## **EPD** Environmental Product Declaration



Program BISTRÓ REF: PBI03

Dimensions: 80X80X74 cm

Bistro invites you to enjoy company, share moments, hold occasional meetings, coffee breaks and all this with a simple but friendly aesthetic, full of color. A personal style based on the joy of collaborating and sharing our leisure time.

### **RAW MATERIALS USED (PACKAGING INCLUDED)**

	Kg of raw materials included in the product	% of raw materials included in the product
STEEL	3,460	17,23%
POLYETHYLENE	0,008	0,04%
PAPER	0,001	0,00%
CARDBOARD	0,800	3,98%
ALUMINIUM	4,100	20,42%
ZAMAK	0,003	0,01%
PARTICLE BOARD	11,710	58,31%
Total	20,082	100%

% Recycled Materials: 65,22%% Recyclable Materials: 88,77%

This Program BISTRÓ Environmental Product Declaration have been calculated and drafted in accordance with ISO14025 Type III standard, and based on "PCR 2012-19, Furniture, except seats and mattresses" version 2.01.



### Bistró canteen tables, life cycle information

#### **FUNCIONAL UNIT**

The functional unit consists of an ABRIL chair operating for a 15-year useful life.

#### SYSTEM LIMITS

The limits of the system include raw material, production (includes processes and facility maintenance), transportation, packaging, distribution, use, and end-of-life of both packaging and product.

#### SYSTEM SCOPE

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

- UPSTREAM: including raw materials production
- CORE: including raw material transport to Forma5 (Spain, Seville), product manufacturing process and waste treatment.
- DOWNSTREAM: Distribution to the customer, maintenance, use of the product and both the end of life of the product and the packaging has been included.

#### CERTIFICATES

- ISO 9001:2015
- ISO 14001:2015
- ISO 14006:2011
- ISO 45001:2018
- MARCA DE CALIDAD TECNALIA

Grupo Forma 5., S.L.u. Made in Spain, UE.

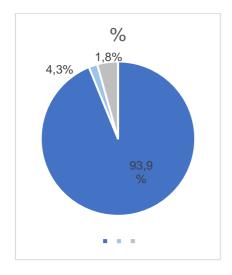
Report drafted by: Luis Carlos González Valencia. Industrial technical engineer by University of Sevilla Official College of Technical Engineers of Sevilla (COGITISE). Membership number: 9129.

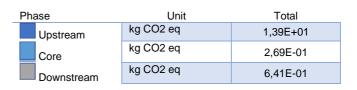


IMPACTS PER CATEGORIES					
EPD 2018 <sup>1</sup> Categorías indicadores	Unidad	CORE Impact result	UPSTREAM Impact result	DOWNSTREAM Impact result	TOTAL
Abiotic depletion, elements	kg Sb eq	-1,920E-12	1,441E-06	4,908E-14	1,441E-06
Acidification (fate not incl.)	kg SO2 eq	1,258E-02	3,368E-02	3,804E-03	5,006E-02
Photochemical oxidation	kg NMVOC	1,115E-02	3,175E-02	5,348E-03	4,824E-02
Eutrophication	kg PO4 eq	5,767E-03	3,887E-03	6,587E-04	1,031E-02
Climate Change(Carbon Footprint)	kg CO2 eq	2,692E-01	1,390E+01	6,407E-01	1,481E+01
Abiotic depletion, fossil fuels	MJ	1,286E+02	6,740E+01	1,749E+01	2,135E+02
Ozone layer depletion (ODP) (optional)	kg CFC-11 eq	-1,554E-09	5,054E-07	5,348E-03	5,348E-03
Water scarcity	m3 eq	-5,039E-03	1,156E+00	1,746E-01	1,326E+00

Table 1. Impacts per Categories in Bistró canteen tables family.

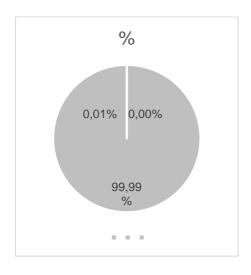
### **CLIMATE CHANGE (CARBON FOOTPRINT)**





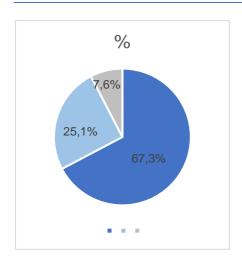
<sup>&</sup>lt;sup>1</sup> This method is the successor of EPD (2013) and is intended for the creation of Environmental Product Declarations (EPDs), as published on the website of the Swedish Environmental Management Council (SEMC). For more information see also General programmer instructions for the international EPD System 3.0 of 11 December 2017. The latest update to the recommendations included in this method is from 2018-06-08 (adding Water Scarcity Footprint). Contact info: http://www.environdec.com/.

### **OZONE LAYER DEPLETION**



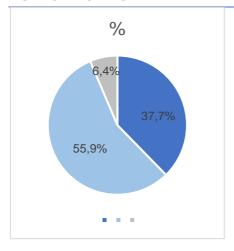
Phase	Unit	Total
Upstream	kg CFC-11 eq	1,039E-07
Core	kg CFC-11 eq	5,328E-07
Downstream	kg CFC-11 eq	1,911E-03

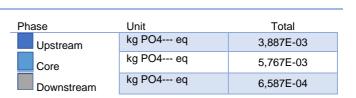
#### **ACIDIFICATION**



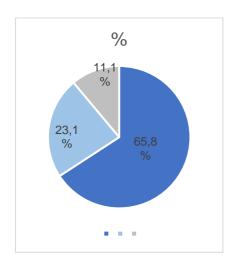
Phase	Unit	Total
Upstream	kg SO2 eq	3,368E-02
Core	kg SO2 eq	1,258E-02
Downstream	kg SO2 eq	3,804E-03

#### **EUTROPHICATION**



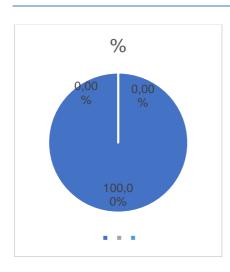


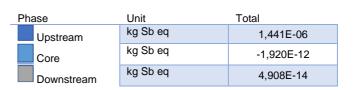
#### PHOTOCHEMICAL OXIDATION



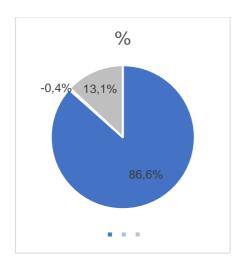
Phase	Unit	Total
Upstream	kg NMVOC	3,175E-02
Core	kg NMVOC	1,115E-02
Downstream	kg NMVOC	5,348E-03

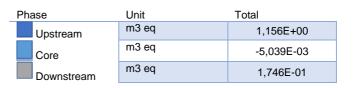
#### **ABIOTIC DEPLETION**



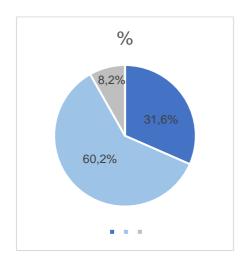


### **WATER SCARCITY**





### **ABIOTIC DEPLETION FOSSIL FUELS**



Phase	Unit	Total
Upstream	MJ	6,740E+01
Core	MJ	1,286E+02
Downstream	MJ	1,749E+01

USE OF RESOURCES				
RESOURCES	Unit	CORE	UPSTREAM	DOWNSTREAM
Products				
Energy non renewable	MJ	1,35E+01	1,63E+02	1,88E-01
Energy renewable	MJ	7,86E+01	6,19E-01	0,00E+00
Secondary fuel	MJ	0,00E+00	0,00E+00	2,55E+06
Secondary fuel renewable	MJ	0,00E+00	0,00E+00	0,00E+00
Materials	kg	1,84E-02	3,36E+02	2,55E+01
Fresh water used	m³	7,77E-01	1,56E+02	1,19E-01

CATEGORIES OF WASTE AND OUTPUT FLOWS				
RESOURCES	Unit	CORE	UPSTREAM	DOWNSTREAM
Products				
Hazardous waste	kg	1,51E-07	9,26E-09	1,39E-01
Non-hazardous waste	kg	7,88E+00	8,00E+00	2,85E-01
Radioactive waste	kg	2,61E-01	3,42E+00	5,57E-07