

ENVIRONMENTAL PRODUCT DECLARATION

Acrylic waterproofing

Campolin®

Campolin® Fiber



DAPcons®.100.156

DECLARACIÓN AMBIENTAL DE PRODUCTO
ENVIRONMENTAL PRODUCT DECLARATION

According to the standards:
ISO 14025 y EN 15804 + A2:2020

DECLARACIÓN AMBIENTAL DE PRODUCTO ENVIRONMENTAL PRODUCT DECLARATION

DAPcons®.100.156

According to the standards:
ISO 14025 y EN UNE 15804 + A2:2020



GENERAL INFORMATION

Product

ACRYLIC WATERPROOFING

Company

SOPREMA

Product description

High density acrylic resin, which forms a waterproof elastic coating. The brands that make up this product are: CAMPOLIN, CAMPOLIN FIBER.

Reference RCP

RCP 100 (version 3 - 27/05/2021) Construction products in general

Production plant

The manufacturing plant for the acrylic waterproofing is as follows: Soprema Iberia SLU. C/ Ferro 7, Pol. Ind. Can Pelegrí 08755 Castellbisbal, Barcelona. Spain.

Validity

From: 03/10/2023 Until: 03/10/2028

The validity of DAPcons®.100.156 is subject to the conditions of the regulation DAPcons®. The current edition of this DAPcons® is the one that appears in the registry maintained by Cateb; for informational purposes, it is included on the Program website www.csostenible.net

EXECUTIVE SUMMARY

ACRYLIC WATERPROOFING

**DAPconstruction® Programme Operator**

Environmental Product Declarations in the Construction sector
www.csostenible.net

**Programme Manager**

Colegio de la Arquitectura Técnica de Barcelona (Cateb)
Bon Pastor, 5 · 08021 Barcelona www.apabcn.cat

**Owner of the declaration**

SOPREMA IBERIA SLU
CALLE FERRO, 7 - POLIGONO IND CAN PELEGRI 08755 - BARCELONA (España)
www.soprema.es

**Author of the Life cycle assessment:**

ITeC - Institut de Tecnologia de la Construcció de Catalunya
C. Wellington, 19, 08018 - BARCELONA, España

Declared product

ACRYLIC WATERPROOFING

Geographic representation

Production: Spain.

Distribution and end of life: Global.

Variability between different products

Declared values on this EPD are of a medium product, with a variability for indicator "Global Warming Potential-total (GWP-total)" of 0.7%, and a variability value of 3.7% for all indicators.

Declaration number

DAPcons®.100.156

Issue date

23/02/2023

Validity

This verified declaration authorizes its holder to carry the logo of the operator of the ecolabelling program DAPconstruction®. The declaration is applicable exclusively to the mentioned product and for five years from the date of registration. The information contained in this statement was provided under the responsibility of:

SOPREMA IBERIA SLU

Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

Verifier Signature

HELIOS POMAR BLANCO. ReMa-INGENIERÍA, S.L..
Verifier accredited by the administrator of the
DAPcons® Programme

ENVIRONMENTAL PRODUCT DECLARATION

1. DESCRIPTION OF THE PRODUCT AND ITS USE

High density Campolin acrylic resin, which forms an elastic waterproof coating. There is a product line with reinforcing fibers that allows an application without having to intercalate a reinforcement between layers.

The products covered by the EPD are the following:

- CAMPOLIN White RAL 9010, 20kg drum.
- CAMPOLIN Grey RAL 7004, 20kg drum.
- CAMPOLIN Red RAL3002, 20kg drum.
- CAMPOLIN Terracota RAL 8023, 20kg drum.
- CAMPOLIN FIBER White RAL 9010, 5kg can and 20kg drum.
- CAMPOLIN FIBER Grey RAL 7004, 5kg can and 20kg drum.
- CAMPOLIN FIBER Black RAL 9004, 20kg drum.
- CAMPOLIN FIBER Red RAL 3002, 5kg can and 20kg drum.
- CAMPOLIN FIBER Terracota RAL 8023, 5kg can and 20kg drum.
- CAMPOLIN FIBER Green RAL 6010, 20kg drum.

Its main applications are:

- Elimination of dampness and leaks in roofs and vertical surfaces (half-rounds of slabs, parapets, dividing walls, rainwater partitions...).
- Re-waterproofing of balconies and roofs of flagstone or tile.
- Protective coating of walls, party walls, slab edges and concrete structures.
- Renovation of fiber cement roofs, sheet metal or previously waterproofed with rubber.
- Aesthetic coating of self-protected asphalt roofs.
- Not recommended for tiling on top or to cover with products that can hinder water circulation.

Its advantages are:

- Water-based product, free of solvents, tar or other asphaltic materials.
- Easy and fast application by roller, airless spray gun and brush.
- Completely impermeable to rainwater.
- Breathable to water vapor.

Technical properties:

- Density: 1,30 g/cm³.
- Viscosity (KU): ≥ 141 .
- Dry residue: 64-68%
- Dry to the touch (20°C): 20 - 40 minuts.
- Completely dry (20°C): 24 hours.
- VOC: < 40 g/l.
- Yield: 1,8-2,2 kg/m², in three layers.
- Tensile strenght resistance (dried 28 days): 2,95±0,15 MPa.
- Elongation (dried 28 days): 375±50 %.
- Flexibility at low temperatures: No cracks at -15°C.
- Ageing resistance 14 a 70°C: max. 3% loss of mass, max. 35% loss of elongation.
- Maximal time of storage: 1 year, temperature between 5 and 30°C.

1.1 Content information

Product components

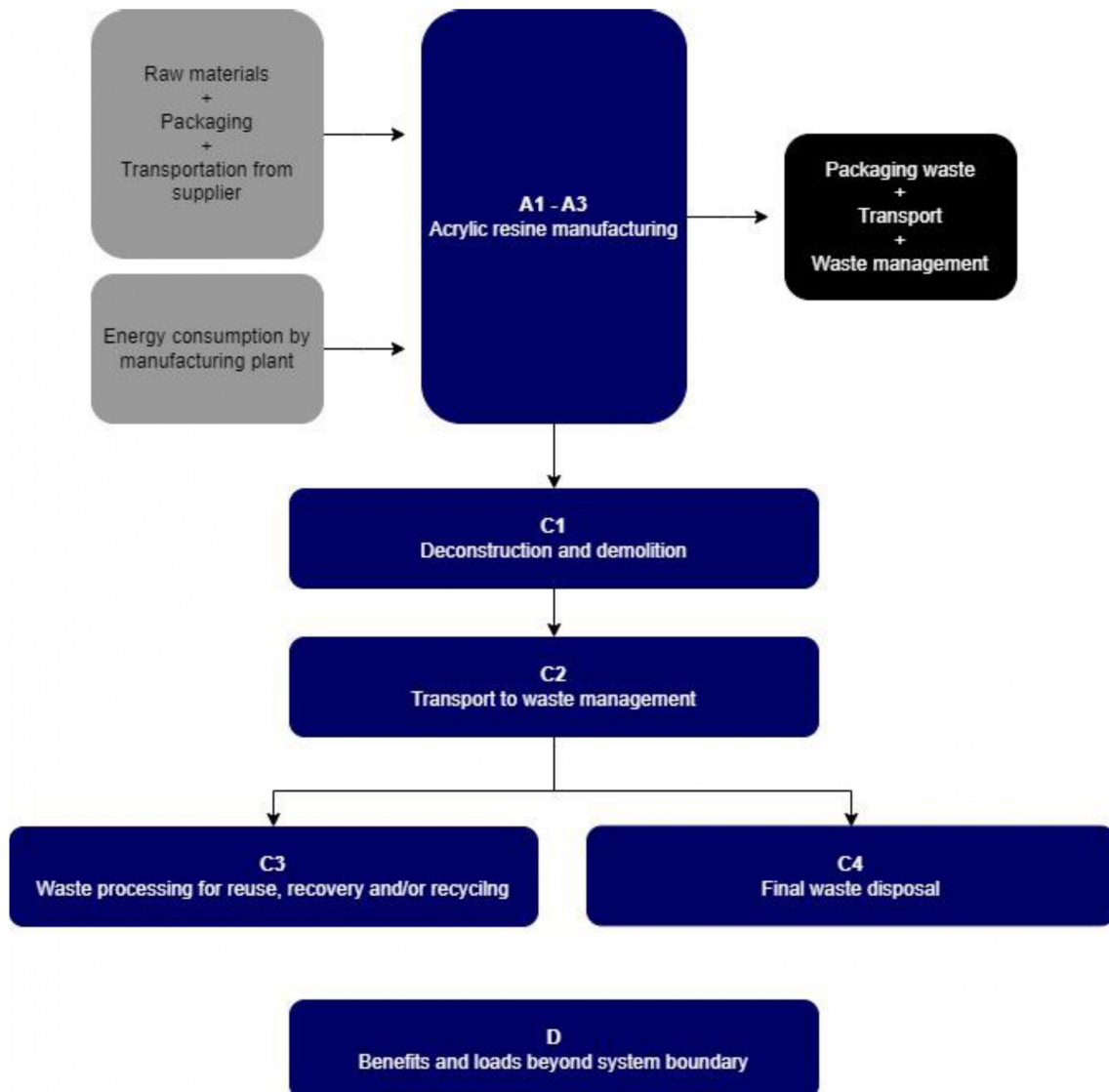
The raw materials used in Campolin acrylic resin manufacturing process are resins, colorants, mineral fillers, additives and water.

Packaging materials

The materials used for packaging are polypropylene for drums and cans, and wood for pallets.



System limits



2. DESCRIPTION OF THE STAGES OF THE LIFE CYCLE

2.1. Manufacturing (A1, A2 y A3)

Raw Materials and transport (A1 y A2)

Raw materials are received at the manufacturing plant from external manufacturers. Impacts produced by raw materials have been considered, considering the manufacturing yield, and impacts produced by the packaging of raw materials.

For the transport of raw materials, a generic EURO VI truck of 16-32 Tn has been considered.

Manufacturing (A3)

The acrylic waterproofing is manufactured using a dissolver type agitator in two vertical tanks. From aqueous resins, fillers, pigments and additives, the acrylic waterproofing is manufactured and finally packed in plastic cans using packaging machines.

2.2. Construction process stage (A4 y A5)

Transport to the building site (A4)

Undeclared

Product installation process and construction (A5)

Undeclared

2.3. Product use (B1-B7)

Use (B1)

Undeclared

Maintenance (B2)

Undeclared

Repair (B3)

Undeclared

Replacement (B4)

Undeclared

Refurbishment (B5)

Undeclared

Operational energy use (B6)

Undeclared

Operational water use (B7)

Undeclared

2.4. End of life (C1-C4)

Deconstruction and demolition (C1)

The environmental impacts attributed to the disassembly of the product at the end of its useful life are negligible, as they constitute a very small part of the demolition of a building.

Transport to waste processing (C2)

Product residues created in the previous phase are transported by 16-32 Tn EURO VI truck at a distance of 50 km to the waste management place.

Waste processing for reuse, recovery and/or recycling (C3)

No environmental impact is accounted in this module because paint waste has no reuse, recovery or recycling process.

Disposal (C4)

In this module, the environmental impacts of disposing of 100% of the product waste in landfill are accounted for.

2.5. Reuse/recovery/recycling potential (D)

Since paint waste has no recycling process, the environmental charges and benefits generated by the recycling of paint waste produced in the Construction and End-of-Life stages are zero.

3. LIFE CYCLE ASSESSMENT

The life cycle analysis model on which this statement is based has been performed according to ISO 14040:2006, ISO 14044+A1:2018, ISO 14025:2010 and EN 15804:2012+A2:2020, and RCP 100 Product Category Rules document for general building products. The Ecoinvent v3.6 (2029) database has been used to obtain the inventory data for the generic processes.

The declaration is Cradle to Gate type with modules C1 - C4 and module D. Life Cycle Analysis covers from paint manufacturing until it leaves the plant, considering the end-of-life stage and benefits and loads beyond system boundary. Specific data for 2021 production of quantity and raw materials used, origin and transport required, type of packaging and energy consumption were taken from Soprema Iberia S.L.U. plant at C/ Ferro 7, Pol. Ind. Can Pelegrí 08755 Castellbisbal, Barcelona. Spain.

3.1. Declared Unit

The declared unit is: 1kg of CAMPOLIN / CAMPOLIN FIBER SOPREMA paint.

Additional comments

-

3.2. Scope and modules that are declared

Table 2. Declared modules

Product stage			Construction Process Stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw materials supply	Transport	Manufacturing	Transport	Construction - Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction	Transport	Waste processing	Disposal	Reuse, recovery, recycling potential
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

X = Declared module MND = Undeclared module

3.3. LCA results of potential environmental impact referred to the declared unit (ACV)

Table 3. Parameters of environmental impact

Parameter	Unit	Life cycle stage														Module D
		Product stage	Construction Process Stage		Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Climate change - total (GWP-total)	kg CO2 eq	2,89E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,75E-03	0,00E+00	1,14E-01	0,00E+00
Climate change - fossil (GWP-fossil)	kg CO2 eq	2,89E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,74E-03	0,00E+00	1,14E-01	0,00E+00
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	-1,26E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,77E-06	0,00E+00	9,03E-05	0,00E+00
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	6,58E-04	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,35E-08	0,00E+00	2,03E-06	0,00E+00
Ozone layer depletion (ODP)	kg CFC 11 eq	1,10E-07	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,57E-09	0,00E+00	9,56E-10	0,00E+00
Acidification (AP)	mol H+ eq	2,35E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,33E-05	0,00E+00	4,97E-05	0,00E+00
Eutrophication of fresh water (EP-freshwater)	kg P eq	2,17E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,39E-08	0,00E+00	6,58E-07	0,00E+00
Eutrophication of sea water (EP-marine)	kg N eq.	2,22E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,22E-06	0,00E+00	2,06E-05	0,00E+00
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	2,54E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,47E-05	0,00E+00	2,24E-04	0,00E+00
Photochemical ozone formation (POCP)	kg NMVOC eq	8,98E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	8,75E-06	0,00E+00	8,72E-05	0,00E+00
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	9,45E-05	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	3,98E-10	0,00E+00	2,53E-09	0,00E+00
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	5,10E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	9,57E-02	0,00E+00	7,16E-02	0,00E+00
Water consumption (WDP)	m3 worldwide eq. private	1,30E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	-2,11E-05	0,00E+00	1,85E-04	0,00E+00
The Indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This Indicator is thus equal to the GWP Indicator originally defined in EN 15804:2012+A1:2013. Can be obtained from IPCC characterization factors.																
Global Warming Potential (GHG)	kg CO2 eq	2,89E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,74E-03	0,00E+00	1,14E-01	0,00E+00

A1 Supply of raw materials. A2 Transport to waste processing. A3 Manufacturing. A4 Transport to waste processing. A5 Installation and construction processes. B1 Use. B2 Maintenance. B3 Repair. B4 Replacement. B5 Refurbishment. B6 Operational energy use. B7 Operational water use. C1 Deconstruction and demolition. C2 Transport to waste processing. C3 Waste management for reuse, recovery and recycling. C4 Fine removal. D Environmental benefits and burdens beyond the system boundary. MND Undeclared module.

Table 4. Parameters for the use of resources, waste and output material flows

Parameter	Unit	Life cycle stage														Module D
		Product stage	Construction Process Stage		Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Use of renewable primary energy excluding renewable primary energy resources used as feedstock	MJ, net calorific value	2,66E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,34E-04	0,00E+00	1,84E-03	0,00E+00
Use of renewable primary energy used as raw material	MJ, net calorific value	8,95E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	2,75E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,34E-04	0,00E+00	1,84E-03	0,00E+00
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	5,50E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,02E-01	0,00E+00	7,60E-02	0,00E+00
Use of non-renewable primary energy used as raw material	MJ, net calorific value	5,74E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Total use of non-renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	5,56E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,02E-01	0,00E+00	7,60E-02	0,00E+00
Use of secondary materials	kg	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of renewable secondary fuels	MJ, net calorific value	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable secondary fuels	MJ, net calorific value	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of freshwater resources	m3	3,20E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	1,43E-07	0,00E+00	9,51E-06	0,00E+00
Hazardous waste removed	kg	1,99E-05	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	2,53E-07	0,00E+00	1,51E-07	0,00E+00
Non-hazardous waste eliminated	kg	1,54E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	5,11E-06	0,00E+00	1,00E+00	0,00E+00
Radioactive waste disposed of	kg	5,86E-05	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	6,93E-07	0,00E+00	4,54E-07	0,00E+00
Components for reuse	kg	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	7,82E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery (energy recovery)	kg	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ by energy vector	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

A1 Supply of raw materials. A2 Transport to waste processing. A3 Manufacturing. A4 Transport to waste processing. A5 Installation and construction processes. B1 Use. B2 Maintenance. B3 Repair. B4 Replacement. B5 Refurbishment. B6 Operational energy use. B7 Operational water use. C1 Deconstruction and demolition. C2 Transport to waste processing. C3 Waste management for reuse, recovery and recycling. C4 Fine removal. D Environmental benefits and burdens beyond the system boundary. MND Undeclared module.

Table 5. Kg of biogenic carbon

Carbon content (biogenic) - packaging	1,57E-02
Carbon content (biogenic) - product	0,00E+00

3.4. Recommendations of this DAP

The environmental product declarations of different type III eco-labeling systems may not be directly comparable, as the calculation rules may be different. This declaration represents the performance of the acrylic waterproofing manufactured by Soprema Iberia S.L.U.

3.5. Cut-off rules

More than 95% of all mass and energy inputs and outputs in the system have been included, leaving out, among others, diffuse emissions at the factory.

3.6. Additional environmental information

The product is defined as a non-hazardous substance according to the legislation no. 1907/2006 (REACH) of June 1, 2007. The SAFETY DATA SHEET (SDS) and the use and handling data sheet are available on the manufacturer's website www.soprema.es.

ISO 14001: Certified production plants and implemented Environmental Management System.

3.7. Other data

-

4. ADDITIONAL TECHNICAL INFORMATION AND SCENARIOS

4.1. Transport to the building site (A4)

Undeclared

4.2. Installation processes (A5)

Undeclared

4.3. Reference life (B1)

Undeclared

4.4. Maintenance (B2), Repair (B3), Replacement (B4), or Refurbishment (B5)

Maintenance (B2)

Undeclared

Repair (B3)

Undeclared

Replacement (B4)

Undeclared

Refurbishment (B5)

Undeclared

4.6. Operational energy use (B6) and operational water use (B7)

Undeclared

4.7. End of life (C1-C4)

	Process				
	Collection processes (specified by types)	Recovery systems (specified by type)			Elimination
	kg collected with mixed construction waste	kg for reuse	kg for recycling	kg for energy recovery	kg for final disposal
	1	0	0	0	1
Assumptions for scenario development	Paint waste has no reuse, recovery or recycling process. It is accounted the environmental impacts of disposing 100% of the product waste in landfill.				

5. ADDITIONAL INFORMATION

- Manufactured according to ISO:9001 Quality System, certificate no. FR18/81842815.
- Environmental Management System according to ISO:14001, certificate no. FR18/81842816.
- Product declared according to EN 13813 - Screed material and floor screeds - Screed material - Properties and requirements.

6. RCP AND VERIFICATION

This statement is based on Document

RCP 100 (version 3 - 27/05/2021) Construction products in general

Independent verification of the declaration and data, in accordance with ISO 14025 and IN RCP 100 (version 3 - 27/05/2021)



External

Third party Verifier

HELIOS POMAR BLANCO

Accredited by the administrator of the DAPcons®
Programme



Verification date:

16/10/2023

References

- EN 15804:2012+A2:2019, Sustainability of construction works. Environmental product declarations. Basic rules for the construction product category.
- ISO 14025:2010, Environmental labels and declarations - Environmental declarations type III - Principles and procedures (identical to ISO 14025:2006).
- ISO 21930:2017, Sustainability of construction works - Environmental declaration for construction products (referenced by EN 15804).
- ISO 14040:2006, Environmental management - Life cycle assessment - Principles and framework.
- ISO 14044+A1:2018, Environmental management - Life cycle assessment - Requirements and guidelines.
- PD CEN/TR 16970:2016, Sustainability of construction works. Guidance for the implementation of EN 15804.
- RCP 100. Construction products in general, v3 (27/05/2021).
- Association of Issuing Bodies (2020). European Residual Mixes 2020.
- Luciano Antonio Gileno & Luiz Felipe Ramos Turci, 2021, Life cycle assessment for PET-bottle recycling in Brazil: B2B and B2F routes, Instituto de Ciencia e Tecnologia (ICT), Federal University of Alfenas (UNIFAL-MG), Poços de Caldas-MG, Brazil.
- Bressi, Sara & Santos, João & Giunta, Marinella & Lo Presti, Davide. (2018). A comparative life-cycle assessment of asphalt mixtures for railway sub-ballast containing alternative materials.
- Rietveld, Eelco & Hegger, Sander. (2014). Life Cycle Assessment of Newly Manufactured and Reconditioned Industrial Packaging.
- Dupriez, Maxime. (2017). Life Cycle Assessment of metal packaging in Europe.
- Biganzoli, Laura & Rigamonti, Lucia & Grosso, Mario. (2018). Intermediate Bulk Containers Re-use in the Circular Economy: An LCA Evaluation.
- Guide on the codification, classification and waste management routes in Catalonia. Generalitat de Catalunya, Department of Territory and Sustainability. Waste Agency of Catalonia.
- Life Cycle Analysis Report for SOPREMA Acrylic Paints (2023). The Catalonia Institute of Construction Technology.

Programme Manager

Colegio de la Arquitectura Técnica de Barcelona
(Cateb)

Bon Pastor, 5 · 08021 Barcelona www.apabcn.cat



