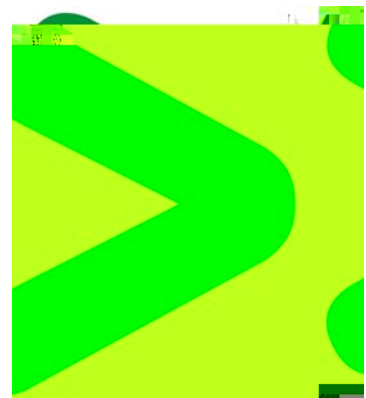


Product Environmental Profile

Harmony™ 9001SKS Non Illuminated
Selector Switch & 9001SK Illuminated
Selector Switch



Product Environmental Profile - PEP

Product overview

The main purpose of the 9001SKS Non illuminated and 9001SK Illuminated selector switch range is to initiate an action on a machine while viewing an operating state.

This range consists of: a selector operator with a standard/extended/coin operated knob with or without contact blocks, can be added a light module to convert to an Illuminated operator . In the case that light module and contact blocks are included, to know the environmental impacts, use the present PEP and add the impacts described on contact block subassembly PEP and the impacts from the light module subassembly PEP.

This switch head is designed for mounting in 30mm diameter holes.

The representative product used for the analysis is 9001SKS11B.

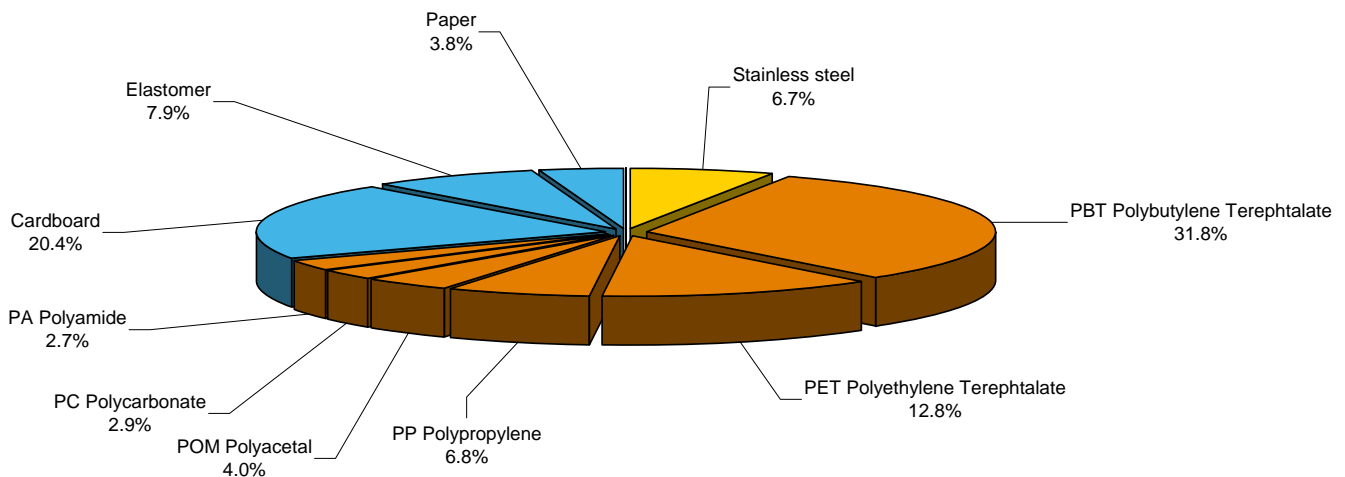
The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.

The environmental analysis was performed in conformity with ISO 14040.

Constituent materials

The mass of the product range is from 59 g and 63 g including packaging. It is 56 g for the 9001SKS11B.

The constituent materials are distributed as follows:



Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2002/95/EC of 27 January 2003) 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) as mentioned in the Directive

Manufacturing

The 9001SKS Non illuminated and the 9001SK Illuminated selector switch product range is manufactured at a Schneider Electric production site on which an ISO14001 certified environmental management system has been established.

Distribution

The weight and volume of the packaging have been optimized, based on the European Union's packaging directive.

The 9001SKS11B packaging weight is 13.8 g. It consists of cardboard and paper.

Use

The products of the 9001SKS Non illuminated and 9001SK Illuminated selector switch range do not generate environmental pollution (noise, emissions) requiring special precautionary measures in standard use.

The products from 9001SKS Non illuminated and 9001SK Illuminated selector switch range don't need any electrical power consumption and maintenance operation.

Product Environmental Profile - PEP

End of life

At end of life, the products in the 9001SKS Non illuminated and 9001SK Illuminated selector switch range have been optimized to decrease the amount of waste and allow recovery of the product components and materials.

This product range doesn't need any special end-of-life treatment. According to countries' practices this product can enter the usual end-of-life treatment process.

The recyclability potential of the products has been evaluated using the "ECO DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

According to this method, the potential recyclability ratio is: 17.9%.

As described in the recyclability calculation method this ratio includes only metals and plastics which have proven industrial recycling processes.

Environmental impacts

Life cycle assessment has been performed on the following life cycle phases: Materials and Manufacturing (M), Distribution (D), Installation (I) Use (U), and End of life (E).

Modelling hypothesis and method:

- The calculation was performed on the 9001SKS11B.

- Product packaging: is included

- Installation components: no special components included.

- Scenario for the Use phase: this product range is included in the category 3 (Enclosure or envelope): (assumed service life is 20 years and use scenario is: not needed to be defined).

End of life impacts are based on a worst case transport distance to the recycling plant (1000km)

Presentation of the product environmental impacts

Environmental indicators	Unit	For 9001SKS11B					
		S = M + D + I + U + E	M	D	I	U	E
Raw Material Depletion	Y-1	5.88E-15	5.88E-15	2.31E-20	0.00	0.00	1.16E-19
Energy Depletion	MJ	5.01E+01	5.00E+01	1.70E-02	0.00	0.00	8.48E-02
Water depletion	dm ³	1.38E+01	1.38E+01	1.61E-03	0.00	0.00	8.05E-03
Global Warming	g _≈ CO ₂	2.72E+03	2.71E+03	1.34	0.00	0.00	6.72
Ozone Depletion	g _≈ CFC-11	6.93E-04	6.87E-04	9.50E-07	0.00	0.00	4.75E-06
Air Toxicity	m ³	6.54E+05	6.53E+05	2.53E+02	0.00	0.00	1.27E+03
Photochemical Ozone Creation	g _≈ C ₂ H ₄	1.38	1.37	1.15E-03	0.00	0.00	5.74E-03
Air acidification	g _≈ H ⁺	5.29E-01	5.28E-01	1.71E-04	0.00	0.00	8.56E-04
Water Toxicity	dm ³	2.23E+03	2.23E+03	1.68E-01	0.00	0.00	8.40E-01
Water Eutrophication	g _≈ PO ₄	6.69E-01	6.69E-01	2.23E-05	0.00	0.00	1.12E-04
Hazardous waste production	kg	4.01E-02	4.01E-02	5.00E-07	0.00	0.00	2.50E-06

Life cycle assessment has been performed with the EIME software (Environmental Impact and Management Explorer), version 4.0, and with its database version 11.0.

The Manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators.

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range: according to the weight of the product.

System approach

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

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.

Product Environmental Profile - PEP

Glossary

Raw Material Depletion (