

SAUTER Declaration on materials and the environment

Product



EGT *4*

EGT392F102

Type overview (passive)

EGT346F022 / F102
 EGT347F022 / F102
 EGT348F102
 EGT392F102
 EGT446F012 / F102
 EGT347F012 / F102
 EGT646F102
 EGT647F102

Type overview (active)

EGT346F031
 EGT347F031
 EGT348F031

Designation

Duct temperature sensor

Product range

**Sensors and transducers
 Temperatures (sensors)**

Product group of eco-balance

Controllers and sensors

Manufacturer	Fr. Sauter AG Im Surinam 55, CH-4016 Basel	
Product description	CE conformity	
	Function, operation, maintenance, service	PDS 31.110
Environmental risk	Fire protection according to	EN 60695-2-11, EN 60695-10-2
	Fire load ¹	0.5...1.7 MJ
	Hazardous substances ²	Conforming to RoHS 2011/65/EU
	Banned substances (see link below)	Conforming to REACH 1907/2006/EC
	Parts containing halogen (causing corrosive smoke)	Cable, printed circuit board
	Liquids polluting the aquatic environment	None
	Explosive substances	None
Packaging ³	Minigrip bag Folded cardboard EGT348F102/F031	

¹ See **Remarks** on last page

² Only applies to electrical devices

³ Directive 94/62/EC and follow-on document, ruling 97/129/EC

Materials

	Total weight of product ⁴	85...120 g	Material Safety Data Sheet (MSDS)	EU waste code ⁵
Plastic				
PA6		57.0 g	Yes	20 01 39
PTFE (cable EGT392F102)		3.0 g	Yes	20 01 39
Silicone (cable)		3.1 g	Yes	20 01 39
Metal				
Steel of different alloys		5.2...10.6 g	Not required	20 01 40
Stainless steel		10.0...45.0 g	Not required	20 01 40
Die-cast aluminium		63.0 g	Not required	20 01 40
Printed circuit board				
PCB assembly, lead-free solder (except EGT392F102)		7.0 g	Not required	20 01 36
Various				
None				
Special components				
Silicone joint		1.6 g	Not required	20 01 99
Ceramic/steel (connection terminal)		13.0 g	Not required	20 01 99
Casting compound (except EGT392F102)		1.0 g	Not required	20 01 99



Note

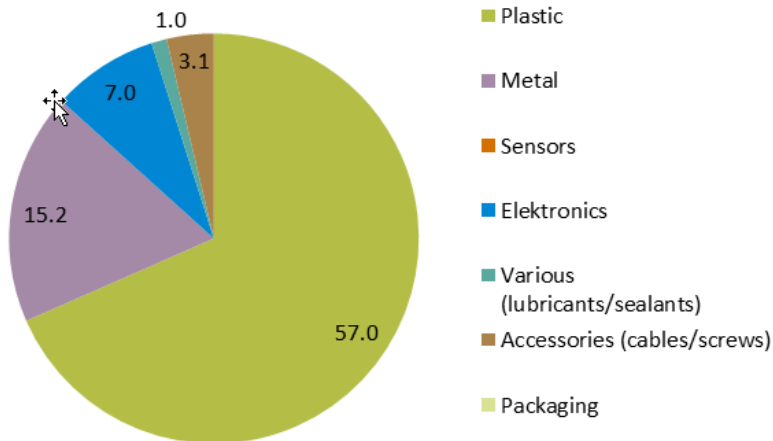
The following materials balance and the calculation of the environmental impact relate to types EGT346F022 (passive) and EGT346F031 (active).

⁴ See **Remarks** on last page

⁵ Directive 75/442/EEC and follow-on document, ruling 2001/118/EC

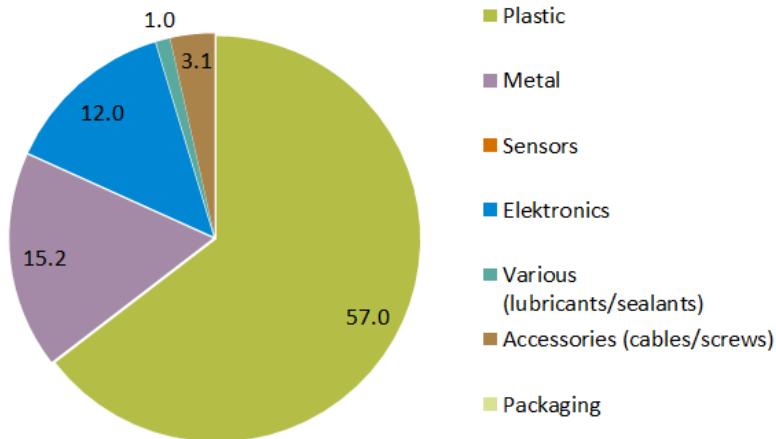
Materials balance

Materials balance [g]



EGT346F022 (passive)

Materials balance [g]



EGT346F031 (active)

Energy requirement in the utilisation phase

Power requirement for component EGT346F031 / EGT347F031 / EGT348F031

- Minimum power consumption 0.35 W
- Average power consumption -
- Typical energy consumption per year 3.0 kWh

The energy requirement evaluation was performed for a typical utilisation scenario. The European electricity mix from ecoinvent 2.2 was used to evaluate the power consumption in the utilisation phase.

Calculation of the environmental impact

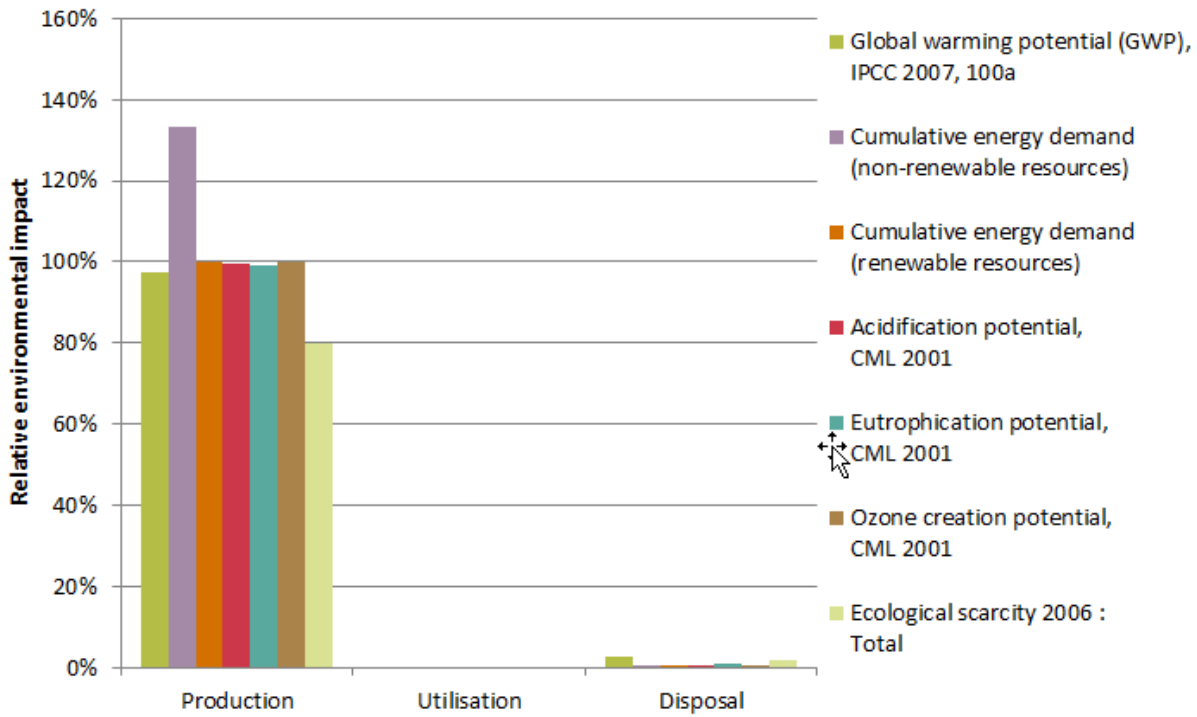
Evaluation over the entire life stage of 8 years in a typical utilisation scenario. The results additionally shown are based on a method of ecological scarcity that combines various environmental effects into an “environmental impact points” key figure. The method is based on Switzerland’s environmental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

Indicator	Unit	Production	Utilisation	Disposal	Total
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	0.8	-	0.0	0.8
Cumulative energy demand (non-renewable resources)	MJ eq.	13	-	0.0	10
Cumulative energy demand (renewable resources)	MJ eq.	0.9	-	0.00	1
Acidification potential, CML 2001	kg SO2 eq.	2.78E-03	0.00E+00	9.24E-06	2.79E-03
Eutrophication potential, CML 2001	kg PO4-- eq.	8.29E-04	0.00E+00	6.80E-06	8.36E-04
Ozone creation potential, CML 2001	kg C2H4 eq.	1.46E-04	0.00E+00	3.28E-07	1.46E-04
Ecological scarcity 2006 : Total	UBP	800	-	20	1'000

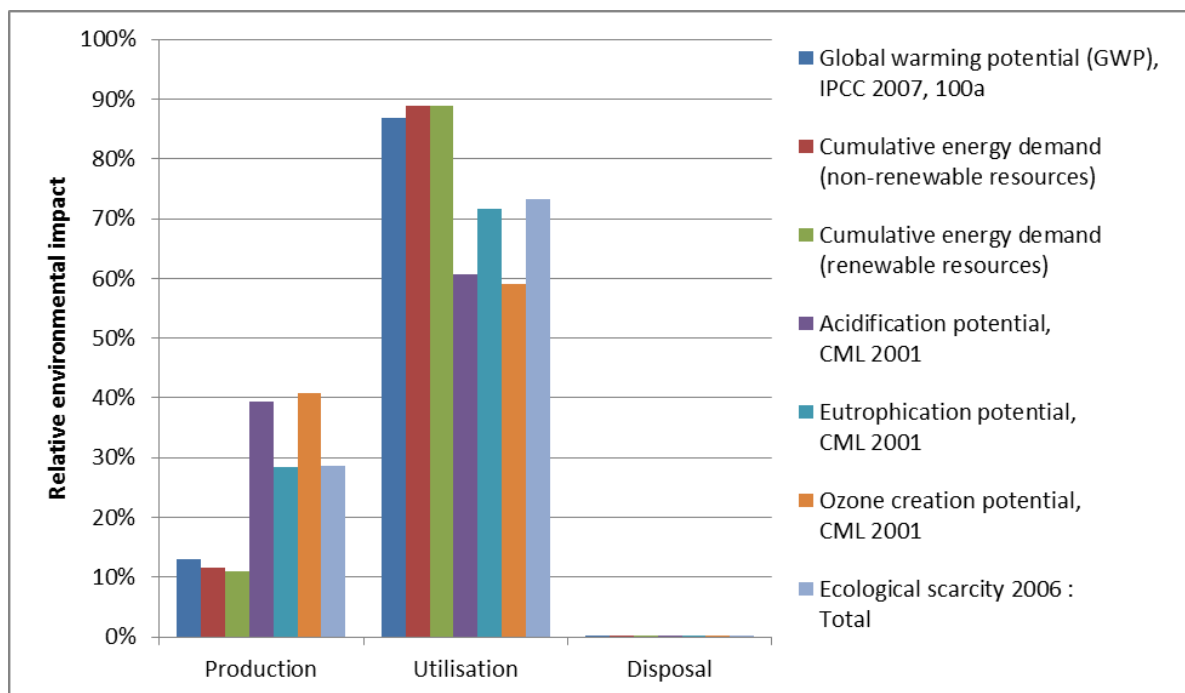
EGT346F022 (passive)

Indicator	Unit	Production	Utilisation	Disposal	Total
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	2.4	15.8	0.0	18.2
Cumulative energy demand (non-renewable resources)	MJ eq.	42	320	0.1	360
Cumulative energy demand (renewable resources)	MJ eq.	3.0	24	0.00	27
Acidification potential, CML 2001	kg SO2 eq.	4.23E-02	6.50E-02	1.32E-05	1.07E-01
Eutrophication potential, CML 2001	kg PO4-- eq.	2.05E-02	5.17E-02	8.38E-06	7.22E-02
Ozone creation potential, CML 2001	kg C2H4 eq.	1.81E-03	2.62E-03	4.86E-07	4.42E-03
Ecological scarcity 2006 : Total	UBP	6'300	16'100	30	22'000

EGT346F031 (active)



EGT346F022 (passive)



EGT346F031 (passive)

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

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 PCB assembly.

It is possible that special treatment for special components is compulsory by law or makes ecological sense.

Packaging:

Recyclable

The local and currently valid laws (WEEE2012/19/EU) must be observed.

Special information:

None

Remarks
(1) Depending on the fire load for the type:
Type overview (passive)

EGT346F022 / EGT346F102	1.7 MJ
EGT347F022 / EGT347F102	1.7 MJ
EGT348F102	1.7 MJ
EGT392F102	0.1 MJ
EGT446F012 / EGT446F102	1.7 MJ
EGT447F012 / EGT447F102	1.7 MJ
EGT646F102	1.7 MJ
EGT647F102	1.7 MJ

Type overview (active)

EGT346F031	0.5 MJ
EGT347F031	0.5 MJ
EGT348F031	0.5 MJ

(2) Depending on the weight of the type:
Type overview (passive)

EGT346F022 / F102	85 g
EGT347F022 / F102	95 g
EGT347F102	95 g
EGT348F102	120 g
EGT392F102	85 g
EGT446F012 / F102	85 g
EGT447F012 / F102	95 g
EGT646F102	95 g
EGT647F102	95 g

Type overview (active)

EGT346F031	90 g
EGT347F031	100 g
EGT347F031	120 g

How the environment benefits With these products we make a significant contribution to energy savings in buildings and to reducing global warming.
In the Green Building area, our products ensure that customer requirements are fulfilled optimally and that there is cost efficiency over the entire building life-cycle.

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 have been evaluated with existing data inventories for production processes 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 only for information purposes.

Deviations from the information it contains can occur without being reported. 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 Center for Life Cycle Inventories, Dübendorf
FOEN 2008 eco-balances: method of ecological scarcity – eco-factors 2006, FOEN