

EPD_Environmental Product Declaration

DESK_TALENT S100 FIXED 160X80

Ref_TL14F0000

Report Data 12.11.2018

Certificates

ISO 9001

ISO 14001

ISO 14006.Ecodesign

PEFC. Programme for the Endorsement of Forest Certification

FSC®. Forest Stewardship Council

GBCe. Green Building Council Spain



1. Details of the system

Type New Product ☒ Redesign ☐ Studied Year 2018

Declaration From extraction of raw materials to complete desk solution, including end of life.
Scope: The detail of each of the phases considered and its scope is included below

Materials

Including the extraction and processing of raw materials and component sourcing to its delivery at the Actiu Technological Park.

Production

Consider the production and assembly processes used in Actiu.

Transport

Includes from the Actiu Technological Park to our customers facilities. Transport is provided through light commercial transport.

Use

This stage has not environmentally relevance for life cycle analysis.

End of life

Any product can be disposed of in different ways, or become a resource. Drawing on national average dates, it is supposed that aluminium, wood and cardboard packaging is recycled, while the rest is treated as urban waste.

2. RAW MATERIALS USED FOR THE PRODUCT. Product specifications, including packaging

	KG of product solution	Percentage %	Quality of finishes	
			Production of raw materials	Processed
Aluminium 100% rec.	9,057	36,11%	Bibliographic data	Bibliographic data
Acero	0,150	0,60%	Bibliographic data	Bibliographic data
Cardboard	1,662	6,63%	Bibliographic data	Bibliographic data
Melamine	12,160	48,49%	Bibliographic data	Bibliographic data
PVC	1,900	0,00%	Bibliographic data	Bibliographic data
TOTAL	24,929	91,83%		
% recycled materials		67,24%		
% recyclable materials		91,83%		

ACTIU product design is made to facilitate the separation of its components and recycling.

The product is designed to help companies LEED® certification. You can obtain LEED® credits with our product. On the one hand, contains a high percentage of recycled materials and is manufactured with low emissions to the atmosphere. On the other hand, has been designed with ergonomic standards. Finally, it can be easily recycled because it is designed for disassembly and identification of very simple components. This will help you achieve LEED® credits for employee health and innovation

The verification process life cycle analysis is performed by independent experts in Ecodesign (Consultant Business Area) and using the criteria of the standard UNE ISO 14006 "Ecodesign".

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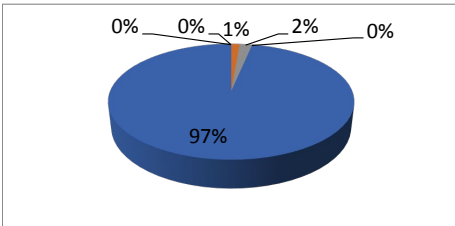
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3. Impacts produced by category. Five substances area included in each category have the greatest impact in each category

Impact category

ACIDIFICATION

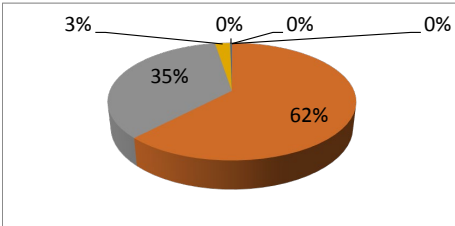


Substance	Unit	Total
Substancias remanentes	kg SO2 eq	0
Ammonia	kg SO2 eq	0,00574265
Nitrogen dioxide	kg SO2 eq	0,008603083
Nitrogen oxides	kg SO2 eq	0
Sulfur dioxide	kg SO2 eq	0,422043871
Sulfur oxides	kg SO2 eq	5,0916E-263

TOTAL **kg SO2 eq** **0,186395583**

Impact category

EUTROFIZATION

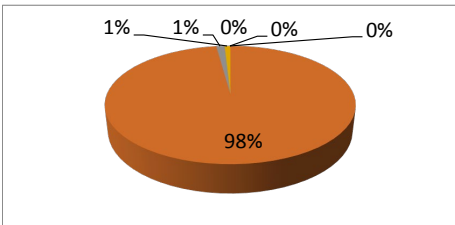


Substance	Unit	Total
Substancias remanentes	kg PO4--- eq	0
Ammonia	kg PO4--- eq	0,069724089
Dinitrogen monoxide	kg PO4--- eq	0,039445841
Nitrogen dioxide	kg PO4--- eq	0,002651108
Nitrogen oxides	kg PO4--- eq	0,000258897
Ammonium, ion	kg PO4--- eq	3,1088E-05

TOTAL **kg SO2 eq** **0,001919987**

Impact category

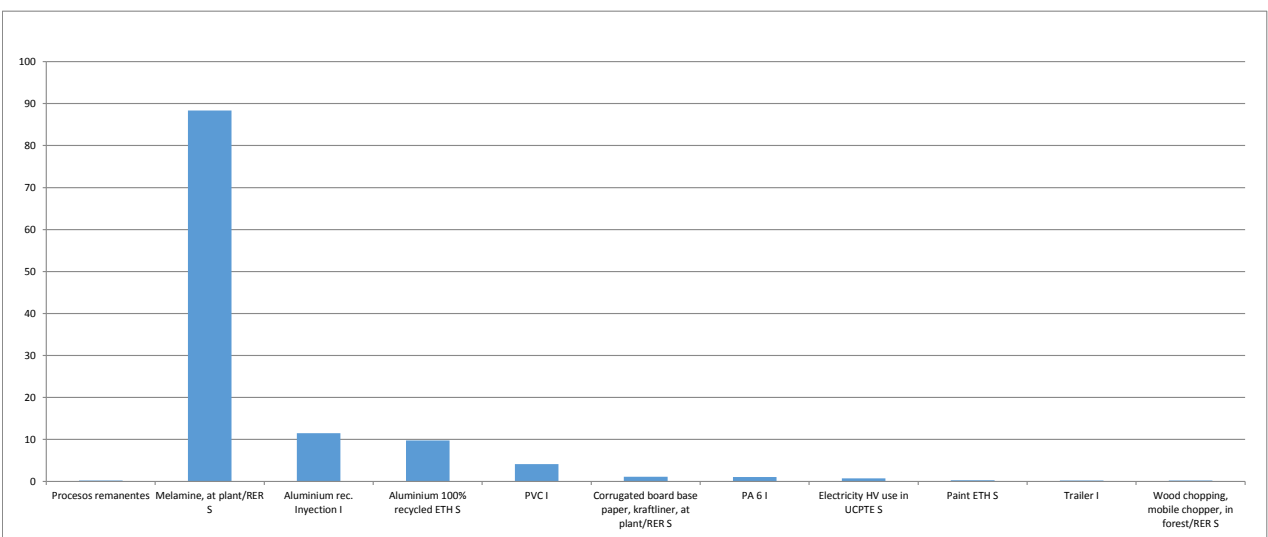
GLOBAL WARMING



Substance	Unit	Total
Substancias remanentes	kg CO2 eq	0
Dinitrogen monoxide	kg CO2 eq	103,723286
Carbon dioxide, fossil	kg CO2 eq	1,368442559
Carbon dioxide	kg CO2 eq	0,930451685
Methane	kg CO2 eq	5,0916E-263
Methane, fossil	kg CO2 eq	0

TOTAL **kg CO2 eq** **11,79618268**

Impact of group elements (materials, processes, energy, use, transport and waste)



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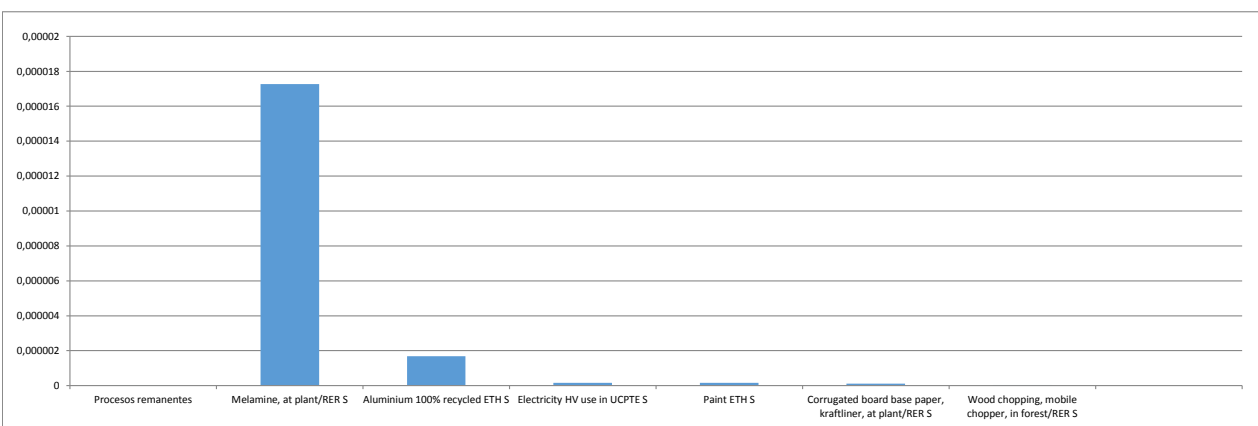
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4. Impacts produced by category. Five substances area included in each category have the greatest impact in each category

Impact category	Substance	Unit	Total
REDUCING OZONE	Substancias remanentes	kg CFC-11 eq	0
	Methane, tetrachloro-, CFC-10	kg CFC-11 eq	1,89879E-05
	Methane, bromochlorodifluoro-, Halon 1211	kg CFC-11 eq	1,65261E-07
	Methane, bromotrifluoro-, Halon 1301	kg CFC-11 eq	1,17177E-07
	Methane, trichlorofluoro-, CFC-11	kg CFC-11 eq	5,0916E-263
	Methane, chlorodifluoro-, HCFC-22	kg CFC-11 eq	0
	TOTAL	kg S02 eq	1,61393E-07

Impact of group elements (materials, processes, energy, use, transport and waste)



Impact category	Substance	Unit	Total
PHOTOCHEMICAL SMOG	Substancias remanentes	kg C2H4 eq	0
	Carbon monoxide	kg C2H4 eq	0,06322732
	Carbon monoxide, fossil	kg C2H4 eq	0,001472749
	Ethane	kg C2H4 eq	0,000682665
	Ethene	kg C2H4 eq	0,000136569
	Hydrocarbons, unspecified	kg C2H4 eq	4,61069E-06
	TOTAL	kg S02 eq	0,021764831

Impact category	Substance	Unit	Total
NON-RENEWABLE RESOURCES	Substancias remanentes	MJ eq	0
	Coal, brown, in ground	MJ eq	2003,087875
	Coal, 18 MJ per kg, in ground	MJ eq	22,7143589
	Coal, 29.3 MJ per kg, in ground	MJ eq	19,56576619
	Coal, hard, unspecified, in ground	MJ eq	5,0916E-263
	Oil, crude, in ground	MJ eq	5,0916E-263
	TOTAL	kg S02 eq	165,5031874

WASTE	Total NO HAZARDOUS	KG	8,67
	Total HAZARDOUS	KG	0,0335

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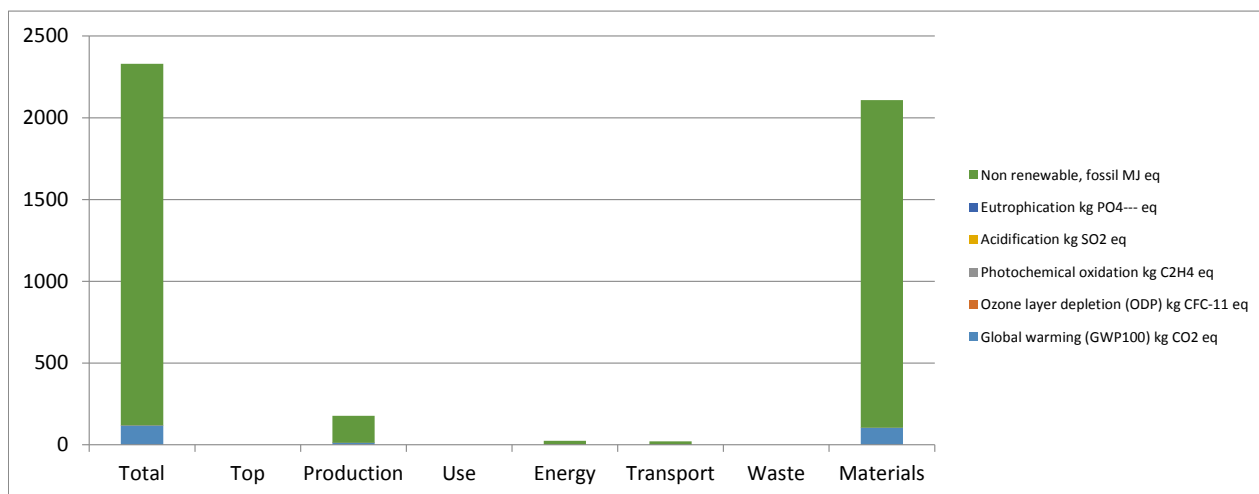
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5. Impact produced by life cycle stage. In includes six stages: Production, Use, Energy, Transport, Waste and Materials.

Impact Category	Uts.	Total	Top	Production	Use	Energy	Trsp.	Waste	Mat.
Global warming (GWP100)	kg CO2 eq	117,818363	0	11,79618268	0	0,930451685	1,368	0	103,7
Ozone layer depletion (ODP)	kg CFC-11 eq	1,94318E-05	0	1,61393E-07	0	1,65261E-07	1E-07	0	2E-05
Photochemical oxidation	kg C2H4 eq	0,087147565	0	0,021764831	0	0,000682665	0,001	0	0,063
Acidification	kg SO2 eq	0,622785188	0	0,186395583	0	0,00574265	0,009	0	0,422
Eutrophication	kg PO4--- eq	0,074554081	0	0,001919987	0	0,000258897	0,003	0	0,07
Non renewable, fossil	MJ eq	2210,871188	0	165,5031874	0	22,7143589	19,57	0	2003



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6. Ecodesign improvements considered.

ACTIU products are designed considering different environmental strategies. According to their level of complexity, the strategies used are classified into one of the following. Here are some of the choices for ecodesign significant product.

PRODUCT STRATEGY ECODESIGN	CHOICES
Low impact materials selection	Designed to be manufactured with 67,24% recycled materials
	100% recycled aluminium
	Powder paint with no VOC emissions
	Limitation on use of hazardous substances. Without chromium, mercury, cadmium
Optimization of product techniques	Recycled cardboard packaging
	Optimizing energy use throughout the production process
	Painting processes of high technology systems.
	Recovery unused paint in the process. Zero emissions of VOCs.
	Recovery of paint not used in the process for reuse
Optimization of distribution system	Metal cleaning by closed water circuit.
	Optimization of energy use in the manufacturing process: Heat recovery in the painting process, automated manufacturing systems to save energy.
	Packing in flat packages for space optimization.
Optimization of product life	Modular system for maximum use and combination of different program models.
	15 years minimum duration product
	Easy maintenance and cleaning of the product. It is easily cleaned with a damp cloth with water.
Optimization of the end of system life	The product is part of a modular program. Easy to modify, extend and repair to optimize its useful life.
	Easy separation of product components.
	High degree of recyclability of the product: 91,83%
	Packaging reuse system between ACTIU and its providers to avoid waste generation

Bibliography and references

ISO 14025 Environmental labels and declarations – Type III

ISO 14044:2006 "Environmental management. Life cycle analysis. Requirements and guidelines"

UNE - EN ISO 14006:2011 "Environmental management systems. Guidelines for the incorporation of ecodesign"

Methods for calculating environmental impacts

Data base: ETH-ESU System processes, Ecoinvent system processes, IDEMAT, EDIP, IPCC, Ecological Scarcity 2006.