with	h elements from another program PASS
Document in compliance with ISO 14025 : 2010: «Environm Type III environmental declarations»	
Environmental data in alignment with EN 15804: 2012 + A	1 : 2013