esPattio

EPD Environmental Product Declaration

Program Marina Panels
REF: PMAC2
Dimensions: 135 x 85,5 x 69,4 cm

Marina Panels redefines the gathering space as a refuge where calm and conversation find their place. True to the refined aesthetic envisioned by Patrick Norguet, this collection combines the solidity of durable design with subtle functionality, making every encounter natural, comfortable, and stylish.

RAW MATERIALS USED, INCLUDING PACKAGING

	Kg of raw material contained in the product	% of raw material contained in the product
STEEL	16,788	20,72%
PARTICLEBOARD	5,268	6,50%
MDF	8,850	10,92%
PLYWOOD	23,500	29,00%
POLYURETHANE FOAM	10,150	12,53%
POLYESTER	6,042	7,46%
POLYPROPYLENE	0,020	0,03%
POLYETHYLENE	0,620	0,77%
CARDBOARD	7,200	8,88%
WOOD FIBERBOARD	2,600	3,21%
Total	**81,038**	**100%**

% Recycled materials: 29.70%
% Recyclable materials: 86.24%

The Environmental Product Declaration for Marina Panels has been calculated and prepared in accordance with the guidelines set by ISO 14025 Type III, and is based on the product category rules “PCR 2012-19, Furniture, except seats and mattresses,” version 2.01

Marina Panels, Life Cycle Information

FUNCTIONAL UNIT

The functional unit consists of a Marina Panels sofa, with a service life of 15 years.

SYSTEM LIMITS

The boundaries set for the analyzed system include: raw materials, production (processes and facility maintenance), transportation, packaging, distribution, use, and end of life, including both packaging and the product.

SCOPE

The system scope includes the complete life cycle of the product, from raw material extraction through manufacturing, use, and end of life. The system has been divided into three phases:

- UPSTREAM: including the manufacturing of raw materials
- CORE: including the transportation of these raw materials to Forma 5 Group (Seville, Spain), the product manufacturing process, and waste treatment and management.
- DOWNSTREAM: including distribution to the customer, maintenance, product use, and end of life of both the product itself and the accompanying packaging used during distribution.

CERTIFICATES

- ISO 9001:2015
- ISO 14001:2015
- ISO 14006:2011
- ISO 45001:2018
- TECNALIA QUALITY

Forma 5 Group, S.L.u.
Made in Spain, European Union.

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Official Association of Technical Engineers of Seville (COGITISE)
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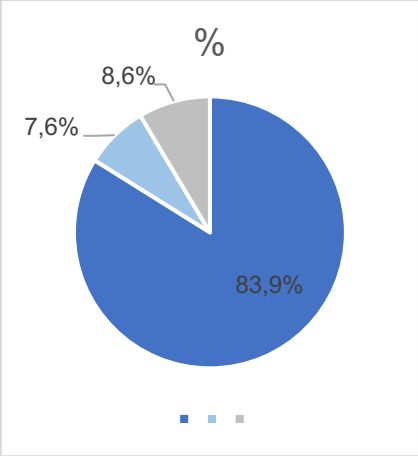
IMPACT PER CATEGORIES

EPD 2018[1] Inidcators per categories	Unit	CORE Impact result	UPSTREAM Impact result	DOWNSTREAM Impact result	TOTAL
Abiotic depletion, elements	kg Sb eq	3,046E-10	7,097E-04	6,306E-14	7,097E-04
Acidification (fate not incl.)	kg SO2 eq	1,349E-02	3,558E-01	1,533E-02	3,846E-01
Photochemical oxidation	kg NMVOC	1,715E-02	6,280E-02	2,156E-02	1,015E-01
Eutrophication	kg PO4--- eq	2,503E-04	6,190E-02	2,652E-03	6,480E-02
Climate Change(Carbon Footprint)	kg CO2 eq	2,281E+00	2,529E+01	2,578E+00	3,015E+01
Abiotic depletion, fossil fuels	MJ	1,530E+03	8,015E+02	2,081E+02	2,539E+03
Ozone layer depletion (ODP) (optional)	kg CFC-11 eq	1,783E-08	9,818E-07	2,156E-02	2,156E-02
Water scarcity	m3 eq	1,964E-01	2,769E+00	2,253E-01	3,191E+00

Table 1. Impacts by Category in the MARINA PANELS family.

This method is the successor to EPD (2013) and is intended for the creation of Environmental Product Declarations (EPD), as published on the website of the Swedish Environmental Management Council (SEMC). For further information, see also the *General Programme Instructions for the International EPD System 3.0*, dated December 11, 2017. The latest update of the recommendations included in this method was issued on 2018-06-08 (adding the Water Scarcity Footprint). Contact information: http://www.environdec.com/

CLIMATE CHANGE (CARBON FOOTPRINT)



Etapa	Unidad	Total
Upstream	kg CO2 eq	2,53E+01
Core	kg CO2 eq	2,28E+00
Downstream	kg CO2 eq	2,58E+00

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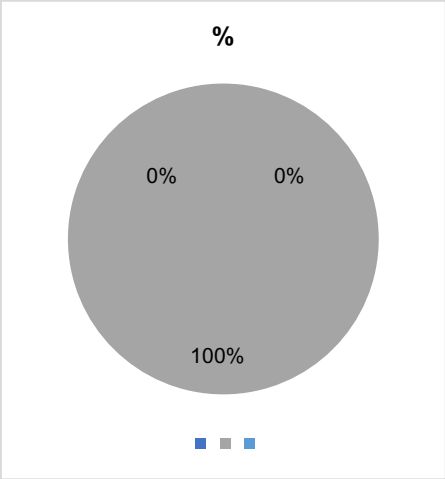
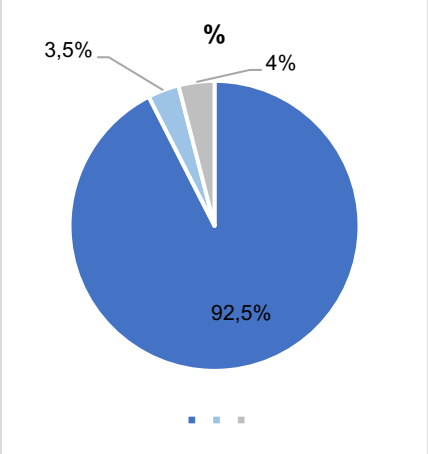
OZONE LAYER DEPLETION



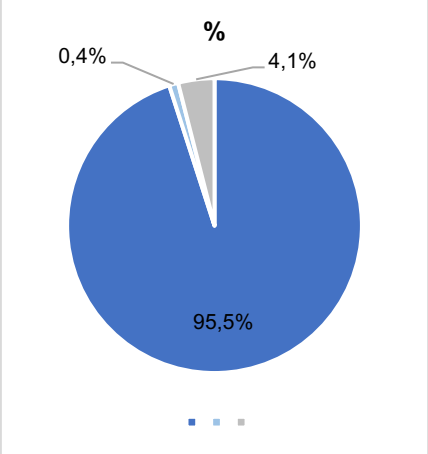
Etapa	Unidad	Total
Upstream	kg CFC-11 eq	9,818E-07
Core	kg CFC-11 eq	1,783E-08
Downstream	kg CFC-11 eq	2,156E-02

ACIDIFICATION



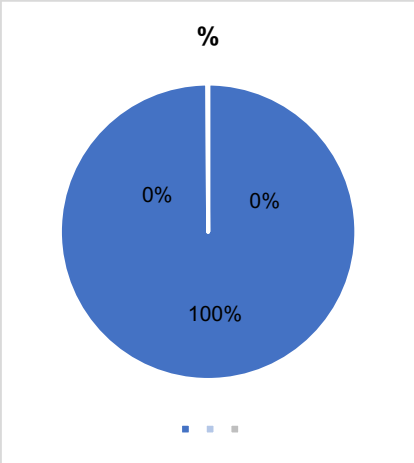
Etapa	Unidad	Total
Upstream	kg SO2 eq	3,558E-01
Core	kg SO2 eq	1,349E-02
Downstream	kg SO2 eq	1,533E-02

EUTROPHICATION



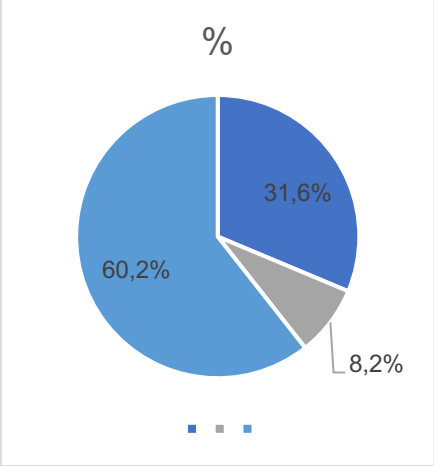
Etapa	Unidad	Total
Upstream	kg PO4--- eq	6,190E-02
Core	kg PO4--- eq	2,503E-04
Downstream	kg PO4--- eq	2,652E-03

ABIOTIC DEPLETION



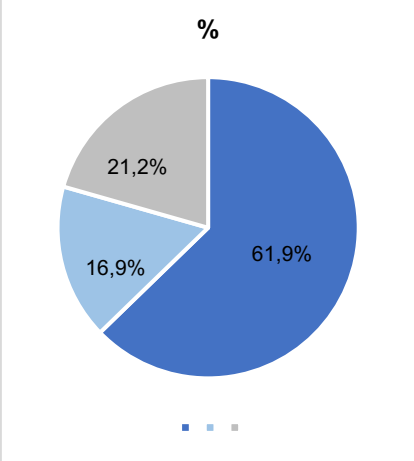
Etapa	Unidad	Total
Upstream	kg Sb eq	7,097E-04
Core	kg Sb eq	3,046E-10
Downstream	kg Sb eq	6,306E-14

ABIOTIC DEPLETION OF FOSSIL FUELS



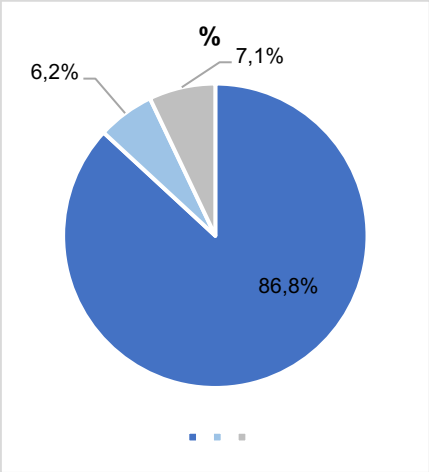
Etapa	Unidad	Total
Upstream	MJ	8,015E+02
Core	MJ	1,530E+03
Downstream	MJ	2,081E+02

PHOTOCHEMICAL OXIDATION



Etapa	Unidad	Total
Upstream	kg NMVOC	6,280E-02
Core	kg NMVOC	1,715E-02
Downstream	kg NMVOC	2,156E-02

WATER SCARCITY



Etapa	Unidad	Total
Upstream	m3 eq	2,769E+00
Core	m3 eq	1,964E-01
Downstream	m3 eq	2,253E-01

USE OF RESOURCES

RESOURCES	unit	CORE	UPSTREAM	DOWNSTREAM
Products				
Energy non renewable	MJ	2,66E+01	4,65E+02	5,36E-01
Energy renewable	MJ	2,24E+02	1,76E+00	0,00E+00
Secondary fuel	MJ	0,00E+00	0,00E+00	7,26E+06
Secondary fuel renewable	MJ	0,00E+00	0,00E+00	0,00E+00
Materials	kg	5,26E-02	9,57E+02	7,28E+01
Fresh water used	m^3	2,46E-01	4,44E+02	3,40E-01

CATEGORIES OF WASTE AND OUTPUT FLOWS

RESOURCES	Unit	CORE	UPSTREAM	DOWNSTREAM
Products				
Hazardous waste	kg	2,97E-07	1,82E-08	2,73E-01
Non-hazardous waste	kg	1,55E+01	1,57E+01	5,61E-01
Radioactive waste	kBq	5,13E-01	6,72E+00	1,10E-06