




### 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

Function	Ensure for electrical and electronic cabling, for grouping and attaching low and extra low voltage cables using equipment cable ties, for series assembly of electrical cables, with self blocking head and internal teeth, in accordance with standard EN 62275 type 1 (NFC 68-146) for a lifetime of 20 years.
Reference Product	  Cat.No 032038 Cable tie Colring - W 3.5 mm - L 180 mm - colourless

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
031800, 031801, 031802, 031803, 031804, 031805, 031806, 031807, 031808, 031809, 031810, 031811, 031812, 031813, 031814, 031815, 031816, 031817, 031818, 031820, 031821, 031822, 031823, 031824, 031825, 031826, 031827, 031828, 031829, 031831, 031832, 031833, 031835, 031836, 031837, 031838, 032012, 032013, 032014, 032015, 032018, 032019, 032020, 032022, 032023, 032024, 032025, 032026, 032027, 032028, 032029, 032030, 032031, 032032, 032037, 032038, 032039, 032040, 032042, 032043, 032044, 032045, 032046, 032047, 032048, 032049, 032050, 032051, 032052, 032054, 032055, 032057, 032058, 032061, 032063



### ■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It does not contain substances covered by the RoHS Directive (2002/95/EC and its revision 2011/65/EC). It contains none of the 138 candidate list of the REACH regulation dated 19/12/2012

Total weight of Reference Product		1 g (with unit packaging)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PA	78.7%				
				Packaging as % of weight	
				PVC	19.0%
				PE	2.3%
				paper	<1%
Total plastics	78.9%	Total metals	0%	Total other and packaging	21.3%

Estimated recycled material content: 19 % of weight.



### ■ MANUFACTURE

This Reference Product comes from sites 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 recyclability rate is of 97% (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 this type of product.



### END OF LIFE

Development teams integrate product end-of-life factors in 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 given in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 96 %.

This value is based on data collected from a technological channel operating on an industrial basis. It does not prejudice the effective use of the channel for electrical and electronic products at the end of their life.

Separated into:

- plastic materials (excluding packaging) : 54%
- metal materials (excluding packaging) : 12%
- other materials (excluding packaging) : 0 %
- packaging (all types of materials) : 30 %



### 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 into account. As required by the "PEP ecopassport" programme all transport for the manufacturing of the Reference Product, including materials and components, has been 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 style="list-style-type: none"> <li>• Under normal conditions of use, this type of product requires no servicing or maintenance.</li> <li>• No consumables are necessary to use this type of product.</li> <li>• Product category: envelope</li> <li>• Use scenario: no energy consumption during the 20 years working life. This modelling duration does not constitute a minimum durability requirement.</li> </ul>
End of life	In view of the data available 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 V5 and its database «Legrand_2012_10_31_version_3, issue de la base CODDE-2012-07»



### ENVIRONMENTAL IMPACTS (continued)

		Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Mandatory indicators	Global warming	5.84E+03	g~CO <sub>2</sub> eq.	5.57E+03	95%	2.06E+02	4%	0.00E+00	0%	0.00E+00	0%	6.16E+01	1%
	Ozone depletion	7.73E-04	g~CFC-11 eq.	6.27E-04	81%	1.46E-04	19%	0.00E+00	0%	0.00E+00	0%	1.17E-07	< 1%
	Water eutrophication	6.53E-01	g~PO <sub>4</sub> <sup>3-</sup> eq.	6.49E-01	99%	3.42E-03	< 1%	0.00E+00	0%	0.00E+00	0%	1.15E-04	< 1%
	Photochemical ozone creation	2.68E+00	g~C <sub>2</sub> H <sub>4</sub> eq.	2.49E+00	93%	1.79E-01	7%	0.00E+00	0%	0.00E+00	0%	1.38E-02	< 1%
	Air acidification	8.43E-01	g~H+ eq.	8.05E-01	96%	2.62E-02	3%	0.00E+00	0%	0.00E+00	0%	1.15E-02	1%
	Total energy depletion	1.22E+02	MJ	1.19E+02	97%	2.60E+00	2%	0.00E+00	0%	0.00E+00	0%	8.69E-01	< 1%
	Water depletion	4.15E+01	dm <sup>3</sup>	4.13E+01	99%	2.47E-01	< 1%	0.00E+00	0%	0.00E+00	0%	6.40E-03	< 1%

Optional indicators	Raw material depletion	4.40E-16	year <sup>1</sup>	4.35E-16	99%	3.55E-18	< 1%	0.00E+00	0%	0.00E+00	0%	1.26E-18	< 1%
	Air toxicity	1.11E+06	m <sup>3</sup>	1.05E+06	95%	3.88E+04	3%	0.00E+00	0%	0.00E+00	0%	1.70E+04	2%
	Water toxicity	2.37E+00	m <sup>3</sup>	2.32E+00	98%	2.87E-02	1%	0.00E+00	0%	0.00E+00	0%	2.64E-02	1%
	Hazardous waste production	4.35E-02	kg	4.35E-02	100%	7.66E-05	< 1%	0.00E+00	0%	0.00E+00	0%	7.63E-08	< 1%

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

To determine the environmental impact of a product covered by the PEP other than the cat.number (032038), the following rules apply :

- The Installation and Use phases : impact is null
- The Manufacturing, Distribution and End of life phases are proportional to the mass

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-2014-160-v1-en	Drafting rule : PEP-PCR-ed 2.1-FR-2012 12 11 PSR-0005-ed1-FR-2012 12 11
Authorisation number of checker : VH02	Programme information: www.pep-ecopassport.org
Date of issue : 04-2015	Validity period: 4 years
Independent verification of the declaration and data, in accordance with ISO 14025:2006 Internal <input checked="" type="checkbox"/> External <input type="checkbox"/>	
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	

