

# Product Environmental Profile

## FLEXIBLE CONDUITS

high impact with draw wire (ICTA 3422)



### 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

<b>Function</b>	Accommodate and protect the wiring along 1 meter for a reference service life of 20 years. The embedded flexible conduit system with cross-section 51 mm <sup>2</sup> includes the profile and accessories that are representative of standard use.
<b>Reference Product</b>	
	Cat.No 6 512 20
	ICTA 3422 Ø20.

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:

<b>Catalogue Numbers</b>
the total ICTA 3422 product range as presented in all relevant catalogues (Ø16 to Ø63) - list available on request from the customer service.

# Product Environmental Profile

## FLEXIBLE CONDUITS

high impact with draw wire (ICTA 3422)



### ■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It contains no 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.

<b>Total weight of Reference Product</b>		<b>65 g (with unit packaging)</b>			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PP	90.5 %	Steel	6.1 %		
PE	2.1 %				
PET	0.3 %				
				<b>Packaging as % of weight</b>	
				PE (packaging)	0.7 %
				PP (packaging)	0.2 %
<b>Total plastics</b>	<b>92.9 %</b>	<b>Total metals</b>	<b>6.1 %</b>	<b>Total other and packaging</b>	<b>0.9 %</b>

Estimated recycled material content: 3 % by mass.



### ■ MANUFACTURE

This Reference Product comes from a site that has 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 1263 km by road and 6650 km by sea from our warehouse to the local point of distribution into the market all around the world.

Packaging is compliant with applicable regulation. At the packaging end of life, its recyclability rate is of 100 % (in % of packaging weight).



### ■ 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.

# Product Environmental Profile

## FLEXIBLE CONDUITS

high impact with draw wire (ICTA 3422)



### 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 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 electrical and electronic products.

Separated into:

- plastic materials (excluding packaging) : 88 %
- metal materials (excluding packaging) : 6 %
- other materials (excluding packaging) : 0 %
- packaging (all types of materials) : 1 %



### 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.

The following modelling elements were taken into account:

<b>Manufacture</b>	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.
<b>Distribution</b>	Transport between the last Group distribution centre and an average delivery to the sales area.
<b>Installation</b>	Installation components not delivered with the product are not taken into account.
<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: embedded flexible conduit.</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: FRANCE ; Electricity Mix ; AC ; consumption mix, at consumer ; 230 V - 2002</li> </ul>
<b>End of life</b>	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.
<b>Software used</b>	EIME V5 and its database «Legrand-2012-10-31 version 3» made from the database «CODDE-2012-07»

# Product Environmental Profile

## FLEXIBLE CONDUITS

high impact with draw wire (ICTA 3422)



### ENVIRONMENTAL IMPACTS (continued)

		Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
Mandatory indicators	Global warming	2,15E+02	g~CO <sub>2</sub> eq.	1,97E+02	92 %	1,31E+01	6 %	0,00E+00	0 %	0,00E+00	0 %	4,91E+00	2 %
	Ozone depletion	1,98E-05	g~CFC-11 eq.	9,47E-06	48 %	6,90E-06	35 %	0,00E+00	0 %	0,00E+00	0 %	3,48E-06	18 %
	Water eutrophication	1,01E-02	g~PO <sub>4</sub> <sup>3-</sup> eq.	9,81E-03	98 %	1,62E-04	2 %	0,00E+00	0 %	0,00E+00	0 %	8,19E-05	< 1 %
	Photochemical ozone creation	1,30E-01	g~C <sub>2</sub> H <sub>4</sub> eq.	1,17E-01	90 %	8,51E-03	7 %	0,00E+00	0 %	0,00E+00	0 %	4,27E-03	3 %
	Air acidification	2,75E-02	g~H <sup>+</sup> eq.	2,27E-02	82 %	4,19E-03	15 %	0,00E+00	0 %	0,00E+00	0 %	6,50E-04	2 %
	Total energy depletion	5,72E+00	MJ	5,54E+00	97 %	1,23E-01	2 %	0,00E+00	0 %	0,00E+00	0 %	6,22E-02	1 %
	Water depletion	1,41E+01	dm <sup>3</sup>	1,41E+01	100 %	1,17E-02	< 1 %	0,00E+00	0 %	0,00E+00	0 %	5,90E-03	< 1 %

Optional indicators	Raw material depletion	1,17E-14	year <sup>-1</sup>	1,17E-14	100 %	1,68E-19	< 1 %	0,00E+00	0 %	0,00E+00	0 %	8,48E-20	< 1 %
	Air toxicity	3,61E+04	m <sup>3</sup>	2,96E+04	82 %	5,54E+03	15 %	0,00E+00	0 %	0,00E+00	0 %	9,62E+02	3 %
	Water toxicity	3,33E-02	m <sup>3</sup>	3,12E-02	94 %	1,36E-03	4 %	0,00E+00	0 %	0,00E+00	0 %	6,86E-04	2 %
	Hazardous waste production	1,36E-03	kg	1,35E-03	100 %	3,68E-06	< 1 %	0,00E+00	0 %	0,00E+00	0 %	1,83E-06	< 1 %

The environmental impacts of the Reference Product are representative of the products covered by the PEP, which therefore constitute a homogeneous environmental family. The environmental impact of a product, different of the Reference Product, can be estimated by weighting the environmental impacts of the Reference Product by the corresponding factor (see table below).

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.

Designation	Correction factor to apply to each indicators, for each life cycle steps or to the total life cycle
ICTA 3422 ø16	0.78
<b>ICTA 3422 ø20</b>	<b>1.00</b>
ICTA 3422 ø25	1.32
ICTA 3422 ø32	1.71
ICTA 3422 ø40	2.26
ICTA 3422 ø50	3.01
ICTA 3422 ø63	4.38

Registration number: LGRP-2015-112-V1-EN	Drafting rule: PCR : PEP-PCR-ed 2.1-FR-2012 12 11 supplemented by PSR : PSR-0003-ed1-EN- 2012 02 02
Authorisation number of checker: VH02	Programme information: <a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
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	

