



Compliant with ISO 14025 and UNE-EN 15804:2012+A2:2019

# Pure polyurea membrane DANOCOAT 250

# DANOSA, Derivados Asfálticos Normalizados, S.A.

Program: The International EPD® System, <u>www.environdec.com</u>

Program Manager: EPD International AB

EPD Registration Number: S-P-03356
Publication date: 2023-04-20
Valid until: 2028-04-17

An EPD should contain current information and be updated if conditions change. Therefore, the stated validity is subject to continued registration and publication at www.environdec.com.









# **General information**

# **Program information**

Program:	The International EPD® System						
	EPD International AB						
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Direction.	SE-100 31 Stockholm						
	Sweden						
Web site:	www.environdec.com						
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CEN EN 15804 serves as the basis for the Product Category Rules (PCR).
Product Category Rule (PCR): Construction Products, PCR 2019:14. Version 1.11.
The PCR review was Performed by: The Technical Committee of the International EPD® System. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel can be contacted via www.environdec.com/contact
Independent verification of the declaration and information, according to ISO 14025:2010
☐ EPD process certification ☒ EPD verification
Third Party Verifier :
TECNALIA R&I Certification S.L. Auditor: Cristina Gazulla Santos Accredited by: ENAC. Accreditation no.125/C-PR283
The data tracking procedure during the validity of the EPD involves a third party verifier:
⊠ Yes □ No

Construction product EPDs may not be comparable if they do not comply with EN 15804.

Environmental claims for products within the same product category from different programs may not be comparable.

The verifier and the operator of the program have no responsibility for the legality of the product.





#### Company information

Owner of the EPD: DANOSA, Derivados Asfálticos Normalizados, S.A

Contact: DANOSA SPAIN - +34 949 888 210 - info@danosa.com

DANOSA is a manufacturing company, specialized in integral solutions for sustainable construction. It has been in continuous activity since its foundation in 1964, having evolved through new products and systems, addressing and expanding geographies and supplied markets, with a distribution of sales between national and international markets of 50% respectively. It is considered as one of the reference companies in the Spanish and European market, with a global presence in more than 100 countries.

Thanks to this, DANOSA meets the needs of Building and Civil Engineering: asphalt waterproofing, synthetic waterproofing, liquid waterproofing, acoustic insulation, thermal insulation, mortars, drainage, geotextiles and skylights. In recent years it has been fully involved in the development of innovation and sustainability projects, adapting its solutions to comply with sustainable construction standards, maximizing the energy efficiency of buildings. In addition, it has ISO 9001 and ISO 14001 quality and environmental certifications, respectively.

Many of its products have Environmental Product Declarations (EPD) and are also integrated in the materials platform of the Green Building Council Spain, which allows them to score in projects with GREEN, LEED and BREEAM certification.

The company has also strengthened its business line dedicated to the recovery of materials and its commitment to the circular economy, which allows it to introduce recycled materials into production processes, making it possible for these wastes to become useful raw materials for the manufacture of new products.

This document will be used for B2B communication and may be considered global in scope.

Location of the production center: Polígono Industrial Sector 9, 19290 Fontanar (Guadalajara) Spain.

#### **Product information**

<u>Name of the product:</u> DANOCOAT 250 is a continuous, seamless, pure polyurea membrane with high mechanical and chemical resistance and high elasticity.

<u>Product description:</u> Waterproofing membrane, 100% pure polyurea, two-component, free of solvents and plasticizers, with 100% solids content, curing in a few seconds; for waterproofing with high elasticity, crack bridging capacity, excellent chemical and abrasion resistance. It is a versatile membrane, suitable for waterproofing, coating and protecting various types of substrates against impact, wear and tear or abrasion. It is applied by means of high pressure and high temperature spraying equipment.









Danocoat 250

This product is suitable for waterproofing and can be installed in:

- Waterproofing of balconies and terraces.
- Waterproofing of roofs.
- Waterproofing of bleachers and access stairs.
- Waterproofing of pedestrian walkways.
- Parking lot pavements and roofs.
- Waterproofing of swimming pools, retention basins, tanks and silos.
- Waterproofing and protection against abrasion of metal surfaces.
- Protection of concrete, steel and other materials in chemically aggressive environments.

#### It has the following advantages and benefits:

- High resistance to root penetration.
- Excellent impermeability and total watertightness.
- Continuous membrane without overlaps, excellent adhesion and adaptable to any geometry of the substrate.
- Good chemical resistance, especially to stagnant water and hydrolysis.
- Excellent mechanical resistance to abrasion, traction and temperature changes (-40°C to +140°C).
- High elasticity capable of bridging cracks even at low temperatures.
- Instantaneous curing and drying in just a few seconds.
- Very fast execution of the work without generating inconveniences.
- Suitable for road and pedestrian traffic.
- Application of high thicknesses in a single pass. Aesthetic finish with multiple colors and textures.
- Environmentally friendly: Solvent free and plasticizer free.





#### Declared performance:

Esser	ntial characteristics	Performance	Harmonised technical specification			
Bond strength by pull-of	ff	≥ 4,0 Mpa				
Water-vapour transmiss	ion	Clase II				
Liquid water permeabili	ty	W < 0,1kg/m2*h0,5				
Carbon dioxide permeal	oility	SD > 50				
Resistance to impact		Clase III	EN 1504-2:2004			
Taber abrader		128 mg	LN 1304-2.2004			
Resistance to tempera	ture shock	3,6 Mpa				
Crack bridging	Static method (-10°C)	Clase A5 > 2,5 mm				
properties	Dyanmic method (-10°C)	Clase B.4.2				
Reaction to fire		Clase E				
Resistance to severe c	hemical attack (group 1, 3, 9, 10, 11,	Clase I				

CPC Code: 36950 Unspecified articles of plastics for construction.

#### **LCA Information**

#### Declared unit:

1 kg of waterproofing membrane, installed and with an expected service of 50 years.

<u>Expected service of reference:</u> The expected service of the product is considered to be the same as that of the building as it is a product that is incorporated into the building's installations, i.e. 50 years.

<u>Temporal representativeness:</u> The primary data were obtained from the production center and refer to the year 2021.

<u>Databases and software used:</u> Ecoinvent v3.8 (allocation, cut-off by classification) and SimaPro v9.3. The calculation methodologies are in accordance with UNE-EN 15804:2012+A2:2019.

<u>Description of the system boundaries:</u> The EPD covers modules A1-A3, A4-A5, B1-B7, C1-C4 and D.

Modularity and polluter payer principles have been followed. The following processes have been excluded:

- Manufacture of equipment used in production, buildings or any other capital goods;
- The transportation of personnel to the plant;
- · Transportation of personnel within the plant;
- Research and development activities.
- Long-term emissions.

95% of all mass and energy inputs and outputs of the central system, identified in the life cycle inventory included in this report, have been included. Those inputs and outputs, for which data are not available, which together represent less than 5% of the mass, such as packaging waste of auxiliary materials, have not been considered.





Whenever possible, allocation has been avoided. For general energy and waste data have been allocated physically, based on kg of product. Specific process consumption has been measured with specific meters.

All primary data were obtained from Danosa. Secondary data were obtained from the Ecoinvent v3.8 database.

The scenarios included are currently in use and are representative of one of the most likely alternatives.

#### A1. Raw material extraction

Extraction and processing of natural resources and manufacture of raw materials: Polyetheramine and amine.

This stage includes the production of the energy consumed in the manufacturing stage (A3).

- The raw materials for production are placed in the mixer.
- The raw materials are weighed and added into the vat. The raw materials are mixed and agitated at the speeds and times indicated in the production order.
- The containers are labelled and filled. Finally, it is placed on the pallet and strapped.

#### A2. Transportation

Transport of all raw materials considered in module A1, from the extraction, production and processing site to the factory gate.

#### A3. Manufacturing

This module considers all membrane manufacturing processes, including the consumption of packaging materials, as well as the treatment of the waste generated.

The membrane is distributed packaged in metal drums with plastic film on wooden pallets.

The primary data used have been obtained from the production plant itself and are representative of Danosa's membrane production.

#### A4. Distribution

The scenarios included are currently in use and are representative of one of the most likely alternatives. An additional statement of representative mixtures is allowed for the relevant region.

Transportation of the product from the production plant to the installation site.

PARAMETER	VALUE (expresse	d in declared unit)								
Type of fuel and consumption of the vehicle or type of means of transportation used	National distribution: 16-32 ton Euro 5 truck with a diesel consumption of 0.38 liters per km.	International distribution: 16-32 ton Euro 5 truck with a diesel consumption of 0.38 liters per km and Transoceanic ship.								
Distance	National and international distribution: Components A and B 669.41 km (on road)	National and international distribution: Components A and B 2338.08 km (by ship)								
Capacity of use (including return transport)	Assumed % in Ed	coinvent database								
Bulk density of the product conveyed: Membrane	2 kg/m²									
Volume use capacity factor	1 (default)									





#### A5. Installation

This module includes the consumption of auxiliary materials (in addition to the product), as well as the management of possible waste generated during this information module.

The extraction systems send components A and B to the pressurising and heating machine. These components, after exiting the nozzle of the applicator gun independently, are mixed in the air and react with each other.

- Preparation of the substrate, cleaning and repair of cracks and crevices.
- Application of a primer.
- Projection of the Danocoat 250 polyurea membrane.
- If the membrane is left outdoors, it must be protected with a UV resistant top coat.
- The projection of the Danocoat 250 polyurea membrane is carried out by means of a specific equipment working at pressure and temperature (65 80 °C).

PARAMETER	VALUE (EXPRESSED IN DECLARED UNIT)
Secondary materials for installation: Water	-
Consumption of other resources: Solvents	Considered negligible
Quantitative description of the type of energy (regional mix) and its consumption during the installation process.	1.67E-01 kwh/kg
Waste of materials on site, prior to processing of waste generated during product installation: waste of product	-
Direct emissions to air, land or water	Considered negligible

#### B. Stage of use

As this is a passive product within a building, the use stage (including modules B1 to B7) is considered negligible.

#### Demolition (C1)

It is considered a joint demolition of the building, so the contribution of the specific demolition of the evaluated membranes is not considered relevant.

#### Transportation (C2)

Once the product (membrane and auxiliary installation material) has been uninstalled, it is transported 50 km in 7.5-16 ton trucks from the construction site to the landfill.

#### Waste treatment for reuse, recovery or recycling (C3)

Waste from the system is not considered to be processed prior to disposal.

#### Final elimination (C4)

All system waste (product and auxiliary material) is disposed of in a landfill.

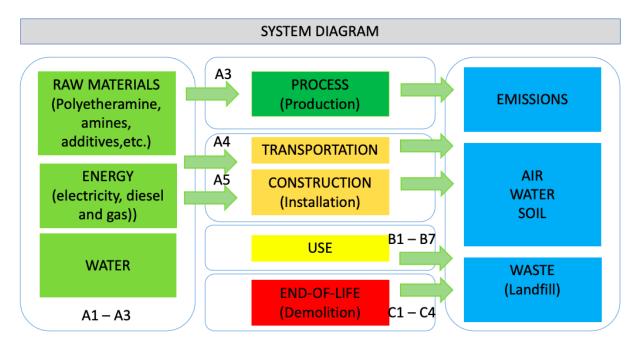
PARAMETER	VALUE (EXPRESSED IN DECLARED UNIT)
Specified waste collection process by type	100% to landfill, collected and mixed with the rest of the construction waste
Recovery system specified by type	0% membrane recycling.
Specified discharge by type	100% landfill
Assumptions for scenario development	The waste from demolition of the products is transported 50 km by 7.5-16 ton Euro 5 trucks to the final treatment or disposal site.





#### Benefits of recycling (module D)

Although modulus D has been calculated, there are no recycling benefits because all of the product is disposed of in landfill as a mixture of construction products. 100% of the weight is sent to landfill.



#### Additional information

- The life cycle analysis study has been carried out by DANOSA with the technical support of Marcel Gómez Consultoría Ambiental.
- The study covers a minimum of 95% of the materials and energy for each module evaluated, and at least 99% of the total use of materials and energy for each unitary process.
- More product information: www.danosa.es
- The quality of the input data has been assessed according to its technological, temporal and geographical coverage. The representativeness of the selected processes is considered to be good, resulting in a value of 3.65 out of 5.

<u>Declared module, geographic location, specific data and data variation.</u>





	Proc	luct S	tage	ti	struc on age		Use Stage End-of-life stage								Resource recovery stage			
	Supply of Raw Materials	Transportation	Manufacturing	Transportation	Construction - Installation	Use	Maintenance	Repair	Replacement	Rehabilitation	Operational Energy Use	Operational Water Use	Deconstruction - demolition	Transportation	Waste Treatment	Waste Disposal		Reuse Potential - Recovery - Recycling.
Module	A1	A2	А3	<b>A4</b>	A5	B1	B2	В3	В4	В5	В6	В7	<b>C1</b>	C2	С3	C4		D
Declared modules	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	х		Х
Geographi cal location	ES	EU	ES	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU		EU
Specific data		>90%	GWI	P-GHG		-	-	-	-	-	-	-	-	-	-	-		-
Variation - products	impa	ct pro	duct	s <10%	eclared <10% - for group.		-	-	-	-	-	-	1	1	1	-		-

# Information of composition

#### Danocoat 250

Danocoat 250			
Product components	Weight, kg	Post-consumer recycled material (%)	Renewable material (%)
Cor	mponent A		
Diisocyanate	0,40 - 0,45	0	0
Isocyanate	0,05 - 0,10	0	0
Weight	0,52	0	0
Cor	mponent B		
Polyetheramine	0,25 – 0,35	0	0
Amina	0,10 - 0,15	0	0
Titanium dioxide	0,02 - 0,04	0	0
Additives	0,001 - 0,002	0	0
Weight	0,48	0	0
Packaging materials	Weight, kg	Weight (% in rela produc	
Wooden Pallet	7.20E-03	0.72	
Film	1.86E-04	0.02	
Metal drum	2,50E-03	0.16	

No substance in the product above 0.10% by weight is present on the "List of potentially hazardous substances (SVHC) candidates for authorization under REACH legislation.





# **Environmental information**

The results are relative expressions and do not predict impacts on endpoint categories, exceedance of certain levels, safety margins or risks.

#### Danocoat 250

**Environmental impacts** 

							Resu	lts per c	declared	l unit						
Indicator	Unit	Manufacturing	Constr	uction				Use					End-c	of-life		Module
		A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
Climate change - fossil (GWP-fossil)	kg CO2 eq	3,61E+00	6,61E-02	5,39E-02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	8,80E-03	0,00	5,27E-03	0,00
Climate change - biogenic (GWP- biogenic)	kg CO2 eq	9,18E-03	2,07E-05	3,40E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	2,86E-06	0,00	7,97E-05	0,00
Climate change - land use and land use changes (GWP-luluc)	kg CO2 eq	2,46E-03	7,17E-07	4,20E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	7,05E-08	0,00	1,91E-06	0,00
Climate change - total (GWP-total)	kg CO2 eq	3,62E+00	6,61E-02	5,46E-02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	8,81E-03	0,00	5,35E-03	0,00
Ozone layer depletion (ODP)	kg CFC11 eq	7,41E-07	1,55E-08	3,70E-09	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	2,07E-09	0,00	9,36E-10	0,00
Acidification (AP)	mol H+ eq	2,19E-02	8,01E-04	4,50E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	2,96E-05	0,00	4,91E-05	0,00
Eutrophication of freshwater (EP- freshwater)	kg P eq	1,15E-04	3,58E-08	2,22E-06	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	4,46E-09	0,00	6,33E-08	0,00
Eutrophication of marine water (EP-marine)	kg N eq	4,86E-03	1,89E-04	6,87E-05	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	9,31E-06	0,00	2,03E-05	0,00
Terrestrial Eutrophication (EP-terrestrial)	mol N eq	3,62E-02	2,11E-03	7,63E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,03E-04	0,00	2,23E-04	0,00
Photochemical ozone formation (POCP)	kg NMVOC eq	1,39E-02	5,53E-04	2,05E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	2,80E-05	0,00	6,16E-05	0,00
Depletion of abiotic resources - minerals and metals (ADP- minerals&metals)*	kg Sb eq	1,63E-06	2,28E-09	2,15E-09	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	3,79E-10	0,00	2,40E-10	0,00
Depletion of abiotic resources - fossil fuels (ADP-fossil)*	MJ	8,25E+01	9,36E-01	1,25E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,24E-01	0,00	7,01E-02	0,00
Water consumption (WDP)*	m3 depriv.	2,66E+00	-1,60E-04	3,42E-02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	-2,07E-05	0,00	1,75E-04	0,00

<sup>\*</sup> Disclaimer: The results of this Environmental Impact Indicator should be used with caution as the uncertainties of these results are high or experience with the Indicator is limited.





						F	Results	per dec		it						
Indicator	Unit	Manufacturing	Const	ruction				Use					Module			
		A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	B7	C1	C2	C3	C4	D
Global Warming Potential - GHG	kg CO2 eq	3,46E+00	6,57E-02	5,34E-02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	8,74E- 03	0,00	5,20E- 03	0,00

The indicator includes all greenhouse gases included in the total GWP, but excludes the absorption and emissions of biogenic carbon dioxide and biogenic carbon stored in the product. This indicator is therefore equal to the GWP indicator originally defined in UNE-EN 15804:2012+A2:2019, according to the IPCC method.

#### **Use of resources**

							Resu	lts per o	declare	d unit						
Indicator	Unit	Manufacturing	Constr	uction	Use							End-c	of-life		Module	
		A1-A3	A4	A5	B1	B2	В3	В4	B5	В6	В7	<b>C1</b>	C2	С3	C4	D
Renewable primary energy use, excluding renewable primary energy resources used as raw materials	MJ	3,27E+00	1,38E-03	2,77E-01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,89E-04	0,00	1,65E-03	0,00
Use of renewable primary energy resources used as raw materials	MJ	5,41E-03	0,00E+00	0,00E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00E+00	0,00	0,00E+00	0,00
Total use of renewable primary energy resources	MJ	3,28E+00	1,38E-03	2,77E-01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,89E-04	0,00	1,65E-03	0,00
Non-renewable primary energy use, excluding non-renewable primary energy resources used as raw materials	MJ	8,85E+01	9,94E-01	1,30E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,31E-01	0,00	7,45E-02	0,00
Use of non-renewable primary energy resources used as raw materials	MJ	4,28E-03	0,00E+00	0,00E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00E+00	0,00	0,00E+00	0,00
Total non-renewable primary energy resource use	MJ	8,85E+01	9,94E-01	1,30E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,31E-01	0,00	7,45E-02	0,00
Use of secondary material	kg	9,20E-01	0,00E+00	0,00E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00E+00	0,00	0,00E+00	0,00
Use of renewable secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00E+00	0,00	0,00E+00	0,00
Use of non-renewable secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00E+00	0,00	0,00E+00	0,00
Net freshwater use.	$m^3$	7,09E-02	2,87E-06	4,95E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	3,39E-07	0,00	8,42E-06	0,00





# Waste generation and outflows

# **Waste generation**

Results per declared unit																
Indicator	Unit	Manufacturing	Const	ruction				Use				Module				
		A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	C1	C2	C3	C4	D	
Hazardous waste disposed	kg	5,28E-05	1,92E-06	4,15E-07	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	3,25E-07	0,00	1,50E-07	0,00
Non-hazardous waste disposed of	kg	2,15E-01	4,02E-05	1,96E-01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	5,09E-06	0,00	1,00E+00	0,00
Radioactive waste	kg	1,72E-04	6,71E-06	9,78E-06	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	8,84E-07	0,00	4,42E-07	0,00

#### **Outflows**

	Results per declared unit															
Indicator	Unit	Manufacturing	Const	Use						End-of-life				Module		
		A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	<b>C1</b>	C2	С3	C4	D
Components for reuse	kg	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00	0.00E+00	0.00
Recycling materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00	0.00E+00	0.00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00	0.00E+00	0.00
Exported energy, electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00	0.00E+00	0.00
Exported energy, thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00	0.00E+00	0.00

# Biogenic carbon content information

Results per declared unit					
Biogenic carbon content	Unit	Quantity			
Biogenic carbon content in the product	kg C	0.00E+00			
Biogenic carbon content in the enclosed packaging.	kg C	1.99E-02			

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>.

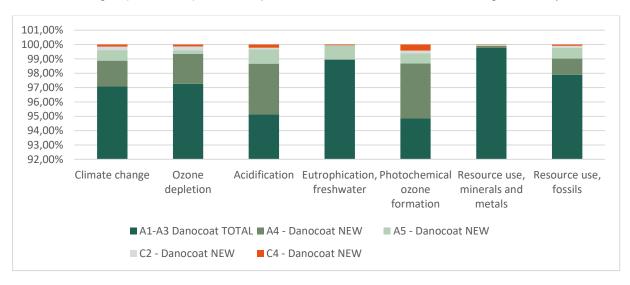




# Interpretation of the LCA

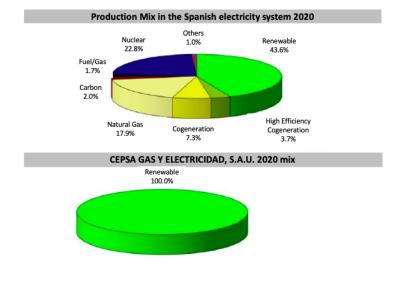
As can be seen in the graph, the product stage (A1-A3) is the Life Cycle Stage with the highest impact for all impact categories analyzed, representing between 96% (Acidification) and 99% (Depletion of abiotic elements, elements) of the total impact of the product life cycle.

A4 represents a low impact for all impact categories analyzed, between 0.14% (Depletion of abiotic elements, elements) and 4% (Ozone depletion) of the total life cycle impact. On the other hand, stage A5 represents less than 2% of the total life cycle impact of all the impact categories analyzed, as do the End-of-Life stages (C2 and C4), whose impacts do not exceed 1% for all the categories analyzed.



#### Additional environmental information

The electricity mix used for the characterization of electricity has been a combination of 61% of renewable energies and 39% of the Spanish mix for the year 2020.



CEPSA GAS Y ELECTRICIDAD, S.A.U. 2020	Production Mix in the Spanish electricity system				
100.0%	43.6%				
0.0%	3.7%				
0.0%	7.3%				
0.0%	17.9%				
0.0%	2.0%				
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#### Information related to the sectorial EPD

This EPD is not sectorial.

#### Differences with previous versions

First version of EPD®.

#### References

- General Instructions of the International EPD® System Program. Version 3.01.
- PCR 2019: 14 Construction products (EN 15804:A2) version 1.11.
- CEN (2019): UNE-EN 15804:2012+A2:2020 Sustainability of construction works Environmental Product Declarations.
- Basic rules for the Construction product category.
- ISO 14020: 2000 Environmental labels and declarations General principles.
- ISO 14025: 2010 Environmental labels and declarations-Environmental declarations Type III-Principles and procedures.
- ISO 14040: 2006 Environmental management Life cycle assessment Principles and framework.
- ISO 14044: 2006 Environmental management Life cycle assessment Requirements and guidelines.
- LCA Danosa Danocoat 250, March 2023.





# VERIFICATION STATEMENT CERTIFICATE

CERTIFICADO DE DECLARACIÓN DE VERIFICACIÓN

Certificate No. / Certificado nº: EPD00421

TECNALIA R&I CERTIFICACION S.L., confirms that independent third-party verification has been conducted of the Environmental Product Declaration (EPD) on behalf of:

TECNALIA R&I CERTIFICACION S.L., confirma que se ha realizado verificación de tercera parte independiente de la Declaración Ambiental de Producto (DAP) en nombre de:

# DERIVADOS ASFALTICOS NORMALIZADOS, S.A. (DANOSA) Pol. Ind. Sector, 9 19290 - FONTANAR (Guadalajara) SPAIN

for the following product(s): para el siguiente(s) producto(s):

# Pure polyurea membrane DANOCOAT 250. Membrana de poliurea DANOCOAT 250.

with registration number **S-P-03356** in the International EPD® System (www.environdec.com). con número de registro **S-P-03356** en el Sistema International EPD® (www.environdec.com).

it's in conformity with: es conforme con:

- ISO 14025:2010 Environmental labels and declarations. Type III environmental declarations.
- General Programme Instructions for the International EPD® System v.3.01.
- PCR 2019:14 Construction products (EN 15804:A2) v.1.11.
- CPC 36950 Unspecified articles of plastics for construction.

Issued date / Fecha de emisión:18/04/2023Update date / Fecha de actualización:18/04/2023Valid until / Válido hasta:17/03/2028Serial № / № Serie:EPD0042100-E

Carlos Nazabal Alsua Manager



This certificate is not valid without its related EPD.

Este certificado no es válido sin su correspondiente EPD.

El presente certificado está sujeto a modificaciones, suspensiones temporales y retiradas por TECNALIA R&I CERTIFICACION.

This certificate is subject to modifications, temporary suspensions and withdrawals by TECNALIA R&I CERTIFICACION.

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El estado de vigencia del certificado puede confirmarse mediante consulta en www.tecnaliacertificacion.com

The validity of this certificate can be checked through consultation in www.tecnaliacertificacion.com.





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