SAUTER Declaration on materials and the environment

Product

HSC120F002

HSC120F012

Type	**HSC 120 F002/F012**	
Designation	**Room humidistat**	
Product range	**On/off controllers**	
Product group of eco-balance	**Sensors**	
Manufacturer	Fr. Sauter AG Im Surinam 55, CH-4058 Basel	
Management system certified according to	**Since**	**With**
	ISO 9001:2015	**10 Oct. 2018**	**SQS**
	ISO 14001:2015	**10 Oct. 2018**	**SQS**
	ISO 45001:2018	**10 Oct. 2018**	**SQS**

Environmentally-compatible product design	Basis	Management system Fr. Sauter AG
	Process	Business process • Product innovation • Ecological accounting

Product description	CE conformity, function, operation, maintenance, servicing	**See PDS 24.013**
Environmental risk	Fire protection according to	**EN 60695-2-11, EN 60695-10-2**
	Fire load	**1,8 MJ**
	Hazardous substances [1] according to	**RoHS 2011/65/EU & 2015/863/EU compliant. Product category 9.**
	Prohibited substances [2] according to	**Regulation (EC) No. 1907/2006 (REACH) compliant**
	Parts containing halogen (causing corrosive smoke)	**None**
	Liquids polluting the aquatic environment	**None**
	Explosive substances	**None**
	Transport hazardous goods class	**None**

Materials

	Weight	Material Safety Data Sheet (MSDS)	EU waste code [3]
Product including packaging	**108,1 g**	Not required	20 01 36
Plastic			
PC	**26,2 g**	Not required	20 01 39
PPS	**54,0 g**	Not required	20 01 39
Metal			
Spring, steel various alloys	**0,5 g**	Not required	20 01 40
Special components			
2K-Gießharz: ISO-CAST A 765 MI	**1,4 g**	Not required	07 02 13
PCBA	**5,2 g**	Not required	16 02 14
Packaging [4]			
Corrugated board PAP 20	**15,9 g**	Not required	20 01 01
Paper PAP 22	**4,9 g**	Not required	20 01 01

Hazardous ingredients

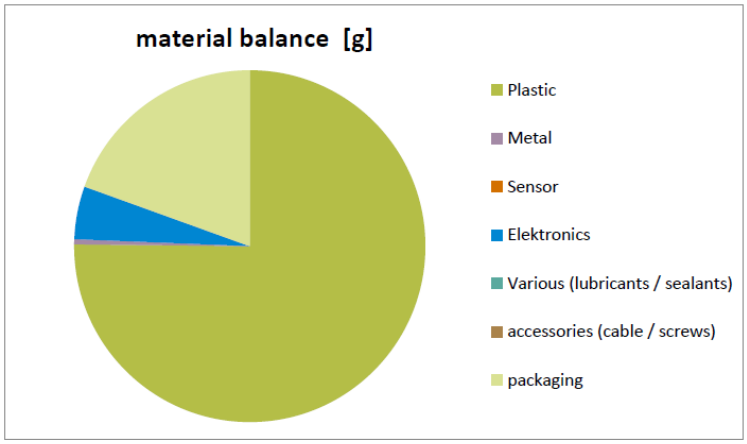
SVHC ingredient		Name of the ingredient	Effective concentration per article, %w/w
CAS number	EN number		

SCIP number will be communicated upon justified request.
Link to ECHA candidate list

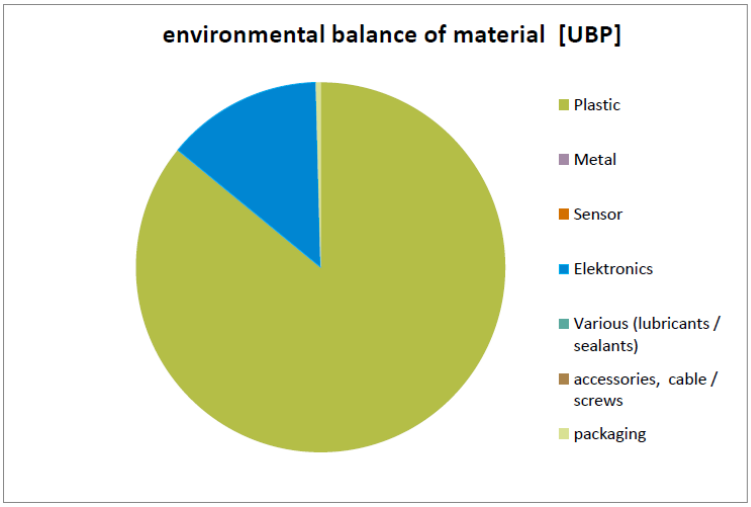
[1] Only applies to electrical devices
[2] SVHC substances >0.1%w/w: see **Hazardous ingredients**
[3] Directive 2008/98/EC, directive (EU) 2018/851
[4] Directive 94/62/EC, 2004/12/EC, 2005/20/EC, 2018/852/EC

Materials balance

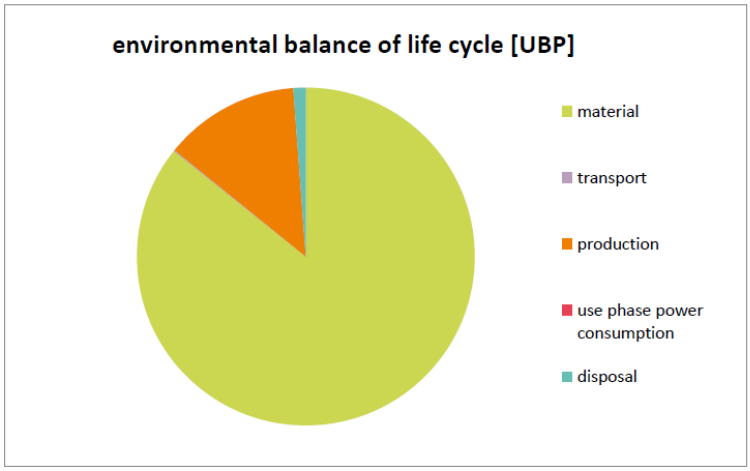
HSC102F002



Material balance	g
Plastic	80,2
Metal	0,5
Sensor	-
Elektronics	5,2
Various (lubricants / sealants)	-
accessories (cable / screws)	-
packaging	20,8
	106,7



environmental balance of material	UBP
Plastic	6.789
Metal	2
Sensor	-
Elektronics	1.079
Various (lubricants / sealants)	-
accessories, cable / screws	-
packaging	33
	7.902



environmental balance of life cycle	UBP
material	7.902
transport	8
production	1.197
use phase power consumption	-
disposal	109
total per piece	**9.216**
total per piece per year (Ecodesign)	**1.317**

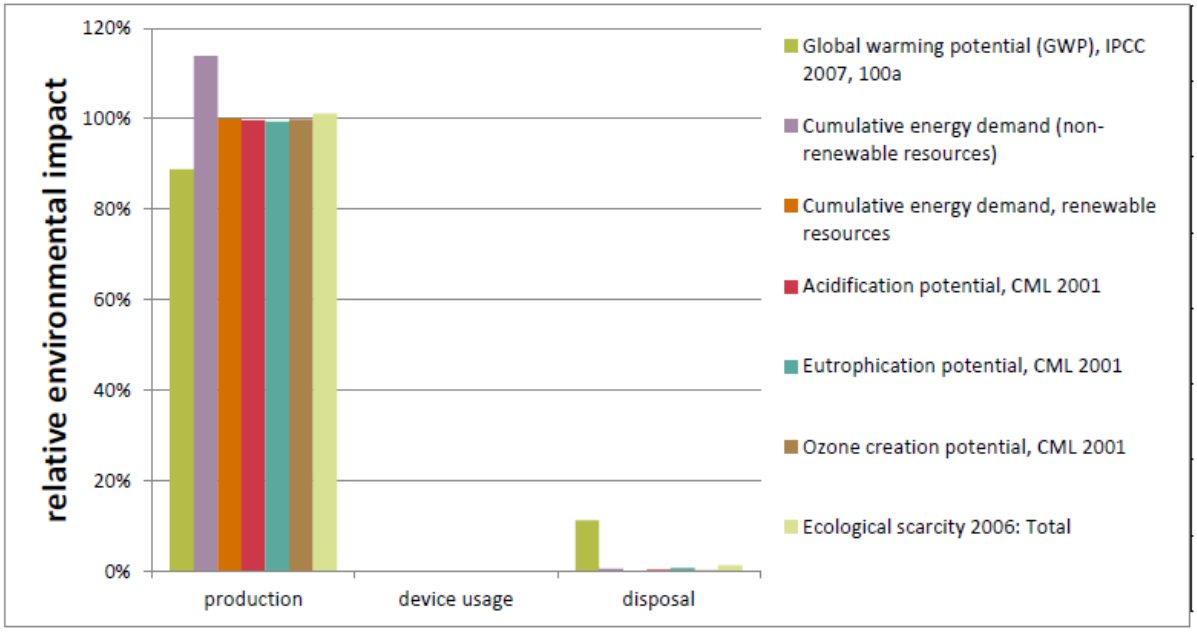
Energy requirement in the utilisation phase

Our hygrostat operates passively, typical energy consumption per year is not applicable.

Calculation of the environmental impact

Evaluation over the entire life stage of 8 years in a typical utilisation scenario. The results shown are based on a method of ecological scarcity that combines various environmental effects into an “environmental impact points” key figure. The method is based on Switzerland’s environmental targets and evaluates the individual effects depending on the “Distance to Target”.

Indikator	unit	production	device usage	disposal	Total
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	1,0	-	0,1	1,1
Cumulative energy demand (non-renewable resources)	MJ eq.	23	-	0,1	20
Cumulative energy demand, renewable resources	MJ eq.	2,0	-	0,00	2
Acidification potential, CML 2001	kg SO2 eq.	1,05E-02	-	3,40E-05	1,05E-02
Eutrophication potential, CML 2001	kg PO4-- eq.	5,74E-03	-	3,65E-05	5,78E-03
Ozone creation potential, CML 2001	kg C2H4 eq.	8,60E-04	-	1,11E-06	8,61E-04
Ecological scarcity 2006: Total	UBP	9.100	-	110	9.000



The relationship of the contributions made by the utilisation in comparison to those made by the reduction and disposal depends on the intensity of the utilisation (utilisation scenario).

Disposal	**Product:** The device must be disposed of as waste from electrical and electronic equipment (electrical/electronic scrap) and must not be disposed of as household waste. This applies in particular to the assembled PCB. Special treatment for special components may be compulsory by law or may make ecological sense. **WEEE** (Waste Electrical and Electronic Equipment) The local and currently valid laws (WEEE2012/19/EU) must be observed. **Packaging:** Recyclable. Any packaging disposal fees are the responsibility of the importer. **Special notes on hazards:** none**.**

How the environment benefits	With these products, we make a significant contribution to energy savings in buildings and the reduction of climate change. With no energy consumption, the primary energy demand is exceptionally low. Its resource-efficient, compact design and easy single-material disassembly, combined with a lifespan of 8 years, ensure optimal sustainability. The environmental footprint is further improved by using energy from renewable sources.
Extent of applicability	This declaration is an environmental declaration based on ISO 14025 and describes the environmental impact of the product over its entire life stage. The declaration is made in a compact form without an external check or registration. The data gathered with existing data inventories for production processes has been evaluated from the ecoinvent 2.2 European database. For the determination of the energy requirement during the utilisation phase of the product, standard HVAC applications and average climatic conditions in Switzerland were assumed, based on the ecological accounting for the corresponding product group.

Disclaimer: This declaration is for information purposes only.

Deviations from the information it contains can occur without notification. Fr. Sauter AG explicitly rules out any liability for any consequences that may result due to the above information.

Your local SAUTER representative will provide further information on environmental aspects, and specifically on disposal.

References

Ecoinvent 2010 ecoinvent data v2.2, Swiss Centre for Life Cycle Inventories, Dübendorf

FOEN 2008 eco-balances: method of ecological scarcity – eco-factors 2006, FOEN