

# Product Environmental Profile

## Cable LCS3 S/FTP F/FTP U/UTP Category 6A



### 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.

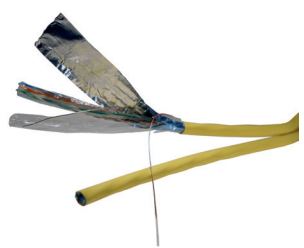
**• Involve the environment in product design and provide informations in compliance with ISO 14025**

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><b>Function</b></p>	<p>To transmit one communication signal on 1m according to Ethernet 10G - BP = 500 MHz protocol, category 6A, during 10 years and a 25% use rate in accordance with the standards in force ISO/IEC 14763-2 : 2019 and EN 50174-2 : 2018 Lifetime and use rate correspond to the application Building - LAN : Commercial as defined in the table given in Appendix 6.1. of the specific rules for wire, cables and accessories.</p>
<p><b>Reference Product</b></p>	<div style="text-align: center;">  </div> <p>Cat.No 032878</p> <p>LAN Cable - CAT6A F/UTP - 2x4 Pairs - L 500 m - LSZH.</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><b>Catalogue Numbers</b></p>
<p>• LG-032878 - LG-032787 - LG-032787B - LG-032787N - LG-032798 - LG-032799 - LG-032828 - LG-032838 - LG-032844 - LG-032845 - LG-032846 - LG-032868 - LG-032869 - LG-032778 - LG-032883 - LG-032884 - LG-032887 - LG-033855 - LG-032798B - LG-032799B - LG-032844B - LG-032845B</p>

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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/EU amended by delegated directive (EU) 2015/863, and its amendment 2017/2102/EU.

<b>Total weight of Reference Product</b>	<b>0.16 kg</b> (all packaging included)
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Product alone weight 0.15 kg					
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PE	21.4%	Copper and copper alloys	49.6%		
PP	17.7%	Al	2.8%		
Other plastics	2.1%				
PE (Packaging)	<0.1%				

Packaging (alone) : 0.01 kg					
		steel(packaging)	0.3%	wood(packaging)	5.3%
				Cardboard (Packaging)	0.8%
				Paper (Packaging)	<0.1%

<b>Total plastics : 0.06 kg</b>	<b>41.2 %</b>	<b>Total metals : 0.08 kg</b>	<b>52.7 %</b>	<b>Total others : 0.01 kg</b>	<b>6.1 %</b>
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At the date of edition of this document, the content of recycled material(s) is :

- Product alone (excluding packaging):0% by mass
- Packaging only: 0% 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 3405.9 km by planes and 698.8 km by trucks and 694.4 by boats from our warehouse to the local point of distribution into the market all around the world

Packaging is compliant with applicable regulation



## ■ 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.

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## 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. This product falls within the scope of the WEEE directive (2012/19/EU). Therefore it must be processed through local WEEE recycling/recovery channels.

**Extended producer responsibility:**

In France, the sale of products covered by the field of application of the European Directive on Waste Electronic and Electrical Equipment (WEEE) is subject to a contribution to a certified eco-organisation.



## 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:

<b>System Limit</b>	<b>Manufacture A1-A3</b>	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
	<b>Distribution A4</b>	Transport between the last Group distribution centre and an average delivery point in the sales area.
	<b>Installation A5</b>	The end of life of the packaging.
	<b>Use B1-B7</b>	<ul style="list-style-type: none"> <li>Product category: Communication and data wires and cables.</li> <li>Use scenario: non-continuous operation for 10 years of working life, during 25% of the time (for building LAN tertiary applications) 2.728 mW/m (2x4 pairs) of energy losses (determined by standard for 10G Ethernet Cat6A). This modelling duration does not constitute a minimum durability requirement..</li> <li>Energy model: Electricity Mix_Low voltage_2018_China_CN - 2018.</li> </ul>
	<b>End of life C1-C4</b>	Choice of end-of-life by default model for PCR-ed4-EN-2021 09 06.
<b>D Module</b>	Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario. It expresses the net benefits and burdens beyond the boundaries of the system, and are not to be included in the life cycle totals.	
<b>Software and data-base used</b>	The indicators set used is « Indicators for PEF EF 3.0 (compliance: PEF ed.4, EN15804+A2) v2.0 » EIME V6 & its database CODDE-2023-02	

Unless otherwise indicated the modelling energetic mix are those integrated in the data modules used from the aforementioned database.

For products covered by the PEP other than the Reference product, the environmental impacts of each phase of the lifecycle are calculated with :

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### ENVIRONMENTAL IMPACTS

	Total Life Cycle		Manufacturing	Distribution	Installation	Use <sup>(1)</sup>			End of Life	Module D
			A1-A3	A4	A5	Total B1-B7	B2	B6	C1-C4	
Climate change - total	1.03E+01	kg CO <sub>2</sub> eq.	8.93E+00	1.14E+00	0*	5.22E-02	0*	5.22E-02	1.43E-01	-1.68E-01
Climate change - fossil fuels	9.55E+00	kg CO <sub>2</sub> eq.	8.23E+00	1.14E+00	0*	5.21E-02	0*	5.21E-02	1.34E-01	-1.58E-01
Climate change - biogenics	7.12E-01	kg CO <sub>2</sub> eq.	7.02E-01	0*	0*	0*	0*	0*	9.69E-03	-9.88E-03
Climate change - land use and land use transformation	1.11E-06	kg CO <sub>2</sub> eq.	9.14E-07	0*	0*	0*	0*	0*	1.93E-07	0.00E+00
Ozone depletion	3.48E-07	kg CFC-11 eq.	3.39E-07	1.33E-09	0*	2.98E-10	0*	2.98E-10	7.42E-09	-3.75E-08
Acidification (AP)	6.06E-02	mole of H <sup>+</sup> eq.	5.43E-02	4.81E-03	0*	3.90E-04	0*	3.90E-04	1.08E-03	-8.29E-03
Freshwater eutrophication	3.72E-04	kg P eq.	6.57E-05	4.03E-07	0*	0*	0*	0*	3.06E-04	-5.58E-07
Marine aquatic eutrophication	7.78E-03	kg of N eq.	5.49E-03	2.15E-03	3.10E-06	4.17E-05	0*	4.17E-05	9.98E-05	-1.59E-04
Terrestrial eutrophication	8.55E-02	mole of N eq.	5.99E-02	2.36E-02	3.22E-05	4.73E-04	0*	4.73E-04	1.46E-03	-1.84E-03
Photochemical ozone formation	2.44E-02	kg NMVOC eq.	1.82E-02	5.77E-03	7.50E-06	1.39E-04	0*	1.39E-04	3.21E-04	-1.03E-03
Depletion of abiotic resources - elements	1.35E-04	kg Sb eq.	1.27E-04	4.50E-08	0*	0*	0*	0*	7.91E-06	-6.27E-05
Depletion of abiotic resources - fossil fuels	1.61E+02	MJ	1.43E+02	1.59E+01	0*	8.43E-01	0*	8.43E-01	9.09E-01	-3.01E+00
Water requirement	3.63E+00	m <sup>3</sup> deprivation worldwide eq.	3.35E+00	4.53E-03	1.02E-03	2.30E-03	0*	2.30E-03	2.77E-01	-3.81E-01
Emission of fine particles	5.39E-07	incidence of diseases	5.01E-07	2.99E-08	0*	2.13E-09	0*	2.13E-09	5.68E-09	-5.03E-08

\* represents less than 0.01% of the total life cycle of the reference flow

(<sup>1</sup>) For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column

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	Total Life Cycle		Manufacturing	Distribution	Installation	Use <sup>(1)</sup>			End of Life	Module D
			A1-A3	A4	A5	Total B1-B7	B2	B6	C1-C4	
<b>Ionizing radiation, human health</b>	<b>3.01E+01</b>	<b>kBq of U235 eq.</b>	3.00E+01	0*	0*	6.19E-03	0*	6.19E-03	1.98E-02	-1.33E+01
<b>Ecotoxicity (fresh water)</b>	<b>9.18E+01</b>	<b>CTUe</b>	6.37E+01	7.43E-01	5.75E-02	9.84E-01	0*	9.84E-01	2.63E+01	-6.91E+00
<b>Human toxicity, carcinogenic effects</b>	<b>1.76E-06</b>	<b>CTUh</b>	1.76E-06	0*	0*	0*	0*	0*	3.04E-10	-8.88E-07
<b>Human toxicity, non-carcinogenic effects</b>	<b>2.84E-07</b>	<b>CTUh</b>	2.59E-07	9.11E-10	0*	3.80E-10	0*	3.80E-10	2.33E-08	-1.07E-07
<b>Impacts related to land use/soil quality</b>	<b>3.36E+00</b>	<b>-</b>	2.40E+00	0*	0*	0*	0*	0*	9.56E-01	0.00E+00
<b>Use of renewable primary energy, excluding renewable primary energy resources used as raw materials</b>	<b>1.99E+01</b>	<b>MJ</b>	1.96E+01	1.79E-02	0*	8.92E-02	0*	8.92E-02	2.33E-01	-2.34E-01
<b>Use of renewable primary energy resources used as raw materials</b>	<b>3.12E-01</b>	<b>MJ</b>	3.12E-01	0*	0*	0*	0*	0*	0*	0.00E+00
<b>Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)</b>	<b>2.02E+01</b>	<b>MJ</b>	1.99E+01	1.79E-02	0*	8.92E-02	0*	8.92E-02	2.33E-01	-2.34E-01
<b>Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials</b>	<b>1.58E+02</b>	<b>MJ</b>	1.40E+02	1.59E+01	0*	8.43E-01	0*	8.43E-01	9.09E-01	-2.77E+00
<b>Use of non-renewable primary energy resources used as raw materials</b>	<b>3.11E+00</b>	<b>MJ</b>	3.11E+00	0*	0*	0*	0*	0*	0*	-2.40E-01
<b>Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)</b>	<b>1.61E+02</b>	<b>MJ</b>	1.43E+02	1.59E+01	0*	8.43E-01	0*	8.43E-01	9.09E-01	-3.01E+00

\* represents less than 0.01% of the total life cycle of the reference flow

(<sup>1</sup>) For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column

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## Cable LCS3 S/FTP F/FTP U/UTP Category 6A



	Total Life Cycle		Manufacturing	Distribution	Installation	Use <sup>(1)</sup>			End of Life	Module D
			A1-A3	A4	A5	Total B1-B7	B2	B6	C1-C4	
Use of secondary materials	0.00E+00	kg	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Use of renewable secondary fuels	0.00E+00	MJ	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Use of non-renewable secondary fuels	0.00E+00	MJ	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Net use of fresh water	8.46E-02	m <sup>3</sup>	7.79E-02	1.06E-04	2.38E-05	5.36E-05	0*	5.36E-05	6.45E-03	-8.86E-03
Hazardous waste disposed of	1.16E+01	kg	1.15E+01	0*	0*	1.58E-03	0*	1.58E-03	1.16E-01	-5.76E+00
Non-hazardous waste disposed of	2.80E+01	kg	2.81E+01	3.38E-02	7.72E-03	9.08E-03	0*	9.08E-03	0*	-8.61E-02
Radioactive waste disposed of	1.86E-02	kg	1.86E-02	2.16E-05	0*	0*	0*	0*	1.87E-05	-7.10E-05
Components for re-use	0.00E+00	kg	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Materials for recycling	6.67E-02	kg	1.11E-02	0*	0*	0*	0*	0*	5.56E-02	0.00E+00
Materials for energy recovery	0.00E+00	MJ by energy vector	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Exported energy	0.00E+00	MJ	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Total use of primary energy during the life cycle	1.81E+02	MJ	1.63E+02	1.60E+01	0*	9.33E-01	0*	9.33E-01	1.14E+00	-3.25E+00

Biogenic carbon content of the product	0.00E+00	kg of C	0*	0*	0*	0*	0*	0*	0*	0.00E+00
Biogenic carbon content of the associated packaging	3.63E-03	kg of C	3.63E-03	0*	0*	0*	0*	0*	0*	0.00E+00

For biogenic carbon storage, the methodology use is 0/0

\* represents less than 0.01% of the total life cycle of the reference flow

(1) For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column

The values of the indicators defined in the PCR-ed4-EN-2021 09 06 are available in the digital database of pep-ecopassport.org website.

For all products concerned (see § «products concerned»), take these impacts values.

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References	Designation	coef to apply per phase of the life cycle					
		total Life Cycle	Manufacturing [A1-A3]	Distribution [A4]	Installation [A5]	Use [B1-B7]	End of life [C1-C4]
LG-032878	Cable category 6A F/UTP 2x4 pairs LSZH 500 meters	1.0	1.0	1.0	1.0	1.0	1.0
LG-032787	Cable category 6A U/UTP 4 pairs LSZH 500 meters	1.0	1.0	1.0	1.0	0.5	0.6
LG-032787B	Cable category 6A U/UTP 4 pairs LSZH 500 meters	1.0	1.0	1.0	1.0	0.5	0.6
LG-032787N	Cable RJ45 category 6A U/UTP 4 paires LSZH 305 meters	1.0	1.0	1.0	1.0	0.3	0.6
LG-032798	Cable category 6A F/FTP 2x4 pairs LSZH 500 meters	1.5	1.5	1.5	1.5	1.0	1.0
LG-032799	Cable category 6A F/FTP 4 pairs LSZH 500 meters	0.3	0.3	0.3	0.3	0.5	0.5
LG-032828	Cable category 6A U/UTP 4 pairs LSZH Cca 500 meters	0.5	0.5	0.5	0.5	0.5	0.6
LG-032838	Cable category 6A U/UTP 4 pairs LSZH B2ca 500 meters	0.5	0.5	0.5	0.5	0.5	0.6
LG-032844	Cable category 6A U/FTP 4 paires LSZH Dca 500 metres	0.3	0.3	0.3	0.3	0.5	0.5
LG-032845	Cable category 6A U/FTP 2 x 4 paires LSZH Dca 500 metres	1.0	1.0	1.0	1.0	1.0	0.9
LG-032846	Cable category 6A U/FTP LSZH B2CA	0.5	0.5	0.5	0.5	0.5	0.5
LG-032868	Cable category 6A S/FTP 4 pairs LSZH advanced fire resistant 500 meters	0.3	0.3	0.3	0.3	0.5	0.6
LG-032869	Cable category 6A F/UTP 4 pairs LSZH advanced fire resistant 500 meters	0.5	0.5	0.5	0.5	0.5	0.6
LG-032778	Cable category 6A F/UTP 4 pairs LSZH 500 meters	0.5	0.5	0.5	0.5	0.5	0.6
LG-032883	Cable category 6A F/FTP 4 pairs LSZH Cca 500 meters	0.3	0.3	0.3	0.3	0.5	0.6
LG-032884	Cable category 6A U/FTP 4 pairs LSZH 500 meters	0.4	0.3	0.3	0.3	0.5	0.6
LG-032887	Cable category 6A F/UTP 4 pairs LSZH anatel	0.5	0.5	0.5	0.5	0.5	0.6
LG-033855	Cable category 6A F/UTP 4 pairs LSZH 500 meters	0.3	0.3	0.3	0.3	0.5	0.4
LG-032798B	Cable category 6A F/FTP 2x4 pairs LSZH 500 meters	1.5	1.5	1.5	1.5	1.0	1.0
LG-032799B	Cable category 6A F/FTP 4 pairs LSZH 500 meters	0.3	0.3	0.3	0.3	0.5	0.5
LG-032844B	Cable category 6A U/FTP 4 paires LSZH Dca 500 metres	0.3	0.3	0.3	0.3	0.5	0.5
LG-032845B	Cable category 6A U/FTP 2 x 4 paires LSZH Dca 500 metres	1.0	1.0	1.0	1.0	1.0	0.9

Registration number: <b>LGRP-01411-V02.01-EN</b>	Drafting rules: <b>PEP-PCR-ed4-2021 09 06</b> <b>Supplemented by PSR-0001-ed4-2022 11 16</b>
Verifier accreditation N°: <b>VH02</b>	Information and reference documents : <b>www.pep-ecopassport.org</b>
Date of issue: <b>10-2023</b>	Validity period: <b>5 years</b>
<b>Independent verification of the declaration and data, in compliance with ISO 14025 : 2006</b>	
<b>Internal <input checked="" type="checkbox"/></b> <b>External <input type="checkbox"/></b>	
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)	
PEP are compliant with XP C08-100-1 :2016 or EN 50693 :2019	
The elements of the present PEP cannot be compared with elements from another program	
Document in compliance with ISO 14025 : 2006: «Environmental labels and declarations. Type III environmental declarations»	

Environmental data in alignment with EN 15804: 2012 + A2 : 2019