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## Your usual Sales office www.legrand.com

## **Product Environmental Profile**

## Programmable time switches





## ■ LEGRAND'S ENVIRONMENTAL COMMITMENTS

- Incorporate environmental management into our industrial sites Of all Legrand sites worldwide, over 80% are ISO 14001-certified (sites belonging to the Group for more than five years)..
- Involve the environment in product design Provide our customers with all relevant information (composition, consumption, end of life, etc.). Reduce the environmental impact of products over their whole life cycle..
- Offer our customers environmentally friendly solutions
  Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.



#### REFERENCE PRODUCT

Fonction	Enable digital programming weekly an electric circuit with removable battery in accordance with standard EN 60730-1 and 60730-2-7 for a period of 10 years
Reference Product	Septiminal
	Catalogue Numbers 6 037 79
	Time-switch programm digital weekly -2 channel -2 modules

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 for the reference product refers to the following Catalogue Numbers:

#### Références

 $6\ 037\ 70, 6\ 037\ 71, 6\ 037\ 72, 6\ 037\ 73, 6\ 037\ 74, 6\ 037\ 75, 6\ 037\ 76, 6\ 037\ 77, 6\ 037\ 78, 6\ 037\ 79, 6\ 037\ 80, 6\ 037\ 81, 6\ 0$ 



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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. At the date of publication of this document, this Reference Product does not contain RoHS substances (2002/95/EC and its revision 2011/65/EU), and no substances appearing on the list of substances that are candidate for authorization of the european Reach regulation (REACH - article 33.1).

Total weight of Reference Product	156 g (with un	it packaging)				
Plastics as % of weight		Metals as % of weight		Other as % of weight		
Polycarbonates (PC)	24,10%	Steel (stainless, with chrome)	13,40%	Melamine Cyanurate	4,90%	
Polybutylene Terephthalate (PBT)	5,70%	Copper (Cu)	7,90%	Glass Fiber	3,10%	
Silicon Rubber	4,00%	Iron (Fe)	5,80%	Epoxy Resin (Liquid)	2,00%	
Polyamide (PA 6)	2,90%	Alloy (unspecified)	1,50%	Nickel/Lithium Oxides (unspecified)	1,30%	
Thermoset (unspecified)	1,50%			Other miscellaneous	3,4%	
				Packaging as % of weight		
				Cardboard	10,70%	
				Paper (50% recycled)	6,30%	
Other plastics	0,5%	Other metals	1,0%			
Total plastics	38.7%	Total metals	29.6%	Total other and packaging	31.7%	

Estimated recycled material content: 18% 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 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/EC concerning packaging and packaging waste. At the packaging end of life, its theoretical recycling potential is of 0% and its energy recovery potential is of 0% (in % of the mass of the packaging)



### ■ INSTALLATION ■

Installation components not delivered with the product are not taken into account.



## USE

Servicing and maintenance:

Under normal conditions of use, this type of Product requires no servicing or maintenance

Consumable

No consumables are necessary to use the Reference Product



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#### ■ END OF LIFE ■

- Hazardous waste contained in the product: 0 g no hazardous waste comes from this Reference Product
- Non-hazardous waste contained in the product: 136 g
- Theoretical recycling potential:

The theoritical recycling potential of a product is the percentage of material that can be recycled using existing techniques. It takes no account of the existence or lack of recycling services, which are highly dependent on the local situation. This Reference Product contains 84% by weight of potentially recycling material (excluding packaging):

This Reference Product contains 78% by weight of potentially recycling material (excluding packaging):

- Plastic materials : 38%- Metal materials : 34%- Others materials : 6%

• Energy recovery potential:

Energy recovery consists in using the calories contained in waste by burning it and recovering the energy produced, for example, to heat buildings or to produce electricity. The process uses the convertible energy contained in the waste. 54 % of the product mass can be reclaimed with energy recovery.



### ■ 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

The following modelling elements were taken into account:

Manufacture	Unit packaging taken in account.
Distribution	Transport between the last Group distribution centre and an average delivery to the sales area
Installation	Installation components not delivered with the product are not taken into account.
Use	<ul> <li>Under normal conditions of use, this type of Product requires no servicing or maintenance</li> <li>No consumables are necessary to use the Reference Product</li> <li>Product category: active product</li> <li>Use scenario: Use scenario: for a 10 years working life, in active mode of operation, with a power of 1.403 W and 70% associated time and in sleep phase of operation, with a power of 1.04 W and 30% associated time of one year of operation. This modelling duration does not constitute a minimum durabilty requirement</li> <li>Energy model: Europe, year 2005</li> </ul>
End of life	In view of the data avalaible on the date of creation of the document, and in accordance with the requirements of the PCR of the «PEP ecopassport» programme, transport of the Reference Product by road only once, over a distance of 1000 km, to a processing site at end of life was counted.
Software used	EIME V4.1 and its database 11.3



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## ■ ENVIRONMENTAL IMPACTS (continued) ■

		Total for Lif	e cycle	Raw material and manufacture		Distribution		Installation		Use		End of life	
	Contribution to greenhouse effect	6,99E+04	g~CO2	4,33E+03	6%	1,45E+01	(< 1%)	0,00E+00	0%	6,55E+04	94%	1,85E+01	(< 1%)
	Damage to the ozone layer	4,36E-03	g~CFC-11	7,84E-04	18%	1,02E-05	(< 1%)	0,00E+00	0%	3,56E-03	82%	1,31E-05	(< 1%)
icators	Eutrophisation of water	3,62E-01	g~PO43-	2,07E-01	57%	2,41E-04	(< 1%)	0,00E+00	0%	1,54E-01	43%	3,07E-04	(< 1%)
Mandatory indicators	Photochemical ozone formation	2,40E+01	g~C2H4	1,84E+00	8%	1,24E-02	(< 1%)	0,00E+00	0%	2,22E+01	92%	1,58E-02	(< 1%)
Manda	Acidification of the air	9,78E+00	g~H+	9,32E-01	10%	1,84E-03	(< 1%)	0,00E+00	0%	8,84E+00	90%	2,36E-03	(< 1%)
	Total energy consumed	1,37E+03	MJ	7,62E+01	6%	1,83E-01	(< 1%)	0,00E+00	0%	1,30E+03	94%	2,33E-01	(< 1%)
	Consumption of water	2,54E+02	dm3	6,68E+01	26%	1,74E-02	(< 1%)	0,00E+00	0%	1,88E+02	74%	2,22E-02	(< 1%)

indicators	Depletion of natural resources	3,32E-14	années -1	3,18E-14	96%	2,49E-19	(< 1%)	0,00E+00	0%	1,47E-15	4%	3,18E-19	(< 1%)
	Toxicity of the air	1,21E+07	m³	1,21E+06	10%	2,73E+03	(< 1%)	0,00E+00	0%	1,09E+07	90%	3,48E+03	(< 1%)
Optional	Toxicity of the water	1,98E+04	dm³	1,06E+03	5%	1,81E+00	(< 1%)	0,00E+00	0%	1,87E+04	95%	2,31E+00	(< 1%)
	Production of hazardous waste	1,18E+00	kg	9,43E-02	8%	5,38E-06	(< 1%)	0,00E+00	0%	1,09E+00	92%	6,87E-06	(< 1%)

The environmental impacts of the Reference Product are representative of the products covered by the PEP. The environmental impacts of the Reference Product are representative of the products covered by the PEP, which therefore constitute a homgeneous environmental family

To determine the environmental impact of a product covered by the PEP other than the cat.number (ref 603779), the following rules apply: for the ref 603771, 603773, 603775, 60377, 603781, the impacts are similar for the ref 603770, 603772, 603774, 603776, 603778, 603780:

The values of these impacts are valid for the context specified in this document. They must not be used directly to draw up the environmental balance sheet for the installation.

Registration number: LGRP-2013-046-v1-en	Drafting rule: PEP-PCR-ed 2.1-FR-2012 12 11				
Authorisation number of checker: VH02	Programme information: www.pep-ecopassport.org				
Date of issue: 07-2013	Validity period: 4 years				
Independent verification of the declaration and data, in accordance with ISO 14025:2006  Internal   External □					
In accordance with ISO 14025 :2006 Type III environmental declaration					
The critical review of the PCR was conducted by a panel of experts chaired by J.Chevalier (CSTB)					
The elements of the present PEP cannot be compared with elements from another programme					

<sup>-</sup>Manufacturing, Distribution, Installation and end of life phases: impacts are the same

<sup>-</sup>The use phase values are mutliplied by 0.7