

Product Environmental Profile

OCEAN PLASTIC TWO WAY SWITCH





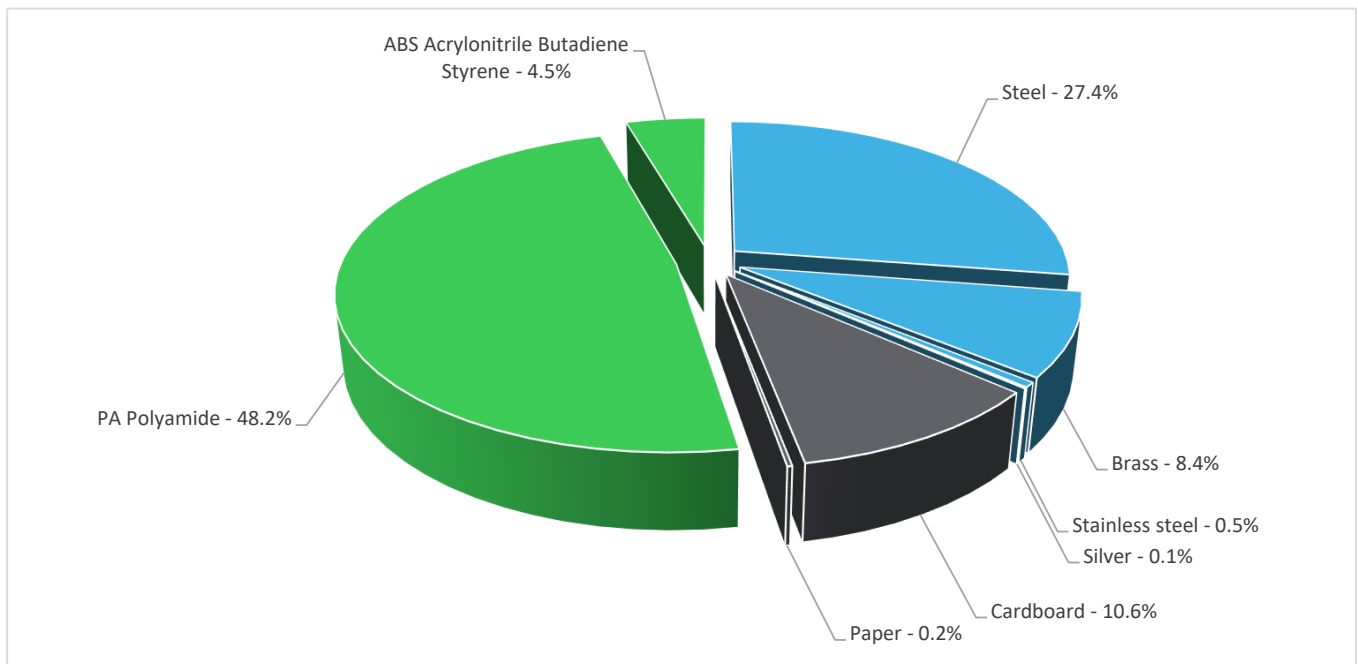
General information

Representative product	OCEAN PLASTIC TWO WAY SWITCH - EKO30004
Description of the product	The main purpose of the Elko Plus Switch product is to give a solution for the control of Electricity.
Functional unit	Establish, support and interrupt for 20 years rated currents in normal conditions of circuit characterized by the current 16A, including any conditions specified for overload in operation characterized by the current 16A, for the operating voltage 250V for a specified time with IP20 protection in accordance with the standard IEC 60529.



Constituent materials

Reference product mass	107.8 g including the product, its packaging.
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Plastics	52.7%
Metals	36.4%
Others	10.8%



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

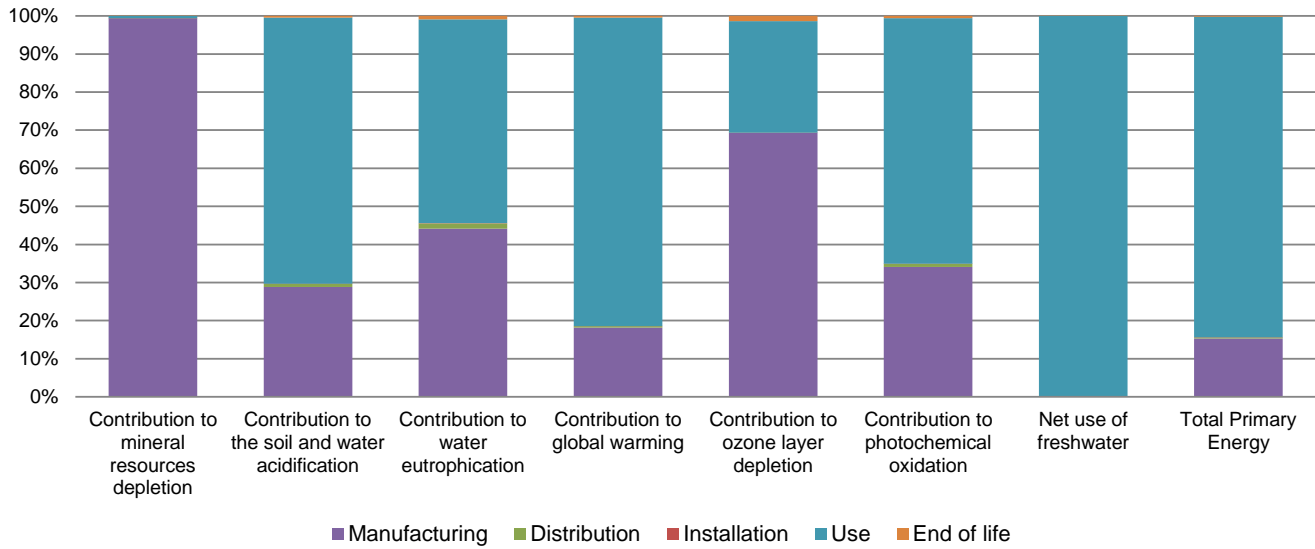
The OCEAN PLASTIC TWO WAY SWITCH presents the following relevant environmental aspects

Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 11.6 g, consisting of cardboard (98.27%), paper (1.73%) Product distribution optimised by setting up local distribution centres
Installation	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).
Use	The product does not require special maintenance operations.
End of life	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: 40% Based on "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	Switches			
Installation elements	No special components needed			
Use scenario	The product is in active mode 30% of the time with a power use of 0.09W and in OFF mode 70% of the time with a power use of 0.0W, for 20 years			
Geographical representativeness	Nordic (Norway/Sweden/Finland)			
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: Merten, 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 TWO WAY SWITCH - EKO30004					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	4.17E-05	4.14E-05	0*	0*	2.31E-07	0*
Contribution to the soil and water acidification	kg SO ₂ eq	6.74E-03	1.94E-03	5.79E-05	2.62E-06	4.71E-03	2.93E-05
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	9.66E-04	4.27E-04	1.33E-05	6.36E-07	5.17E-04	8.51E-06
Contribution to global warming	kg CO ₂ eq	3.66E+00	6.66E-01	1.29E-02	6.28E-04	2.96E+00	1.70E-02
Contribution to ozone layer depletion	kg CFC11 eq	4.96E-08	3.43E-08	2.61E-11	0*	1.45E-08	6.75E-10
Contribution to photochemical oxidation	kg C ₂ H ₄ eq	4.83E-04	1.65E-04	4.11E-06	1.96E-07	3.11E-04	3.02E-06
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m ³	7.15E+00	3.64E-03	0*	0*	7.15E+00	0*
Total Primary Energy	MJ	5.78E+01	8.86E+00	1.82E-01	8.20E-03	4.86E+01	1.41E-01



Optional indicators		OCEAN PLASTIC TWO WAY SWITCH - EKO30004						
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Contribution to fossil resources depletion	MJ	3.36E+01	3.67E+00	1.81E-01	8.14E-03	2.96E+01	1.13E-01	
Contribution to air pollution	m³	1.85E+02	1.00E+02	5.28E-01	2.50E-02	8.33E+01	1.03E+00	
Contribution to water pollution	m³	4.42E+02	2.83E+02	2.12E+00	9.52E-02	1.56E+02	1.27E+00	
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Use of secondary material	kg	2.14E-02	2.14E-02	0*	0*	0*	0*	
Total use of renewable primary energy resources	MJ	7.20E+00	1.48E-01	0*	0*	7.06E+00	0*	
Total use of non-renewable primary energy resources	MJ	5.06E+01	8.71E+00	1.82E-01	8.19E-03	4.16E+01	1.41E-01	
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	7.17E+00	1.11E-01	0*	0*	7.06E+00	0*	
Use of renewable primary energy resources used as raw material	MJ	3.74E-02	3.74E-02	0*	0*	0*	0*	
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	4.90E+01	7.10E+00	1.82E-01	8.19E-03	4.16E+01	1.41E-01	
Use of non renewable primary energy resources used as raw material	MJ	1.61E+00	1.61E+00	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	1.43E+00	1.28E+00	0*	0*	7.24E-04	1.54E-01	
Non hazardous waste disposed	kg	1.65E+01	3.59E-01	0*	0*	1.61E+01	0*	
Radioactive waste disposed	kg	5.07E-03	1.97E-04	0*	0*	4.87E-03	6.86E-07	
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life	
Materials for recycling	kg	6.03E-02	1.06E-02	0*	1.15E-02	0*	3.82E-02	
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*	
Materials for energy recovery	kg	2.64E-03	0*	0*	0*	0*	2.64E-03	
Exported Energy	MJ	3.67E-05	3.45E-06	0*	3.32E-05	0*	0*	

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

Life cycle assessment performed with EIME version EIME v5.9.1, database version 2016-11 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 one indicator ADPe & ODP is mostly in manufacturing phase.

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	ENVPEP2109005_V1	Drafting rules	PCR-ed3-EN-2015 04 02
Date of issue	10/2021	Supplemented by	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	Information and reference documents	www.pep-ecopassport.org
<i>Independent verification of the declaration and data</i>			
Internal	X	External	
<i>The elements of the present PEP cannot be compared with elements from another program.</i>			
<i>Document in compliance with ISO 14021:2016 « Environmental labels and declarations - Self-declared environmental claims (Type II environmental labelling) »</i>			

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