SAUTER Declaration on materials and the environment

Product

	Type	**VKAA015F300,** **VKAA020F300,** **VKAA025F300,** **VKAA032F300,** **VKAA040F300,** **VKAA050F300**
	Designation	**2-way cut-off ball valve with male thread, PN 40**
	Product range	**Electric drives, control valves, butterfly valves**
	Product group of eco-balance	**Valves, dampers, ball valves**

Manufacturer	Fr. Sauter AG Im Surinam 55, CH-4016 Basel		
Management system certified according to		**Since**	**By**
	ISO 9001	**10 Aug. 1993**	**SQS**
	ISO 9001:2000	**10 Aug. 2002**	**SQS**
	ISO 14001:2004	**10 Aug. 2005**	**SQS**
	OHSAS 18001:1999	**10 Aug. 2005**	**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, service	PDS 56.098
Environmental risk	Fire protection according to	EN 60695-2-11, EN 60695-10-2
	Fire load [1]	0.1…0.5 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)	None
	Liquids polluting the aquatic environment	None
	Explosive substances	None
Packaging [3]	Cardboard box	36…117 g
	Paper	5 g

Materials

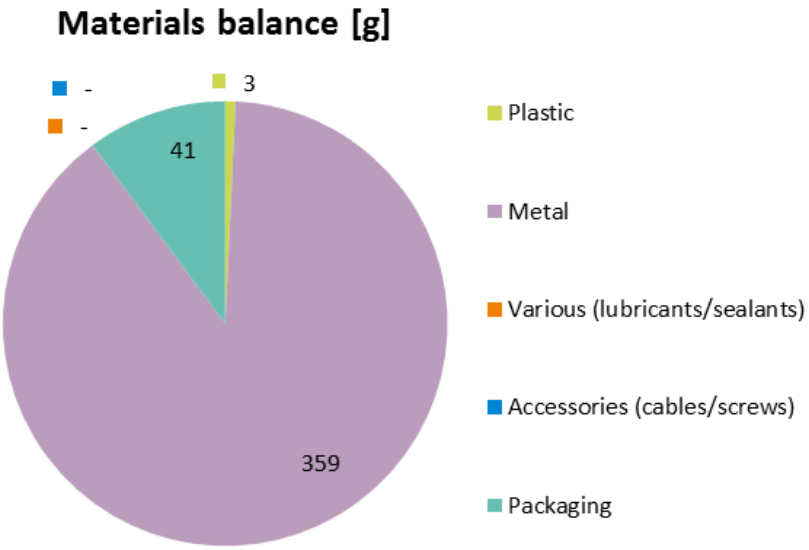
	Total weight of product [4]	362…2020 g	Material Safety Data Sheet (MSDS)	EU waste code[5]
Plastic				
EPDM	(o-rings)	1…3 g	Yes	20 01 39
PTFE	(glide ring, collar)	2…31 g	Yes	20 01 39
Metal				
Dezincification resistant brass CW602N (body, spindle, ball)		359…1986 g	Not required	20 01 40
Printed circuit board				
None				
Various				
None				
Special components				
None				

[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
[4] See **Remarks** on last page
[5] Directive 75/442/EEC and follow-on document, ruling 2001/118/EC

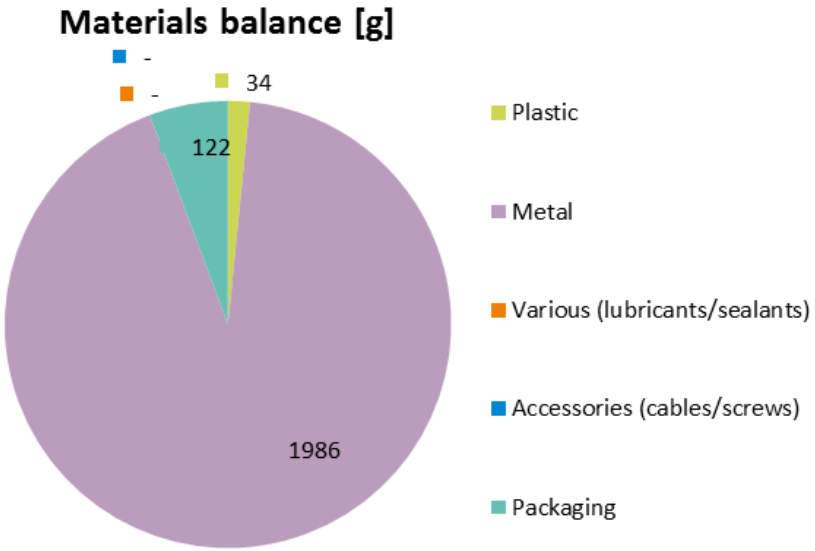
Note

The following materials balance and the calculation of the environmental impact relate to types VKAA015F300 and VKAA050F300.

Materials balance



VKAA015F300



VKAA050F300

Calculation of the environmental impact

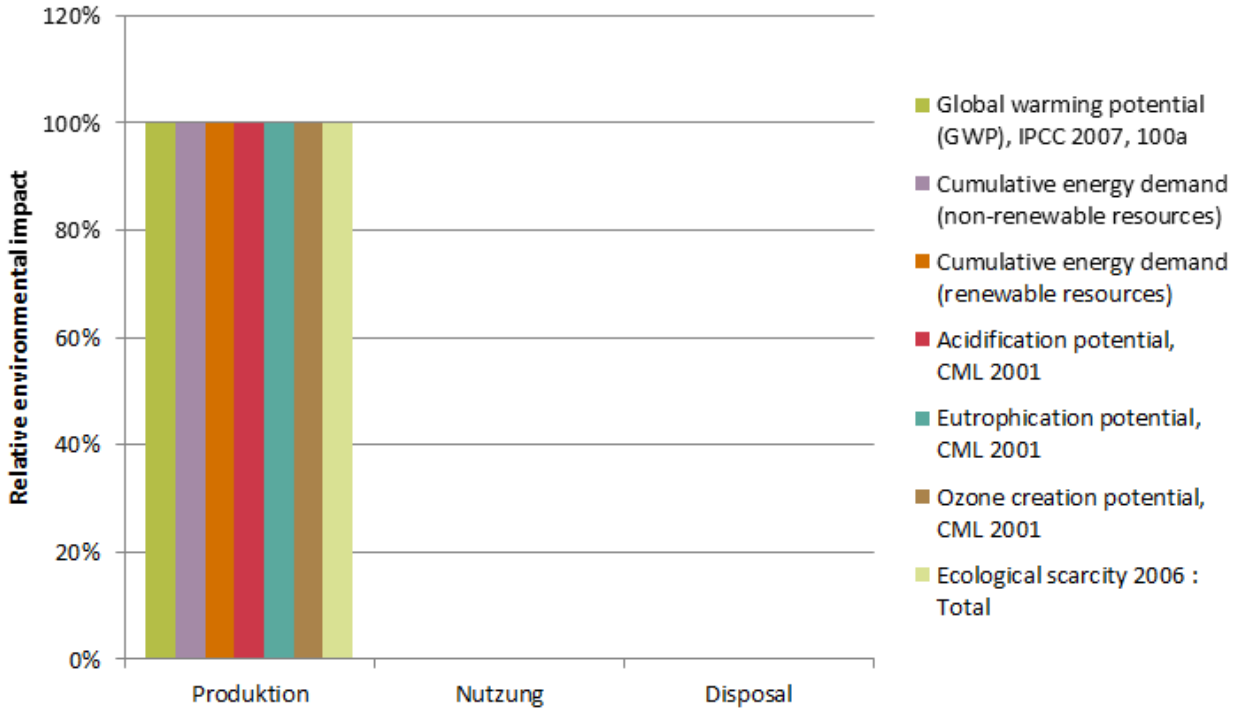
Evaluation over the entire life stage of 8 years in a typical utilisation scenario. The results additionally shown are based on a method of ecological scarcity that combines various environmental effects into an “environmental impact points” key figure. The method is based on Switzerland’s environmental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

Standard Indicators	Unit	Production "cradle to gate"	Utilisation	Disposal
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	2.1	-	0.00
Cumulative energy demand (non-renewable resources)	MJ eq.	30	-	0.0
Cumulative energy demand (renewable resources)	MJ eq.	5	-	0.00
Acidification potential, CML 2001	kg SO2 eq.	4.91E-02	-	1.23E-05
Eutrophication potential, CML 2001	kg PO4-- eq.	5.28E-02	-	4.42E-06
Ozone creation potential, CML 2001	kg C2H4 eq.	1.91E-03	-	4.93E-07
Complementary indicators				
Human toxicity, cancer effects, ILCD 2011	CTUh	9.89E-07	-	1.94E-10
Particulate matter, ILCD 2011	kg PM2.5 eq	4.02E-03	-	1.52E-06
Ecological scarcity 2006 : Total	UBP	19'900	-	20

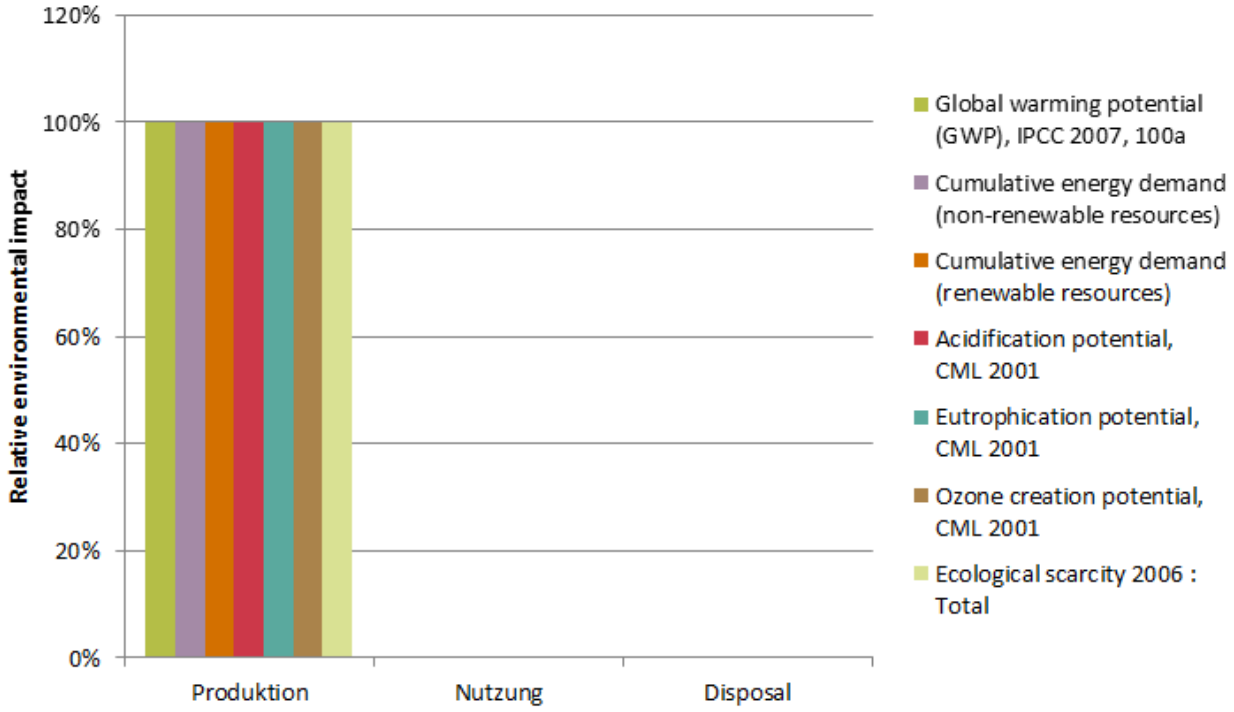
VKAA015F300

Standard Indicators	Unit	Production "cradle to gate"	Utilisation	Disposal
Global warming potential (GWP), IPCC 2007, 100a	kg CO2 eq.	18.2	-	0.02
Cumulative energy demand (non-renewable resources)	MJ eq.	150	-	0.1
Cumulative energy demand (renewable resources)	MJ eq.	24	-	0.00
Acidification potential, CML 2001	kg SO2 eq.	2.49E-01	-	6.60E-05
Eutrophication potential, CML 2001	kg PO4-- eq.	2.65E-01	-	2.21E-05
Ozone creation potential, CML 2001	kg C2H4 eq.	9.76E-03	-	2.64E-06
Complementary indicators				
Human toxicity, cancer effects, ILCD 2011	CTUh	5.02E-06	-	1.09E-09
Particulate matter, ILCD 2011	kg PM2.5 eq	2.03E-02	-	8.12E-06
Ecological scarcity 2006 : Total	UBP	103'700	-	120

VKAA050F300



VKAA015F300



VKAA050F300

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).

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 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:

- Observe operating temperature
- Remove pressure before changing any spare parts
- Observe fitting instructions on drawing

Remarks

(1) Depending on the fire load for the type:

All	0.1…0.7	MJ

(2) Depending on the weight of the type:

VKAA015F300	362	g
VKAA020F300	550	g
VKAA025F300	570	g
VKAA032F300	840	g
VKAA040F300	1290	g
VKAA050F300	2020	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.

- These heavy-duty valves have an extremely long serviceable life and require no maintenance.
- Energy savings on heating and cooling due to good regulability of the flow.
- Optimum use of raw materials.

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