

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

L'Avenir
Industrias Cosmic

EPD HUB, EPD number XXXXX

Publishing XXX date, last updated XXX date, valid until XXX date



Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Industrias Cosmic
Address	CAN BARRI, C/ESQUEIS S/N. LOCAL NÚM1 POL. IND
Contact details	info@icosmic.com
Website	https://www.icosmic.com

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.0, 1 Feb 2022
Sector	Producto de construcción
Category of EPD	Self-declared EPD
Scope of the EPD	Cradle to gate with modules C1-C4, D
EPD author	Roca Group
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal certification ☒ External verification
EPD verifier	Elma Avdyli, EPD Hub

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	L'Avenir
Additional labels	
Product reference	
Place of production	
Period for data	2022
Averaging in EPD	No hay promedio
Variation in GWP-fossil for A1-A3	>10 %

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 ud accesorio baño
Declared unit mass	0.1 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	4,6E-1
GWP-total, A1-A3 (kgCO ₂ e)	4,62E-1
Secondary material, inputs (%)	27.1
Secondary material, outputs (%)	100.0
Total energy use, A1-A3 (kWh)	1.89
Total water use, A1-A3 (m ³ e)	3,51E-3

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

PRODUCT DESCRIPTION

Accesorios de baño para encimera: WJC216A0034XXX y WJC216A0053XXX. 96% plástico reciclado + 2% colorante alimenticio + 2% cascara de arroz.

Further information can be found at <https://www.icosmic.com>.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals		
Minerals		
Fossil materials	96	
Bio-based materials	4	

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C

Biogenic carbon content in packaging, kg C

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 ud accesorio baño
Mass per declared unit	0.1 kg
Functional unit	1 ud accesorio baño
Reference service life	

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage								End of life stage				Beyond the system boundaries
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7		C1	C2	C3	C4	D
x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND		x	x	x	x	x
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use		Deconstr./demol.	Transport	Waste processing	Disposal	Reuse
																	Recovery
																	Recycling

Modules not declared = MND. Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

El producto está compuesto en su mayoría por PE reciclado al que se le añade un pequeño porcentaje de cáscara de arroz y de colorante. Los materiales son transportados hasta la fábrica donde se mezclan e inyectan. Posteriormente se almacenan en cajas y paletizan para enviarlos a la fábrica donde se hará el montaje final, que consiste en añadir papel para embalar las piezas y meterlo en una caja junto con las instrucciones y el etiquetado pertinente.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

La distancia de transporte se define en concordancia con el PCR. El promedio de distancia desde la planta de producción de las piezas y el lugar de montaje es de 840 km y el método de transporte es un camión. El uso del camión será compartido a criterio de la compañía de transporte ya que los volúmenes totales adquiridos solo suponen una pequeña parte del volumen total del camión. Por lo que la cantidad de emisiones en los totales es insignificante. No se contemplan retornos vacíos ya que se asume que el viaje de vuelta será usado, por la compañía de transporte, para satisfacer necesidades de otros clientes. El transporte no genera pérdidas ya que se trata de un producto resistente.

PRODUCT USE AND MAINTENANCE (B1-B7)

El mantenimiento incluye la limpieza tanto del interior del producto como del exterior con detergente y un trapo húmedo. Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

Tanto el producto en sí como su packaging son 100% reciclables.



MANUFACTURING PROCESS

LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	Allocated by mass or volume
Packaging materials	Allocated by mass or volume
Ancillary materials	No applicable
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	No hay promedio
Averaging method	No aplicable
Variation in GWP-fossil for A1-A3	>10 %

This EPD is product and factory specific and does not contain average calculations.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. Ecoinvent and One Click LCA databases were used as sources of environmental data.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	4,92E-2	4,33E-2	3,7E-1	4,62E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,68E-2	3,64E-4	3,68E-2	0E0	-3,68E-2
GWP – fossil	kg CO ₂ e	4,84E-2	4,32E-2	3,68E-1	4,6E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,69E-2	3,64E-4	3,69E-2	0E0	-3,69E-2
GWP – biogenic	kg CO ₂ e	6,71E-4	1,98E-5	3,95E-4	1,09E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	-1,54E-4	2,64E-7	-1,54E-4	0E0	1,54E-4
GWP – LULUC	kg CO ₂ e	1,3E-4	2,42E-5	9,22E-4	1,08E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	2,14E-5	1,09E-7	2,14E-5	0E0	-2,14E-5
Ozone depletion pot.	kg CFC ₁₁ e	5,47E-9	9,25E-9	1,37E-8	2,84E-8	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	2,69E-9	8,55E-11	2,69E-9	0E0	-2,69E-9
Acidification potential	mol H ⁺ e	3,23E-4	1,7E-4	1,83E-3	2,32E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,06E-4	1,53E-6	1,06E-4	0E0	-1,06E-4
EP-freshwater ²⁾	kg Pe	1,26E-5	5,09E-7	1,98E-5	3,29E-5	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	6,14E-7	2,96E-9	6,14E-7	0E0	-6,14E-7
EP-marine	kg Ne	7,31E-5	4,57E-5	3,39E-4	4,58E-4	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	2,93E-5	4,6E-7	2,93E-5	0E0	-2,93E-5
EP-terrestrial	mol Ne	7,68E-4	5,07E-4	3,68E-3	4,95E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,2E-4	5,08E-6	3,2E-4	0E0	-3,2E-4
POCP (“smog”) ³⁾	kg NMVOCe	2,09E-4	1,58E-4	9,66E-4	1,33E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,04E-4	1,63E-6	1,04E-4	0E0	-1,04E-4
ADP-minerals & metals ⁴⁾	kg Sbe	2,31E-7	2,12E-6	5,59E-7	2,91E-6	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	4,53E-7	6,2E-9	4,53E-7	0E0	-4,53E-7
ADP-fossil resources	MJ	5,01E-1	6,4E-1	4,82E0	5,96E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,63E-1	5,65E-3	3,63E-1	0E0	-3,63E-1
Water use ⁵⁾	m ³ e depr.	1,62E-2	2,65E-3	1,03E-1	1,22E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	7,78E-3	2,1E-5	7,78E-3	0E0	-7,78E-3

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO₄e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	2,56E-9	2,29E-9	1,53E-8	2,01E-8	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,83E-9	3,29E-11	1,83E-9	0E0	-1,83E-9
Ionizing radiation ⁶⁾	kBq U235e	1,73E-2	2,8E-3	5,19E-2	7,2E-2	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,09E-3	2,47E-5	1,09E-3	0E0	-1,09E-3
Ecotoxicity (freshwater)	CTUe	6,45E-1	5,68E-1	9,6E0	1,08E1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,82E-1	4,32E-3	3,82E-1	0E0	-3,82E-1
Human toxicity, cancer	CTUh	1,96E-11	2,04E-11	9,38E-11	1,34E-10	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,89E-11	1,11E-13	3,89E-11	0E0	-3,89E-11
Human tox. non-cancer	CTUh	4,64E-10	6,06E-10	3,45E-9	4,52E-9	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	5,43E-10	5,12E-12	5,43E-10	0E0	-5,43E-10
SQP ⁷⁾	-	3,67E-1	3,42E-1	8,17E-1	1,53E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	2,2E-1	8,54E-3	2,2E-1	0E0	-2,2E-1

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	2,48E-1	1,37E-2	7,77E-1	1,04E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,79E-2	7,12E-5	1,79E-2	0E0	-1,79E-2
Renew. PER as material	MJ	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Total use of renew. PER	MJ	2,48E-1	1,37E-2	7,77E-1	1,04E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,79E-2	7,12E-5	1,79E-2	0E0	-1,79E-2
Non-re. PER as energy	MJ	3,07E-1	6,4E-1	4,82E0	5,77E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,63E-1	5,65E-3	3,63E-1	0E0	-3,63E-1
Non-re. PER as material	MJ	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Total use of non-re. PER	MJ	3,07E-1	6,4E-1	4,82E0	5,77E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,63E-1	5,65E-3	3,63E-1	0E0	-3,63E-1
Secondary materials	kg	4E-3	0E0	2,31E-2	2,71E-2	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Renew. secondary fuels	MJ	0E0	0E0	1,96E-6	1,96E-6	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Non-ren. secondary fuels	MJ	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Use of net fresh water	m ³	0E0	1,17E-4	3,39E-3	3,51E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,09E-4	1,18E-6	1,09E-4	0E0	-1,09E-4

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	0E0	9,17E-4	3,02E-2	3,11E-2	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,98E-3	5,49E-6	0E0	0E0	-1,98E-3
Non-hazardous waste	kg	0E0	4,02E-2	8,06E-1	8,47E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	5E-2	6,08E-4	0E0	0E0	-5E-2
Radioactive waste	kg	0E0	4,26E-6	1,46E-5	1,89E-5	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,36E-6	3,88E-8	0E0	0E0	-1,36E-6

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Materials for recycling	kg	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	1E-1	0E0	0E0
Materials for energy rec	kg	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Exported energy	MJ	0E0	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	4,78E-2	4,28E-2	3,61E-1	4,52E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,61E-2	3,6E-4	3,61E-2	0E0	-3,61E-2
Ozone depletion Pot.	kg CFC ₁₁ e	4,78E-9	7,4E-9	1,15E-8	2,37E-8	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	2,23E-9	6,79E-11	2,23E-9	0E0	-2,23E-9
Acidification	kg SO ₂ e	2,63E-4	9,46E-5	1,51E-3	1,87E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	6,67E-5	7,4E-7	6,67E-5	0E0	-6,67E-5
Eutrophication	kg PO ₄ ³ e	6,7E-5	2,27E-5	6,88E-4	7,77E-4	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	7,67E-5	1,49E-7	7,67E-5	0E0	-7,67E-5
POCP ("smog")	kg C ₂ H ₄ e	9,26E-6	6,18E-6	6,17E-5	7,71E-5	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	6,3E-6	4,69E-8	6,3E-6	0E0	-6,3E-6
ADP-elements	kg Sbe	2,31E-7	2,12E-6	5,59E-7	2,91E-6	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	4,53E-7	6,2E-9	4,53E-7	0E0	-4,53E-7
ADP-fossil	MJ	5,01E-1	6,4E-1	4,82E0	5,96E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,63E-1	5,65E-3	3,63E-1	0E0	-3,63E-1

ENVIRONMENTAL IMPACTS – FRENCH NATIONAL COMPLEMENTS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADP-elements	kg Sbe	0E0	2,12E-6	3,67E-7	2,49E-6	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	4,52E-7	6,2E-9	4,52E-7	0E0	-4,52E-7
Hazardous waste disposed	kg	0E0	5,79E-4	2,99E-2	3,04E-2	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,74E-3	3,48E-6	1,74E-3	0E0	-1,74E-3
Non-haz. waste disposed	kg	0E0	4,02E-2	8,06E-1	8,47E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	5E-2	6,08E-4	5E-2	0E0	-5E-2
Air pollution	m ³	0E0	3,86E0	1,85E2	1,89E2	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,08E0	4,68E-2	3,08E0	0E0	-3,08E0
Water pollution	m ³	0E0	1,41E-2	1,32E0	1,33E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	6,88E-3	1,26E-4	6,88E-3	0E0	-6,88E-3

ENVIRONMENTAL IMPACTS – TRACI 2.1. / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	0E0	4,27E-2	3,56E-1	3,99E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	3,61E-2	3,6E-4	3,61E-2	0E0	-3,61E-2
Ozone Depletion	kg CFC ₁₁ e	0E0	9,83E-9	1,18E-8	2,16E-8	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	2,94E-9	9,05E-11	2,94E-9	0E0	-2,94E-9
Acidification	kg SO ₂ e	0E0	1,46E-4	7,74E-2	7,75E-2	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	9,37E-5	1,33E-6	9,37E-5	0E0	-9,37E-5
Eutrophication	kg Ne	0E0	2,12E-5	8,28E-5	1,04E-4	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,28E-5	1,87E-7	1,28E-5	0E0	-1,28E-5
POCP ("smog")	kg O ₃ e	0E0	2,88E-3	2,32E-3	5,2E-3	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	1,81E-3	2,92E-5	1,81E-3	0E0	-1,81E-3
ADP-fossil	MJ	0E0	8,88E-2	2,96E-1	3,85E-1	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	4,48E-2	8,1E-4	4,48E-2	0E0	-4,48E-2

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

#SIGNATURE#