



# Product Environmental Profile

# **ECOLINE - Socket outlet with USB charger A+C 15W**



# **Company information**

#### Hager

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# **References covered**

GS16019010, GS16009011, GS16019011, GS16009016, GS16019016

A question concerning the Product Environmental Profile: infopep@hager.com

# Methodology

PEP has been performed according to the PCR version PEP–PCR–ed3-2015 04 02 and PSR version PSR-0005-ed2-2016 03 29 issued by the PEP ecopassport program.

For further information, please see the website of the program www.pep-ecopassport.org

### **Reference product**

**Reference product identification** GS16009010

# **Functional unit**

Connect/Disconnect during 20 years of:

- plug with 16A load under a voltage of 230V

- 5V@3A USB A+C charger.

Protection from direct contact with live parts is ensured all over the product life time (IP20 and IK07)

The functional unit is based on the use scenario recommended by the PCR for the category of the reference product.

**PSR product Category :** Sockets

### Materials and substances

All useful measures have been adopted to ensure that the materials used in the composition of the product do not contain any substances banned by the legislation in force at the time of marketing.

Plastics			Meta	ls		Others		
	g	%		g	%		g	%
PA6	90.21	38.8%	Copper	37.04	15.9%	Cardboard + Paper	11.45	4.9%
PA66	31.66	13.6%	Zamak	9.17	3.9%	Glass	4.31	1.9%
PC	17.70	7.6%	Stainless steel	2.90	1.2%	Other	1.42	0.6%
Epoxy resin	3.21	1.4%	Iron	2.80	1.2%	Cardboard + Paper	1.08	0.5%
PBT	2.17	0.9%	Zinc	2.79	1.2%	Titanium dioxide	0.81	0.3%
Other	2.90	1.2%	Other	6.55	2.8%	Other	2.79	1.2%
Total mass of reference	e product :		232.72 g					

### Manufacturing

These products are manufactured by a site that has received an environmental certification ISO 14001.

# **Distribution**

The packaging has been designed in accordance with current regulations. In particular, the European directive 94/62/CE relative to packaging and packaging waste.

The used packaging is 100% recyclable or recoverable.

Packaging and logistic flows are continuously improved in order to reduce their impact.

### Installation

#### Installation processes

The processes to install the product are not considered in this study because of their weak impact compared to the other life cycles steps.

#### Installation elements (non delivered with the product)

Elements non delivered with the product and needed to install the product are not considered.

### Use

For the considered scenario, the product has an average power of 2.500 W in active mode during 50% of the time and 0.060 W in sleep mode during 50% of the time. This corresponds to a total energy consumption of 224.256 kWh for the use span of 20 years.

Energy model of the use phase : Europe Consumables and maintenance : None

### End of life

Considering the complexity and the lack of knowledge of the electric and electronic recycling channel and processes, the standard scenario set in the PCR is considered.

The recycling potential of the product is: 24%. The calculation of this rate is based on the method of the IEC/TR 62635.

### **Environmental impacts**

Evaluation of the environmental impact covers the following life cycle stages: raw materials + manufacturing (RMM), distribution (D), installation (I), use (U) and end of life (EoL).

All calculations are done with EIME software version 5.8.1 with the database version HAGER-CODDE-2018-11 .

PEP representative of the covered products marketed in: Europe

Energy models considered for each phase

Manufacturing	Distribution	Installation	Use	End Of Life
RMM	D	l I	U	EoL
Europe	-	Europe	Europe	Europe

#### **Environmental impact indicators**

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Global Warming	kg CO <sub>2</sub> eq.	3.16E+00	4.05E-02	7.09E-04	1.32E+02	2.40E-02	1.36E+02
Ozone Depletion	kg CFC-11 eq.	5.66E-07	8.21E-11	4.84E-12	3.22E-05	5.55E-10	3.27E-05
Acidification of soil and water	kg SO2 eq	8.06E-03	1.82E-04	3.48E-06	1.00E+00	9.25E-05	1.01E+00
Eutrophication	kg PO₄³⁻ eq.	4.16E-03	4.19E-05	3.75E-06	3.75E-02	1.12E-04	4.18E-02
Photochemical Ozone Creation	kg $C_2H_4$ eq.	5.67E-04	1.29E-05	2.45E-07	4.73E-02	7.18E-06	4.79E-02
Depletion of abiotic resources - elements	kg Sb eq	5.28E-04	1.62E-09	3.08E-11	6.03E-06	1.48E-09	5.34E-04
Depletion of abiotic resources – fossil fuels	MJ	2.10E+01	5.70E-01	9.47E-03	1.36E+03	2.41E-01	1.39E+03
Water Pollution	m³	3.10E+02	6.67E+00	1.10E-01	5.56E+03	2.80E+00	5.88E+03
Air Pollution	m³	2.75E+02	1.66E+00	8.96E-02	5.68E+03	2.66E+00	5.96E+03

#### **Resource use indicators**

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials		1.21E+00	7.64E-04	1.11E-04	1.92E+02	5.95E-03	1.93E+02
Use of renewable primary energy resources as raw materials		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renewable primary energy resources	MJ	1.21E+00	7.64E-04	1.11E-04	1.92E+02	5.95E-03	1.93E+02
Use of non-renewable primary energy, excluding non renewable primary energy resources used as raw materials	MJ	3.03E+01	5.73E-01	9.64E-03	2.49E+03	2.60E-01	2.52E+03
Use of non-renewable primary energy resources as raw materials	MJ	5.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E+00
Total use of non renewable primary energy resources	MJ	3.53E+01	5.73E-01	9.64E-03	2.49E+03	2.60E-01	2.53E+03
Total use of primary energy	MJ	3.65E+01	5.73E-01	9.75E-03	2.68E+03	2.66E-01	2.72E+03
Use of secondary materials	kg	5.78E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.78E-02
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net fresh water use	m³	1.37E-01	3.63E-06	2.21E-07	3.45E-01	1.92E-05	4.83E-01

#### Waste category indicators

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Hazardous waste disposed	kg	9.32E-01	1.44E-03	1.17E-02	4.95E+02	2.42E-01	4.96E+02
Non-hazardous waste disposed	kg	2.79E+00	0.00E+00	2.59E-06	0.00E+00	9.55E-05	2.79E+00
Radioactive waste disposed	kg	3.66E-03	1.03E-06	6.03E-08	4.04E-01	6.93E-06	4.07E-01

#### **Output flow indicators**

Indicators	Unit	Manufacturing RMM	Distribution D	Installation I	Use U	End Of Life EoL	GLOBAL
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

no extrapolation rules entered

### Verification

Registration N°: HAGE-00603-V01.01 EN	Drafting Rules	5 04 02				
Registration N . HAGE-00003-V01.01_EN	Supplemented by PSR-0005-ed2-2016 03 29					
Verifier accreditation N°: VH37	Information and reference documents: www.pep-ecopassp					
Date of issue: 10-2020	Validity period: 5 years					
Independent verification of the declaration and data, in compliance wi	ith ISO 14025 : 2010					
Internal • External o						
The PCR review was conducted by a panel of experts chaired by Phil	ippe Osset (SOLINNEN)					
PEP are compliant with XP C08-100-1:2014 The elements of the present PEP cannot be compared with elements from another program						
Document in compliance with ISO 14025 : 2010 « Environmental labe declarations »	els and declarations. Typ	e III environmental	PASS PORT.			

The picture has no contractual value.

All numerical values indicated in this document may vary and depend of many factors such as the tolerance related to materials, the usage and environment conditions of the products, installation characteristics ..., real values for a product in a concrete application may therefore change.

The usage time mentioned in this document is an average duration chosen for the need of the calculations. This value cannot be assimilated to the minimum, average or real life time. The responsibility of the company, issuing this document, can never be engaged if differences would be noticed between the values given by this document and real ones, whatever the causes and/or consequences would be.