

# Product Environmental Profile

## Pass&Seymour® Toggle Switch Openings Wallplates



### 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

<b>Function</b>	Protect persons during 20 years against direct contact with live parts while protecting against mechanical impacts (practically indestructible and self-extinguishing)
<b>Reference Product</b>	 <p style="text-align: center;">Cat. No. TP5</p> <p style="text-align: center;">TOGGLE SWITCH OPENINGS, FIVE GANG</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 (see extrapolation rule at the end of the document):

- 1 Gang : TP11, TP12, TP13, TP14, TP26, TP1, TP8, TP7, TP60, TP720, TP724 (with all color and packaging suffixes)
- 2 Gang : TP23, TP24, TP2, TP82, TP262, TP703, TP18, TP126, TP826, TP138, TP113 (with all color and packaging suffixes)
- 3 Gang : TP3, TP263, TP28, TP226 (with all color and packaging suffixes)
- 4 Gang : TP4, TP264 (with all color and packaging suffixes)
- 5 Gang : TP5, TP265 (with all color and packaging suffixes)
- 6 Gang : TP6, TP266 (with all color and packaging suffixes)
- Jumbo 1 Gang : TPJ1, TPJ8, TPJ7, TPJ26, TPJ13 (with all color and packaging suffixes)
- Jumbo 2 Gang : TPJ2, TPJ82, TPJ18, TPJ126, TPJ113, TPJ826, TPJ262 (with all color and packaging suffixes)
- Jumbo 3 Gang : TPJ3, TPJ263 (with all color and packaging suffixes)
- Jumbo 4 Gang : TPJ4, TPJ264 (with all color and packaging suffixes)

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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/CE.

<b>Total weight of Reference Product</b>	<b>0.21 lbs</b> (with unit packaging)
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Plastics as % of weight		Metals as % of weight		Other as % of weight	
PA	75,5 %	Steel	12,4 %		
				Packaging as % of weight	
				Paper	9,9 %
				PE	2,2 %
<b>Total plastics</b>	<b>75,5 %</b>	<b>Total metals</b>	<b>12,4 %</b>	<b>Total other and packaging</b>	<b>12,1 %</b>

Estimated recycled material content: 13 % by mass.



### ■ MANUFACTURE

This Reference Product comes from sites that have received ISO14001 certification.



### ■ DISTRIBUTION

Products are distributed from logistics centers located to optimize transport efficiency using EPA SmartWay® certified carriers to reduce greenhouse gases emissions. The Reference Product is therefore transported over an average distance of 2175 miles by truck from our warehouse to the local point of distribution into the market in North America.



### ■ INSTALLATION

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



### ■ USE

#### Serviceing and maintenance :

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

#### Consumables :

No consumables are necessary to use the Reference Product.



### ■ END OF LIFE

Development teams integrate product end-of-life factors in the design phase.

**Hazardous waste\* contained in the product:** no hazardous waste

(\* Hazardous waste as defined by European Commission decision 2000/532/EC.

#### • Recycling rate:

Calculated using the method described in the IEC/TR 62635 technical report, the recyclability rate of the product is estimated as 94.0 %. This value is based on data collected from a technological channel using industrial procedures. It does not pre-validate the effective use of this channel for end-of-life electrical and electronic products.

Separated into:

- metal materials (excluding packaging) : 12.4 %
- plastic materials (excluding packaging) : 71.7 %
- packaging (all types of materials) : 9.9 %

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### 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 North America.

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

<b>Manufacture</b>	Packaging taken into account. As required by the «PEP ecopassport» programme all transports for the manufacturing of the Reference Product, including materials and components, has been taken in account. The waste generated during manufacturing phase has been taken into account.
<b>Distribution</b>	Transport between the last Group distribution centre and an average delivery to the sales area
<b>Installation</b>	The end-of-life of the packaging is taken into account at this phase
<b>Use</b>	<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: Not specified by any PSR.</li> <li>• Use scenario : no energy consumption during the 20 years working life. This modelling duration does not constitute a minimum durability requirement.</li> <li>• Energy model: Electricity Mix; United States - 2009.</li> </ul>
<b>End of life</b>	The default end of life scenario maximizing the environmental impacts
<b>Software and database used</b>	EJME V5 and its database «CODDE-2015-04» and the indicators defined in the PCR ed3 in alignment with the EN 15804 standard.



### SELECTION OF ENVIRONMENTAL IMPACTS

	Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
<b>Global warming</b>	<b>1.04E+00</b>	<b>kgCO2 eq.</b>	1.02E+00	<b>97%</b>	1.68E-02	<b>2%</b>	8.46E-04	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	9.51E-03	<b>&lt; 1%</b>
<b>Ozone depletion</b>	<b>4.79E-08</b>	<b>kgCFC-11 eq.</b>	4.76E-08	<b>99%</b>	3.40E-11	<b>&lt; 1%</b>	1.05E-11	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	2.28E-10	<b>&lt; 1%</b>
<b>Acidification of soils and water</b>	<b>2.71E-03</b>	<b>kgSO2 eq.</b>	2.60E-03	<b>96%</b>	7.55E-05	<b>3%</b>	3.87E-06	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	3.65E-05	<b>1%</b>
<b>Water eutrophication</b>	<b>7.81E-04</b>	<b>kg(P04)3- eq.</b>	7.16E-04	<b>92%</b>	1.74E-05	<b>2%</b>	4.23E-06	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	4.34E-05	<b>6%</b>
<b>Photochemical ozone formation</b>	<b>2.37E-04</b>	<b>kgC2H4 eq.</b>	2.28E-04	<b>96%</b>	5.36E-06	<b>2%</b>	2.80E-07	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	2.84E-06	<b>1%</b>
<b>Depletion of abiotic resources - elements</b>	<b>4.62E-06</b>	<b>kgSb eq.</b>	4.61E-06	<b>100%</b>	6.73E-10	<b>&lt; 1%</b>	4.20E-11	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	5.95E-10	<b>&lt; 1%</b>
<b>Total use of primary energy</b>	<b>1.38E+01</b>	<b>MJ</b>	1.35E+01	<b>98%</b>	2.25E-01	<b>2%</b>	1.05E-02	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	1.02E-01	<b>&lt; 1%</b>
<b>Net use of fresh water</b>	<b>1.29E-02</b>	<b>m3</b>	1.29E-02	<b>100%</b>	1.50E-06	<b>&lt; 1%</b>	4.07E-07	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	7.89E-06	<b>&lt; 1%</b>
<b>Depletion of abiotic resources - fossil fuels</b>	<b>1.30E+01</b>	<b>MJ</b>	1.26E+01	<b>97%</b>	2.36E-01	<b>2%</b>	1.19E-02	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	1.35E-01	<b>1%</b>
<b>Water pollution</b>	<b>2.28E+01</b>	<b>m3</b>	1.89E+01	<b>83%</b>	2.76E+00	<b>12%</b>	1.20E-01	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	1.10E+00	<b>5%</b>
<b>Air pollution</b>	<b>7.75E+01</b>	<b>m3</b>	7.57E+01	<b>98%</b>	6.89E-01	<b>&lt; 1%</b>	1.05E-01	<b>&lt; 1%</b>	0.00E+00	<b>0%</b>	1.08E+00	<b>1%</b>

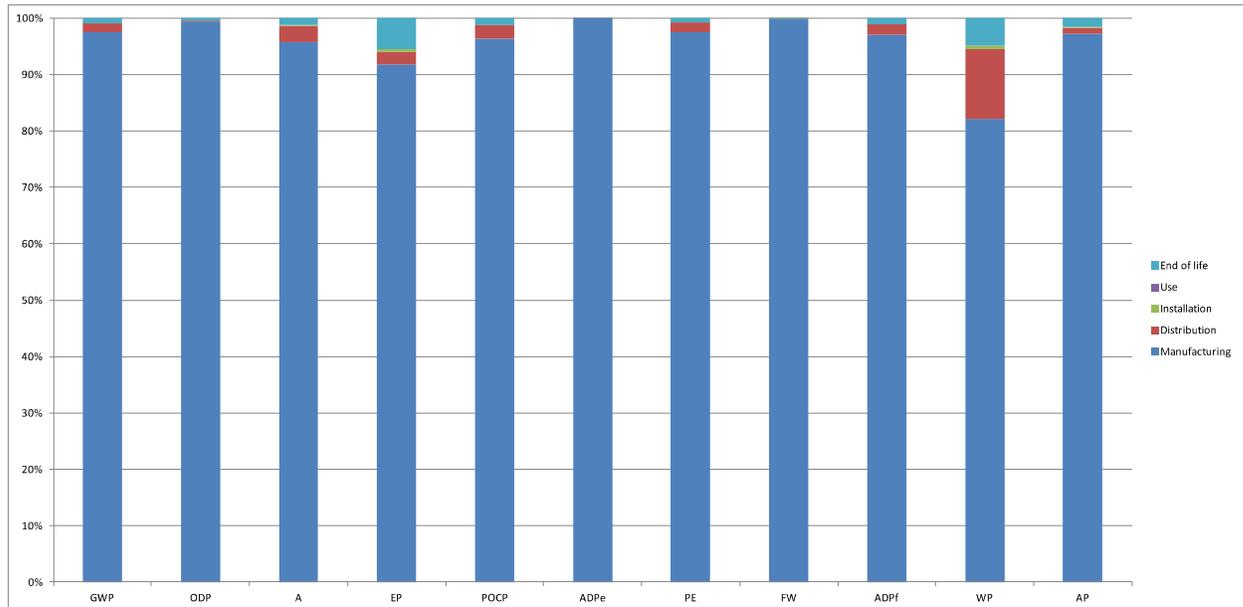
The values of the 27 impacts defined in the PCR-ed3-EN-2015 04 02 are available in the digital database of pep-ecopassport.org website.

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## % ENVIRONMENTAL IMPACT PER LIFE CYCLE STAGE OF REFERENCE PRODUCT



For products covered by this PEP other than the Reference Product, the environmental impacts can be determined for each life cycle phase by following the rules provided below.

**Distribution & Installation Phases:** These phases represent a very low percentage of the total impacts, and the calculation done with the reference product was for the worst case scenario (5 gang wallplate). The impacts for these phases of each of the products concerned will be the same as the reference product.

**Use Phase:** The Use phase is the same for all products covered in this PEP.

**Manufacturing & End of Life Phases:** The impacts for these phases are proportional to the mass of the product alone without packaging in comparison to the mass of the reference product. If the mass of the product concerned was half the mass of the reference product, then the impacts for these phases would also be half the value of the impacts of the reference product.

Registration N°: LGRP-00331-V01.01-EN	Drafting rules: PEP-PCR-ed3-EN-2015 04 02
Verifier accreditation N°: VH02	Information and reference documents : <a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Date of issue: 11-2017	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	

