

Product Environmental Profile

Patch Cord user Cord RJ 45 Cat 5e U UTP unscreened PVC 1 M



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

<p>Function</p>	<p>Connects equipment using two RJ 45 connectors and transmit a communication signal on 1 m according to Ethernet 100 M - BP = 100 Mhz protocol, Cat 5e category, during 10 years and a 25 % use rate in accordance with the standards in force. Lifetime and use rate match the the Building - LAN application defined in the table given in annex 1 of the wires, cables and accessories specific rules.</p>
<p>Reference Product</p>	<div style="text-align: center;">  </div> <p>Cat.No 0 516 36 Patch Cord user cord RJ 45 Cat 5e U UTP unscreened PVC 1 M.</p>

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:

<p>Catalogue Numbers</p> <ul style="list-style-type: none"> • 0 516 37 • 0 516 38 • 0 516 39 • 0 518 17
--

Product Environmental Profile

Patch Cord user Cord RJ 45 Cat 5e U UTP
unscreened PVC 1 M



■ 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	111 g (all packaging included)
--	---------------------------------------

Plastics as % of weight		Metals as % of weight		Other as % of weight	
PVC	16.9 %	Copper alloys	15.2 %		
PE	4.0 %	Other metal	< 0.1 %	Packaging as % of weight	
PC	2.1 %			Wood	37.6 %
				Paper	18.3 %
				PE	5.6 %
				Steel	0.3 %
				PVC	< 0.1 %
				Other	< 0.1 %
Total plastics	23.0 %	Total metals	15.2 %	Total other and packaging	61.8 %

Estimated recycled material content: 19 % by mass.



■ 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 1406 km by road and 9 km by sea (average ponderate by type of transport of worldwide distribution) from our warehouse to the local point of distribution into the market all around the world.

Packaging is compliant with applicable regulation. At their end of life, its 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.

Product Environmental Profile

**Patch Cord user Cord RJ 45 Cat 5e U UTP
unscreened PVC 1 M**



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.

• **Recyclability rate:**

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 91 %. 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) : 22 %
- metal materials (excluding packaging) : 15 %
- other materials (excluding packaging) : 0 %
- packaging (all types of materials) : 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 worldwide marketed products.

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	<ul style="list-style-type: none"> • Product category: data communication cable with connectors. • Use scenario: 10 years working life operating 25 % of the time, according to the LAN - tertiary (commercial) application defined in Annex 1 of PSR0001. The energy dissipation through the connectors is calculated according to PSR0005 for RJ 45 Balanced Connectors. This modelling duration does not constitute a minimum durability requirement. As no EIME module exists for Worldwide Electricity mix, China Module is used. • Energy model: Electricity Mix; China - 2009.
End of life	The default end of life scenario maximizing the impacts.
Software and database used	EIME V5 and its database «CODDE-2015-04»

Product Environmental Profile

Patch Cord user Cord RJ 45 Cat 5e U UTP
unscreened PVC 1 M



SELECTION OF ENVIRONMENTAL IMPACTS

	Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
	Value	Unit	Value	%	Value	%	Value	%	Value	%	Value	%
Global warming	3.15E-01	kgCO ₂ eq.	2.37E-01	75 %	7.77E-03	2 %	4.11E-03	1 %	2.02E-02	6 %	4.54E-02	14 %
Ozone depletion	3.39E-08	kgCFC-11 eq.	3.21E-08	95 %	1.57E-11	< 1 %	3.22E-11	< 1 %	1.61E-10	< 1 %	1.63E-09	5 %
Acidification of soils and water	5.30E-04	kgSO ₂ eq.	4.04E-04	76 %	3.53E-05	7 %	1.85E-05	3 %	2.19E-05	4 %	5.01E-05	9 %
Water eutrophication	1.63E-04	kg(PO ₄) ³⁻ eq.	1.11E-04	68 %	8.05E-06	5 %	1.21E-05	7 %	5.79E-06	4 %	2.68E-05	16 %
Photochemical ozone formation	5.95E-05	kgC ₂ H ₄ eq.	4.85E-05	82 %	2.50E-06	4 %	1.33E-06	2 %	2.59E-06	4 %	4.58E-06	8 %
Depletion of abiotic resources - elements	4.87E-04	kgSb eq.	4.87E-04	100 %	3.11E-10	< 1 %	1.87E-10	< 1 %	8.88E-11	< 1 %	1.12E-09	< 1 %
Total use of primary energy	6.25E+00	MJ	5.51E+00	88 %	1.04E-01	2 %	5.26E-02	< 1 %	3.31E-01	5 %	2.56E-01	4 %
Net use of fresh water	5.53E-03	m ³	5.47E-03	99 %	6.95E-07	< 1 %	1.25E-06	< 1 %	2.26E-05	< 1 %	3.91E-05	< 1 %
Depletion of abiotic resources - fossil fuels	4.65E+00	MJ	3.93E+00	85 %	1.09E-01	2 %	5.77E-02	1 %	3.16E-01	7 %	2.27E-01	5 %
Water pollution	8.38E+01	m ³	3.43E+01	41 %	1.28E+00	2 %	6.25E-01	< 1 %	1.01E+00	1 %	4.67E+01	56 %
Air pollution	1.29E+02	m ³	1.25E+02	97 %	3.20E-01	< 1 %	3.35E-01	< 1 %	2.10E+00	2 %	1.44E+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.

Product Environmental Profile

Patch Cord user Cord RJ 45 Cat 5e U UTP
unscreened PVC 1 M



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:

Extrapolation rule for ref 0 516 37

To know the values of the environmental impacts of the products concerned other than the reference product, multiply the values of environmental indicators by the following corresponding factors:

- The indicators of the «Installation» life phase are identical to the reference product
- Multiply the indicators of the life phase «Manufacturing» => For Impact Indicators : ADPe; FW and AP by 1.7 and the others by 1.4
- Multiply all the indicators of the «Distribution» life phase by 1.3
- Multiply all indicators of the life phase «Use» by 2
- Multiply all the indicators of the phase of life «end of life» by 1.7

Extrapolation rule for ref 0 516 38

To know the values of the environmental impacts of the products concerned other than the reference product, multiply the values of environmental indicators by the following corresponding factors:

- The indicators of the «Installation» life phase are identical to the reference product
- Multiply the indicators of the life phase «Manufacturing» => For Impact Indicators : ADPe; FW and AP by 2.4 and the others by 1.7
- Multiply all indicators of the «Distribution» life phase by 1.6
- Multiply all indicators of the life phase «Use» by 3
- Multiply all the indicators of the phase of life «end of life» by 2.4

Extrapolation rule for ref 0 516 39

To know the values of the environmental impacts of the products concerned other than the reference product, multiply the values of environmental indicators by the following corresponding factors:

- The indicators of the «Installation» life phase are identical to the reference product
- Multiply the indicators of the life phase «Manufacturing» => For Impact Indicators : ADPe; FW and AP by 3.9 and the others by 2.45
- Multiply all indicators of the «Distribution» life phase by 2.4
- Multiply all indicators of the «Installation» life phase by 1.2
- Multiply all indicators of the life phase «Use» by 5
- Multiply all indicators of the life phase «end of life» by 3.8

Extrapolation rule for ref 0 518 17

To know the values of the environmental impacts of the products concerned other than the reference product, multiply the values of environmental indicators by the following corresponding factors:

- The indicators of the «Installation» life phase are identical to the reference product
- Multiply the indicators of the phase of life «Manufacturing» by 0.8
- Multiply all indicators of the «Distribution» life phase by 0.8
- Multiply all the indicators of the life phase «Use» by 0.5
- Multiply all the indicators of the life phase «end of life» by 0.6

Registration N°: LGRP-00554-V01-01-EN	Drafting rules: «PEP-PCR-ed3-EN-2015 04 02»
Verifier accreditation N°: VH02	Information and reference documents: www.pep-ecopassport.org
Date of issue: 12-2017	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010 Internal <input checked="" type="checkbox"/> External <input type="checkbox"/>	
The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
PEP are compliant with XP C08-100-1 : 2014 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	

