ITB cooperates with other operators of EPD programmes through the ECO-PLATFORM. (http://www.eco-platform.org/) in order to coordinate efforts to support industrial sectors while reducing verification efforts in different countries.

Environmental Product Declaration Type III (EPD) ITB number 587/2024

Polyurethane coat

EPD owner:
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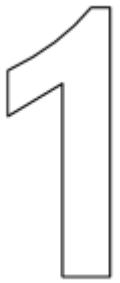
Issuance date: 08.01.2024 | Validity date: 08.01.2029

Basic Information



This declaration is a Type III Environmental Product Declaration (EPD) based on the EN 15804 standard and verified according to ISO 14025 by an independent auditor.

It contains information about the environmental impact of the declared construction materials. These aspects have been verified by an independent body in accordance with ISO 14025. In principle. a comparison or evaluation of EPD data is only possible if all data to be compared have been created in accordance with EN 15804 (see section 5.3 of the standard).

LCA analysis: A1 - A3. A4. C1 - C4 and D according to EN 15804 (cradle to grave with options)
Year of EPD development: 2023
Declared service life: 15 years
Product standard: EN ISO 4624. EN ISO 2815. EN ISO 1522. EN ISO 7784-2
PCR: document ITB-PCR A (based on PN-EN 15804)
Declared unit: 1 kg of product
Reason for implementation: B2B
Representativeness: Polish products. September 2022 - August 2023

Manufacturer

Inchem is a manufacturer of modern construction chemicals and a leader in the production of pigment pastes. It has been existing in the market since 1988 and has continuously maintained its leading position among pigment manufacturers in Poland.

Inchem has specialised in the production of pigment pastes since 1988. The company's products are manufactured for both retail customers and manufacturers of paints and other products to be dyed. They have been conducting experimental works since the beginning of the company to improve the quality of the products. They own a Quality Control Laboratory and Department which take care of the high quality of the products and their development. The leading European companies supply raw materials and supplementary substances. which guarantees the quality and reproducibility of products. In 2002 the company was awarded ISO 9001:2000 Quality Certificate. Inchem's significant advantages are flexibility. ability to adapt to specific customer needs and fast lead times.

Production takes place at a facility located in Łódź.

Description of products and application

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Inchem has maintained a leading position among pigment manufacturers in Poland since 1988. It offers numerous colouring products. including coats. paints. pigments or enamels. The EPD environmental declaration developed as part of this document covers a polyurethane coat in 1K and 2K variants. manufactured by Inchem.

Polyurethane coat

Polyurethane coat for concrete. microcement and porous surfaces is a product with excellent mechanical and chemical resistance. It facilitates protection against moisture and dirt on the applied surface. It can be used on interior and exterior surfaces.

Inchem polyurethane coat is a colourless. two-component and water-based product. Its coating is characterised by high scratch and scrub resistance. The coating is also resistant to oils. chemicals and water. Thanks to these properties. heavy dirt (including tyre marks) is easily removed and the surface is water-repellent.

The product is dedicated for use when painting:

- micro-cement.
- concrete. anhydrite and epoxy resin screeds.
- cementitious screeds. screeds. screeds.
- new and renewed concrete surfaces.
- surfaces which have been grinded and painted with epoxy paint.
- porous surfaces. e.g. unpolished stone. clinker. brick.

Inchem polyurethane coats are used in areas such as:

- utility rooms. garages and cellars.
- industrial and public buildings
- private buildings.
- commercial and warehouse premises.
- service workshops.
- traffic routes. stairways. lobbies. corridors.
- heavily used areas.

Summary of performance properties of Inchem polyurethane coat:

Storage	Efficiency	Packaging	Useful life
Store in original sealed packaging at temperatures between +5°C and +30°C	up to 10 - 12 m^2 per litre of mixture with one coat of paint	Ingredient A - 800 ml can Ingredient B - 150 ml can	36 months

*ingredient A - coat. ingredient B - hardener

Variants

The product covered by this declaration can be purchased in two versions:

- 1K version - polyurethane coat without hardener. component A only.
- 2K version - polyurethane coat with hardener. component A and component B.

Life cycle assessment (LCA) - general principles

Declared unit

The declared unit of product is 1 kg of polyurethane coat in 1K and 2K variants. according to the description in chapter ‘Description of products and application’.

Allocation

The allocation in this study was made in accordance with the ITB PCR A guidelines. The production and storage of the products covered in this declaration take place at the production plant of Inchem in Łódź. Input data and emissions were collected for the plant. All impacts from raw material extraction are allocated in module A1. Production of products is based entirely on raw materials. Module A2 includes the transport of raw materials and intermediate products from to the production plant in Łódź. Electricity. LPG. water use and wastefor the entire production process was inventoried and included in module A3.

System boundaries

The life cycle analysis of the declared products includes the modules A1 - A3. A4. C1 - C4 + D ("from cradle to grave with options”) according to EN 15804 and ITB PCR A.

System limits

97% of input materials and 100% of electricity. LPG gas and water consumption were inventoried at the Łódź production plant. All relevant parameters from the collected production data are included in the assessment. i.e. all materials used in production and electricity. LPG gas. water consumption and direct production waste. Packaging materials were inventoried: finished products are packaged in metal cans.

Modules A1 and A2 Extraction and transport of raw materials

Chemicals used in the production of polyurethane coat and packaging materials are transported from Poland. Germany and France. Module A1 shows the impact of the production and extraction of raw materials further used in the production of coat. Data on the transport of raw materials is recorded by the plant. The means of transport include trucks. For the calculation of module A2. European fuel averages were used.

Module A3 Production

The production process of polyurethane coat is illustrated in the diagrams on page 8. Raw materials are picked for production from the warehouse. from where they go to the standardisation department. The raw materials are then dosed and mixed according to the recipes. The next step is concentration. after which the finished product is obtained. The product goes to the laboratory. where it undergoes a check and is returned for possible adjustment. The product is then packaged and labels are applied to the packaging. The finished coat cans are packed and transported to the warehouse. Electricity is used in the production process. Internal transport includes forklifts powered by LPG gas.

Module A4 Transport

Finished products are transported to customers in Poland and abroad; average transport distances were calculated in proportion to the volume of products transported. Finished products are transported by truck. Products are packed in cartons. The largest recipients of orders are in Denmark and Moldova. The fuel used is diesel.

Module C1 Deconstruction and demolition

It has been assumed that deconstruction of the polyurethane coat will occur simultaneously with the deconstruction of the envelope of which it is a part and therefore the impact from deconstruction of the product covered by this declaration is negligible. No information is available for polyurethane coat on the impact of deconstruction in the construction sector or any other sector. Therefore. no contribution has been reported in this category and the modulus is 0.

Module C2 Transport

It is assumed that the end-of-life product will be transported by truck to the nearest waste treatment facility (truck. diesel) within a 100 km distance.

Module C3 Waste treatment

No re-use. recycling or end-of-life energy recovery of the product has been assumed.

Module C4 Disposal

It has been assumed that at the end of life 100% of the products will be sent to landfill.

Module D External impacts beyond system boundaries

Module D shows the burdens and benefits of recycling or reuse. Benefits are assessed at the point of functional equivalence. i.e. where there is a substitution of virgin raw material. As polyurethane coat is not recyclable and reusable. this modulus is equal to 0.

Data collection period

The input data of the declared products concern the period from September 2022 to August 2023. The life cycle assessment has been prepared for Poland as a reference area.

Data quality

The data for the LCA calculation of modules A1-A4 came from verified LCI inventory data from the plant. In accordance with Annex E of EN 15804 + A2. a data quality assessment was carried out. For technical representativeness. processes with a quality level of 'very good' represent 99% of the values for the climate change indicators. For geographical and temporal representativeness. a process evaluation level of "very good" was obtained.

Assumptions and estimates

The impacts of the representative products were aggregated using a weighted average. The results obtained for the representative products can be applied proportionally to all types of polyurethane coat.

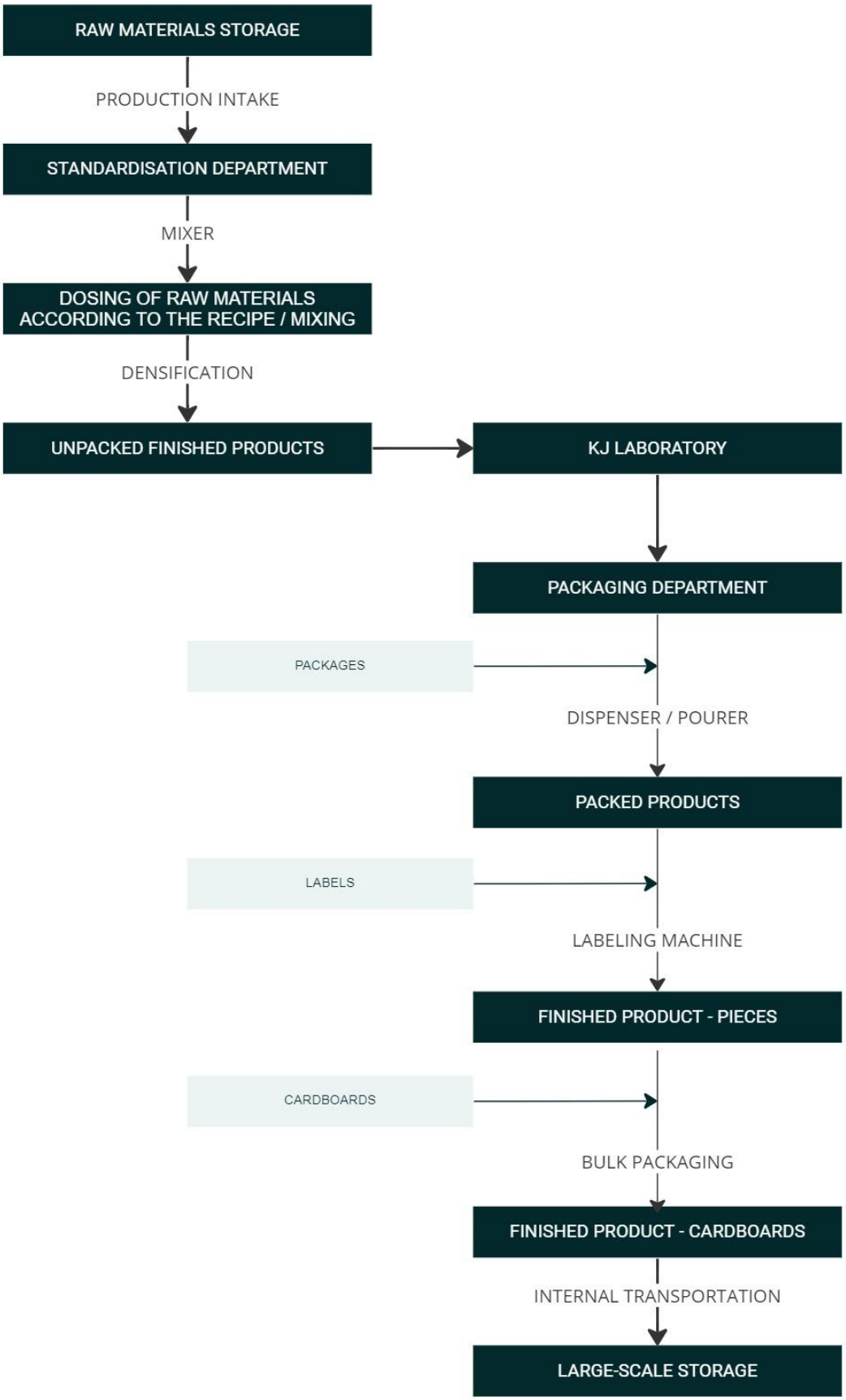
Calculation principles

LCA was made in accordance with PN-EN 15804+A2 standard and ITB PCR A (v1.6. 2023) document.

Databases

The data for the calculations came from Ecoinvent v. 3.6. Ecoinvent v. 3.8 and from databases available in Bionova OneClickLCA software. Emission factors for electricyty have beed supplemented with actual KOBIZE data. The characterisation factors are CML ver. 4.2 based on EN 15804+A2.

Production scheme of polyurethane coat:



Life cycle assessment (LCA) - results

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Declared unit

The declared unit is 1 kg of polyurethane coat in variant 1K or 2K manufactured by Inchem Polonia Sp. z o.o. The following indicates which LCA assessment modules were included in the assessment:

Information on system boundaries (MA = module assessed, MNA = module not assessed)																
Product stage			Construction stage		Use stage							End of life				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport to construction site	Construction and installation process	Use	Maintenance	Repair	Replacement	Refurbishmentt	Operational energy use	Operational water use	Deconstruction / demolition	Transport	Waste processing	Disposal	Potential for reuse, recovery or recycling
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
MA	MA	MA	MA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MA	MA	MA	MA	MA

Results for polyurethane coat in 1K variant (1 kg of polyurethane coat. without hardener)

Environmental impacts

Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
Global warming potential- total	kg CO2 eq.	1.36E+00	6.22E-02	2.03E-01	1.63E+00	9.55E-02	0.00E+00	9.10E-03	0.00E+00	1.19E-01	0.00E+00
Global warming potential- fossil	kg CO2 eq.	1.35E+00	6.21E-02	2.03E-01	2.65E-01	9.54E-02	0.00E+00	9.09E-03	0.00E+00	1.19E-01	0.00E+00
Global warming potential- biogenic	kg CO2 eq.	1.83E-03	4.51E-05	1.92E-04	2.07E-03	6.93E-05	0.00E+00	6.60E-06	0.00E+00	4.17E-05	0.00E+00
Global warming potential- LULAC	kg CO2 eq.	3.54E-04	1.87E-05	1.01E-04	4.74E-04	2.87E-05	0.00E+00	2.74E-06	0.00E+00	1.08E-05	0.00E+00
Depletion potential of the stratospheric ozone layer	kg CFC 11 eq.	1.60E-08	1.46E-08	8.66E-09	3.93E-08	2.24E-08	0.00E+00	2.14E-09	0.00E+00	3.20E-09	0.00E+00
Acidification potential	mol H+ eq.	3.30E-03	2.61E-04	1.24E-03	4.80E-03	4.01E-04	0.00E+00	3.82E-05	0.00E+00	8.92E-05	0.00E+00
Eutrophication aquatic freshwater	kg Pe	1.77E-05	5.05E-07	1.57E-05	3.39E-05	7.76E-07	0.00E+00	7.39E-08	0.00E+00	1.69E-07	0.00E+00
Eutrophication aquatic marine	kg N eq.	5.48E-04	7.86E-05	2.12E-04	8.39E-04	1.21E-04	0.00E+00	1.15E-05	0.00E+00	3.04E-05	0.00E+00
Eutrophication terrestrial	kg N eq.	6.10E-03	8.69E-04	2.24E-03	9.21E-03	1.33E-03	0.00E+00	1.27E-04	0.00E+00	3.34E-04	0.00E+00
Formation potential of tropospheric ozone	kg NMVOC eq.	2.62E-03	2.79E-04	8.21E-04	3.72E-03	4.29E-04	0.00E+00	4.08E-05	0.00E+00	1.22E-04	0.00E+00
Abiotic depletion potential for non-fossil resources	kg Sb eq.	8.89E-06	1.06E-06	1.52E-06	1.15E-05	1.63E-06	0.00E+00	1.55E-07	0.00E+00	3.46E-08	0.00E+00
Abiotic depletion potential for fossil resources	MJ	3.03E+01	9.66E-01	2.08E+00	3.05E+00	1.48E+00	0.00E+00	1.41E-01	0.00E+00	2.44E-01	0.00E+00
Water use	m^3	3.34E-01	3.60E-03	5.08E-02	3.88E-01	5.52E-03	0.00E+00	5.26E-04	0.00E+00	1.45E-03	0.00E+00

Environmental aspects related to resource use

Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
Renewable primary energy as an energy carrier	MJ	6.45E-01	1.22E-02	2.10E-01	8.68E-01	1.87E-02	0.00E+00	1.78E-03	0.00E+00	4.45E-03	0.00E+00
Renewable primary energy for material use	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Completely renewable primary energy	MJ	6.45E-01	1.22E-02	2.10E-01	8.68E-01	1.87E-02	0.00E+00	1.78E-03	0.00E+00	4.45E-03	0.00E+00
Non-renewable primary energy as an energy source	MJ	1.56E+01	9.66E-01	2.05E+00	1.86E+01	1.48E+00	0.00E+00	1.41E-01	0.00E+00	2.44E-01	0.00E+00
Non-renewable primary energy for material use	MJ	1.47E+01	0.00E+00	3.64E-02	1.47E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Completely non-renewable primary energy	MJ	3.03E+01	9.66E-01	2.09E+00	3.34E+01	1.48E+00	0.00E+00	1.41E-01	0.00E+00	2.44E-01	0.00E+00
Use of secondary raw materials	kg	1.80E-03	0.00E+00	2.20E-02	2.38E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.77E-05	0.00E+00
Renewable secondary fuels	MJ	1.90E-05	0.00E+00	1.44E-05	3.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-06	0.00E+00
Non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of fresh water resources	m^3	9.22E-03	2.01E-04	9.17E-04	1.03E-02	3.09E-04	0.00E+00	2.94E-05	0.00E+00	2.63E-04	0.00E+00

Other environmental information describing the waste categories

Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste destined for landfill	kg	2.42E-02	9.39E-04	5.03E-02	7.55E-02	1.44E-03	0.00E+00	1.37E-04	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste destined for disposal	kg	7.42E-01	1.04E-01	6.60E-01	1.51E+00	1.60E-01	0.00E+00	1.52E-02	0.00E+00	1.00E+00	0.00E+00
Radioactive waste for disposal	kg	2.25E-05	6.63E-06	3.62E-06	3.28E-05	1.02E-05	0.00E+00	9.70E-07	0.00E+00	0.00E+00	0.00E+00
Components to be reused	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials to be recycled	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials destined for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Electricity exported	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Results for polyurethane coat in 2K variant (1 kg of finished product: 0.85 kg of coat and 0.15 kg of hardener)

Environmental impacts

Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
Global warming potential- total	kg CO2 eq.	2.01E+00	7.61E-02	4.46E-01	2.53E+00	9.55E-02	0.00E+00	9.10E-03	0.00E+00	1.19E-01	0.00E+00
Global warming potential- fossil	kg CO2 eq.	2.00E+00	7.61E-02	4.45E-01	2.52E+00	9.54E-02	0.00E+00	9.09E-03	0.00E+00	1.19E-01	0.00E+00
Global warming potential- biogenic	kg CO2 eq.	3.79E-03	5.52E-05	5.14E-04	4.36E-03	6.93E-05	0.00E+00	6.60E-06	0.00E+00	4.17E-05	0.00E+00
Global warming potential- LULAC	kg CO2 eq.	1.09E-03	2.29E-05	3.01E-04	1.41E-03	2.87E-05	0.00E+00	2.74E-06	0.00E+00	1.08E-05	0.00E+00
Depletion potential of the stratospheric ozone layer	kg CFC 11 eq.	2.21E-07	1.79E-08	2.05E-08	2.59E-07	2.24E-08	0.00E+00	2.14E-09	0.00E+00	3.20E-09	0.00E+00
Acidification potential	mol H+ eq.	8.81E-03	3.19E-04	2.26E-03	1.14E-02	4.01E-04	0.00E+00	3.82E-05	0.00E+00	8.92E-05	0.00E+00
Eutrophication aquatic freshwater	kg Pe	5.14E-05	6.19E-07	2.64E-05	7.84E-05	7.76E-07	0.00E+00	7.39E-08	0.00E+00	1.69E-07	0.00E+00
Eutrophication aquatic marine	kg N eq.	2.15E-03	9.63E-05	4.53E-04	2.70E-03	1.21E-04	0.00E+00	1.15E-05	0.00E+00	3.04E-05	0.00E+00
Eutrophication terrestrial	kg N eq.	1.53E-02	1.06E-03	4.66E-03	2.10E-02	1.33E-03	0.00E+00	1.27E-04	0.00E+00	3.34E-04	0.00E+00
Formation potential of tropospheric ozone	kg NMVOC eq.	6.07E-03	3.42E-04	1.91E-03	8.32E-03	4.29E-04	0.00E+00	4.08E-05	0.00E+00	1.22E-04	0.00E+00
Abiotic depletion potential for non-fossil resources	kg Sb eq.	2.15E-05	1.30E-06	4.68E-06	2.75E-05	1.63E-06	0.00E+00	1.55E-07	0.00E+00	3.46E-08	0.00E+00
Abiotic depletion potential for fossil resources	MJ	4.43E+01	1.18E+00	4.59E+00	5.01E+01	1.48E+00	0.00E+00	1.41E-01	0.00E+00	2.44E-01	0.00E+00
Water use	m^3	1.04E+00	4.40E-03	1.44E-01	1.19E+00	5.52E-03	0.00E+00	5.26E-04	0.00E+00	1.45E-03	0.00E+00

Environmental aspects related to resource use

Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
Renewable primary energy as an energy carrier	MJ	1.60E+00	1.49E-02	4.39E-01	2.05E+00	1.87E-02	0.00E+00	1.78E-03	0.00E+00	4.45E-03	0.00E+00
Renewable primary energy for material use	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Completely renewable primary energy	MJ	1.60E+00	1.49E-02	4.39E-01	2.05E+00	1.87E-02	0.00E+00	1.78E-03	0.00E+00	4.45E-03	0.00E+00
Non-renewable primary energy as an energy source	MJ	2.76E+01	1.18E+00	4.56E+00	3.33E+01	1.48E+00	0.00E+00	1.41E-01	0.00E+00	2.44E-01	0.00E+00
Non-renewable primary energy for material use	MJ	1.67E+01	0.00E+00	2.73E-02	1.67E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Completely non-renewable primary energy	MJ	4.43E+01	1.18E+00	4.59E+00	5.01E+01	1.48E+00	0.00E+00	1.41E-01	0.00E+00	2.44E-01	0.00E+00
Use of secondary raw materials	kg	4.93E-03	0.00E+00	6.93E-02	7.43E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.77E-05	0.00E+00
Renewable secondary fuels	MJ	5.03E-05	0.00E+00	4.40E-05	9.43E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-06	0.00E+00
Non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of fresh water resources	m^3	2.64E-02	2.46E-04	1.78E-03	2.84E-02	3.09E-04	0.00E+00	2.94E-05	0.00E+00	2.63E-04	0.00E+00

Other environmental information describing the waste categories

Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste destined for landfill	kg	7.99E-02	1.15E-03	1.53E-01	2.34E-01	1.44E-03	0.00E+00	1.37E-04	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste destined for disposal	kg	2.19E+00	1.27E-01	1.03E+00	3.35E+00	1.60E-01	0.00E+00	1.52E-02	0.00E+00	1.00E+00	0.00E+00
Radioactive waste for disposal	kg	6.96E-05	8.12E-06	8.88E-06	8.66E-05	1.02E-05	0.00E+00	9.70E-07	0.00E+00	0.00E+00	0.00E+00
Components to be reused	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials to be recycled	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials destined for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Electricity exported	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Verification

The verification process for this EPD is in accordance with ISO 14025 and ISO 21930. Once verified this EPD is valid for a period of 5 years. There is no need to recalculate after 5 years if the inputs have not changed significantly.

EN 15804 serves as the basis for ITB PCR-A
Independent verification according to ISO 14025 (subsection 8.1.3.)
[ ] internal [X] external

External verification of EPDs: Michał Piasecki. Professor ITB. m.piasecki@itb.pl
Input data verification. LCI audit. LCA: Agnieszka Pikus. JW+A. a.pikus@jw-a.pl
LCA verification: Michał Piasecki. ITB professor. m.piasecki@itb.pl

Note 1: The declaration owner has the sole ownership. liability. and responsibility for the information provided and contained in EPD. Declarations of construction products may not be comparable if they do not comply with EN 15804+A2. For further information about comparability. see EN 15804+A2 and ISO 14025.

Note 2: ITB is a public Research Organization and Notified Body (EC Reg. no 1488) to the European Commission and to other Member States of the European Union designated for the tasks concerning the assessment of building products' performance. ITB acts as the independent. third-party verification organization (ISO 17025/17065/17029). ITB-EPD program is recognized and registered member of The European Platform - Association of EPD program operators and ITB-EPD declarations are registered and stored in the international ECO-PORTAL.

Normative references

- ITB PCR A General Product Category Rules for Construction Products
- ISO 14025:2006 Environmental labels and declarations – Type III environmental declarations – Principles and procedures
- ISO 21930:2017 Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services
- ISO 14044:2006 Environmental management – Life cycle assessment – Requirements and guidelines
- EN 15804 +A2 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
- EN ISO 4624: Paints and varnishes - Pull-off test for adhesion assessment
- EN ISO 2815: Paints and varnishes - Buchholz indentation test
- EN ISO 1522: Paints and varnishes - Pendulum damping test
- EN ISO 7784-2: Paints and varnishes - Determination of resistance to abrasion - Part 2: Method with abrasive rubber wheels and rotating test specimen

Signature Not Verified
Dokument podpisany przez
Michał Piasecki ITB
Data: 2024.01.09 13:56:44 CET

Instytut Techniki Budowlanej
00-611 Warsaw, Filtrowa 1

Thermal Physics, Acoustics and Environment Department
02-656 Warsaw, Ksawerów 21

CERTIFICATE № 587/2024
of TYPE III ENVIRONMENTAL DECLARATION

Products:

Polyurethane coat

Manufacturer:

INCHEM POLONIA Sp. z o.o.

ul. Bartnicza 18, 92-612 Łódź, Poland

confirms the correctness of the data included in the development of
Type III Environmental Declaration and accordance with the requirements of the standard

EN 15804+A2

Sustainability of construction works.
Environmental product declarations.
Core rules for the product category of construction products.

This certificate, issued on 8th January 2024 is valid for 5 years
or until amendment of mentioned Environmental Declaration

Head of the Thermal Physic, Acoustics
and Environment Department
Agnieszka Winkler-Skalna, PhD

INSTYTUT TECHNIKI BUDOWLANEJ

Deputy Director
for Research and Innovation
Krzysztof Kuczyński, PhD

Warsaw, January 2024