

# Product Environmental Profile

## OCEAN PLASTIC SYSTEM M SCHUKO SOCKET OUTLET





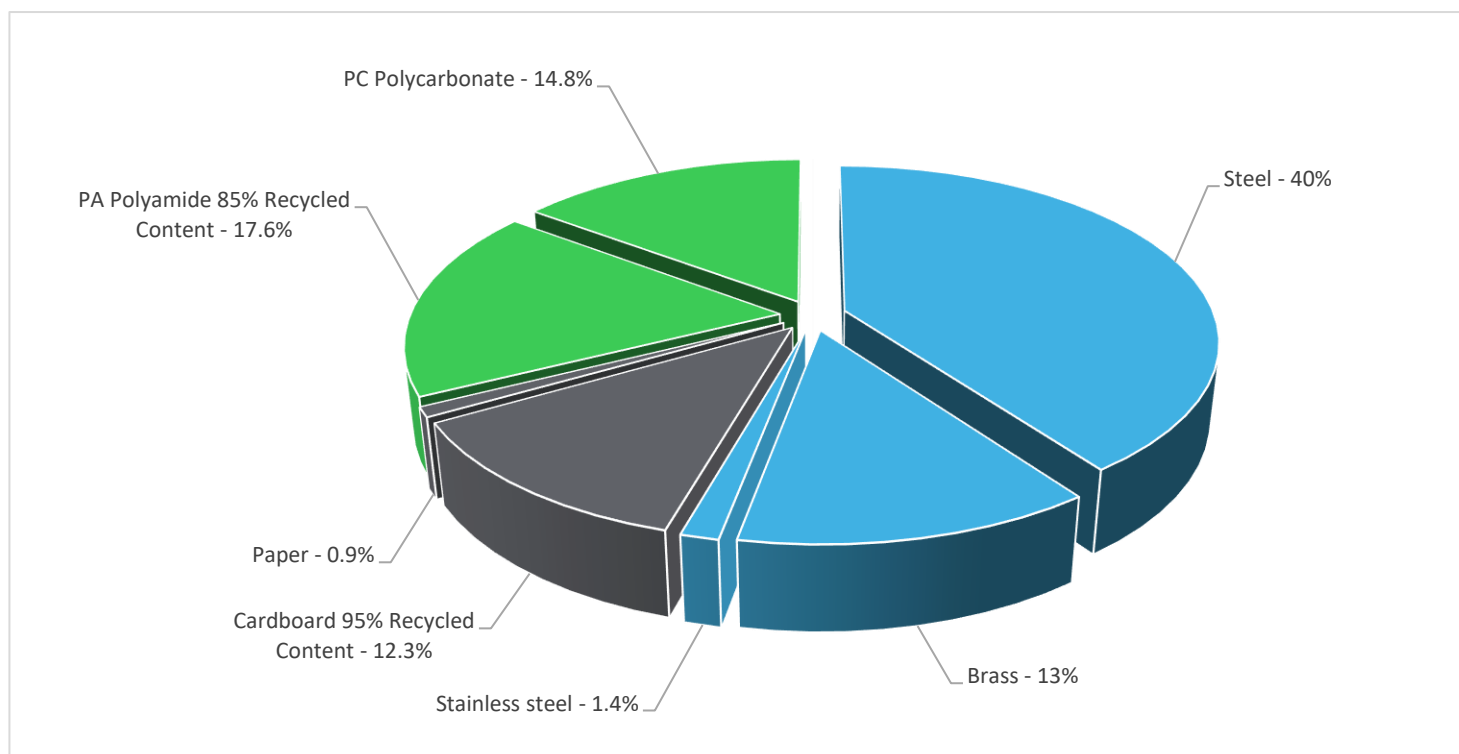
## General information

<b>Representative product</b>	OCEAN PLASTIC SYSTEM M SCHUKO SOCKET OUTLET - MEG2301-0403
<b>Description of the product</b>	The main purpose of the Merten Socket Outlet product is to connect/disconnect the plug of a load protecting user from direct contact.
<b>Description of the range</b>	<p>The indicators values of this Merten Socket Outlet can be extrapolated for other Merten Socket Outlet range of products based on the Mass and Energy values of the products.</p> <p>The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.</p>
<b>Functional unit</b>	Connect/Disconnect during 20 years the plug of a load consuming 16A under a voltage of 250V while protecting the user from direct contact with live parts and with a protection class IP20 in accordance with the standard IEC 60529 and IK03 in accordance with the standard IEC 62262.



## Constituent materials

<b>Reference product mass</b>	87 g	including the product, its packaging.
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Plastics	32.4%
Metals	54.4%
Others	13.2%



## Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 2 January 2013, amended in March 2015, 2015/863/EU and in November 2017, 2017/2102/EU) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers – PBDE), Bis (2-ethylhexyl)phthalate - DEHP, Benzyl butyl phthalate– BBP, Dibutyl phthalate - DBP, Diisobutyl phthalate - DIBP) as mentioned in the Directive.

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>



## Additional environmental information

The OCEAN PLASTIC SYSTEM M SCHUKO SOCKET OUTLET presents the following relevant environmental aspects

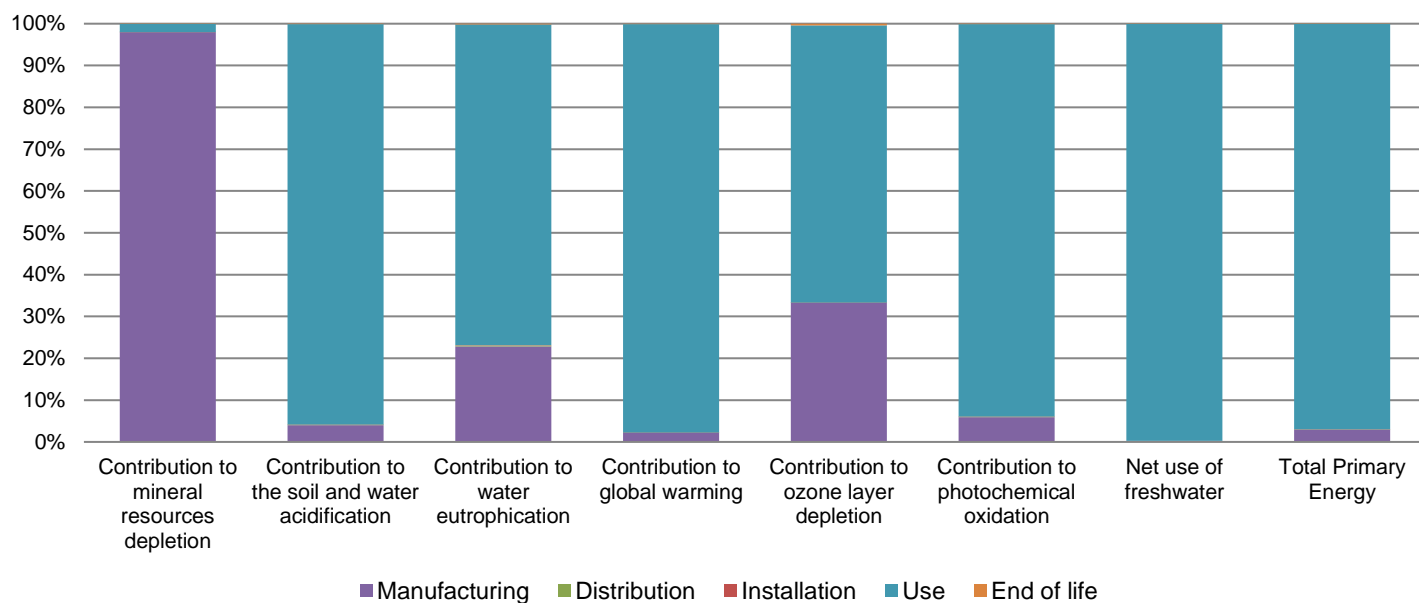
<b>Design</b>	Merten Socket Outlet are made of at least 45% plastic recycled content.
<b>Manufacturing</b>	Manufactured at a Schneider Electric production site ISO14001 certified
<b>Distribution</b>	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 12.1 g, consisting of cardboard (93.15%), paper (6.85%) Packaging recycled materials is 88% of total packaging mass. Product distribution optimised by setting up local distribution centres
<b>Installation</b>	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted during the installation phase (including transport to disposal).
<b>Use</b>	The product does not require special maintenance operations.
<b>End of life</b>	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process.  Recyclability potential: <b>73%</b> Based on Reecyclab tool of ecosystem (for Polyamide) and "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).



## Environmental impacts

Reference life time	20 years			
Product category	Power socket			
Installation elements	No special components needed			
Use scenario	Full load is 0.36 W at worst case scenario. The product is in active mode 50% of the time with a power use of 0.3072W for 20 years			
Geographical representativeness	Germany			
Technological representativeness	The Modules of Technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are Similar and representative of the actual type of technologies used to make the product in production.			
Energy model used	Manufacturing	Installation	Use	End of life
	Manufacturing plant: Wiehl, Germany	Electricity grid mix; AC; consumption mix, at consumer; 230V; DE	Electricity grid mix; AC; consumption mix, at consumer; 230V; DE	Electricity grid mix; AC; consumption mix, at consumer; 230V; DE

Compulsory indicators		OCEAN PLASTIC SYSTEM M SCHUKO SOCKET OUTLET - MEG2301-0403					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	6.57E-05	6.43E-05	0*	0*	1.31E-06	0*
Contribution to the soil and water acidification	kg SO <sub>2</sub> eq	2.80E-02	1.12E-03	4.46E-05	0*	2.68E-02	2.36E-05
Contribution to water eutrophication	kg PO <sub>4</sub> <sup>3-</sup> eq	3.83E-03	8.75E-04	1.03E-05	6.65E-07	2.94E-03	6.60E-06
Contribution to global warming	kg CO <sub>2</sub> eq	1.73E+01	3.84E-01	9.44E-03	0*	1.68E+01	1.26E-02
Contribution to ozone layer depletion	kg CFC11 eq	1.25E-07	4.15E-08	1.91E-11	0*	8.27E-08	5.04E-10
Contribution to photochemical oxidation	kg C <sub>2</sub> H <sub>4</sub> eq	1.89E-03	1.12E-04	3.21E-06	2.04E-07	1.77E-03	2.48E-06
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	4.08E+01	1.08E-01	0*	0*	4.07E+01	0*
Total Primary Energy	MJ	2.85E+02	8.36E+00	1.33E-01	0*	2.77E+02	1.15E-01



Optional indicators		OCEAN PLASTIC SYSTEM M SCHUKO SOCKET OUTLET - MEG2301-0403					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	1.73E+02	4.44E+00	1.33E-01	0*	1.69E+02	9.26E-02
Contribution to air pollution	m³	6.18E+02	1.43E+02	4.34E-01	0*	4.74E+02	8.33E-01
Contribution to water pollution	m³	9.26E+02	3.84E+01	1.55E+00	9.96E-02	8.85E+02	1.00E+00
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1.20E-02	1.20E-02	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	4.03E+01	1.98E-01	0*	0*	4.01E+01	0*
Total use of non-renewable primary energy resources	MJ	2.45E+02	8.17E+00	1.33E-01	0*	2.36E+02	1.15E-01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	4.03E+01	1.51E-01	0*	0*	4.01E+01	0*
Use of renewable primary energy resources used as raw material	MJ	4.78E-02	4.78E-02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	2.44E+02	7.74E+00	1.33E-01	0*	2.36E+02	1.15E-01
Use of non renewable primary energy resources used as raw material	MJ	4.23E-01	4.23E-01	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Waste categories	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	5.02E+00	4.92E+00	0*	0*	4.12E-03	1.01E-01
Non hazardous waste disposed	kg	9.20E+01	4.31E-01	0*	0*	9.16E+01	0*
Radioactive waste disposed	kg	2.79E-02	1.80E-04	0*	0*	2.77E-02	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	7.88E-02	9.04E-03	0*	1.21E-02	0*	5.76E-02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1.72E-03	0*	0*	0*	0*	1.72E-03
Exported Energy	MJ	3.84E-05	3.61E-06	0*	3.47E-05	0*	0*

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

Life cycle assessment performed with EIME version 5.9.3, database version Akulon Plastics 4 in compliance with ISO14044.

The use phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators) except ADPe is mostly in manufacturing phase.

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided upon request.

*Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.*

Registration number	ENVPEP2202015_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	05/2022	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
Independent verification of the declaration and data			
Internal	X	External	
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »			

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