

Statement of Verification

BREG EN EPD No.: 000677

Issue 01

This is to verify that the

Environmental Product Declaration

provided by:

HEMPEL A/S

is in accordance with the requirements of:

EN 15804:2012+A2:2019

and

BRE Global Scheme Document SD207

This declaration is for:

1 kilogram of Topaz Signature Luxury Matt coating



Company Address

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Hayley Thomson

Signed for BRE Global Ltd

Hayley Thomson

Operator

25 March 2025

Date of this Issue

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24 March 2030

Expiry Date



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Environmental Product Declaration

EPD Number: **000677**

General Information

| EPD Programme Operator | Applicable Product Category Rules |
|---|---|
| BRE Global Watford, Herts WD25 9XX United Kingdom | BRE Environmental Profiles 2023 Product Category Rules for Type III environmental product declaration of construction products to EN 15804+A2 PN 514 Rev 3.1. |
| Commissioner of LCA study | LCA consultant/Tool |
| HEMPEL A/S Lundtoftegårdsvej 91 DK-2800 Kgs. Lyngby Denmark | ITeC - The Catalonia Institute of Construction Technology Wellington 19 - ES08018 Barcelona - Tel +34 933 093 404 www.itec.cat SimaPro Version 9.6.0.1 by PRé Sustainability BV. |
| Declared/Functional Unit | Applicability/Coverage |
| 1 kilogram of Topaz Signature Luxury Matt coating | Product Specific |
| EPD Type | Background database |
| Cradle to Gate with Modules C and D | Ecoinvent v3.10 (2024) database CEPE Raw Material database v3.0 |
| Demonstration of Verification | |
| CEN standard EN 15804 serves as the core PCR ^a | |
| Independent verification of the declaration and data according to EN ISO 14025:2010 <input type="checkbox"/> Internal <input checked="" type="checkbox"/> External | |
| (Where appropriate ^b)Third party verifier: Pat Hermon | |
| a: Product category rules b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4) | |
| Comparability | |
| Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A2:2019. Comparability is further dependent on the specific product category rules, system boundaries and allocations, and background data sources. See Clause 5.3 of EN 15804:2012+A2:2019 for further guidance | |

Information modules covered

| Product | | | Construction | | Use stage | | | | | | | End-of-life | | | | Benefits and loads beyond the system boundary |
|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-----------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|
| A1 | A2 | A3 | A4 | A5 | Related to the building fabric | | | | | Related to the building | | C1 | C2 | C3 | C4 | D |
| Raw materials supply | Transport | Manufacturing | Transport to site | Construction – Installation | Use | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | Deconstruction demolition | Transport | Waste processing | Disposal | Reuse, Recovery and/or Recycling potential |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

The transport distances were adapted to the factory, specific transport distances for each provider were used for raw material transport. The manufacturing site included in this EPD is:

Road Number - 45, 2nd Industrial City - South
Jeddah, Jizan Road - Jeddah Leith Street.
Kingdom of Saudi Arabia

Construction Product:

Product Description

This EPD is representative for Topaz Signature Luxury Matt.

Topaz Signature Luxury Matt is a best-in-class high quality emulsion paint, with enriched colour experience due to the accuracy and wide range of colours and its matt finish. Engineered by the latest emulsion technology, It gives a smooth luxurious matt finish with outstanding opacity, washability, flexibility and unique colour retention properties.

Ideal as topcoat recommended for all indoor spaces, including residential areas, villas and hotels for walls, ceilings and partitions where a luxurious smooth silk finish is required. This product offers a wide range of long lasting colour. It has very low VOC which ensures good indoor air quality and this declared product is free from harmful chemicals like APEO, formaldehyde, heavy metals etc.

Technical Information

| Property | Value, Unit |
|----------------------------|------------------------|
| Relative density | 1.5 kg/L |
| Solids by volume | 39 ± 2% |
| Dry film thickness | 30 micron |
| Wet film thickness | 77 micron |
| Theoretical spreading rate | 13 m ² /L |
| Coverage | 0.11 kg/m ² |

Product Contents

The material composition of the declared mixed product:

| Material/Chemical Input | % |
|-------------------------|---------|
| Water | 25 - 40 |
| Binder | < 25 |
| Filler | 25 - 50 |
| Pigments | < 15 |
| Additives | < 5 |

Manufacturing Process

The manufacturing process for coatings involves combining and mixing multiple chemicals and materials into a homogenous product, which is then packaged and distributed.

Process flow diagram



End of Life

Coatings are typically disposed of with the substrate they are painted on. This can be through recycling, incineration or landfill, but the coating itself is unlikely to be separated from the substrate during the disposal process.

Life Cycle Assessment Calculation Rules

Declared / Functional unit description

1 kilogram of Topaz Signature Luxury Matt coating.

System boundary

The chosen system has been Cradle to Gate with Modules C and D, which means that the Life Cycle Assessment is contemplated from the manufacturing of the paints until they leave the factory, considering the end-of-life stage and the benefits and loads beyond the system boundary.

Data sources, quality and allocation

To carry out this study, the time period January, 2023 - December, 2023 has been considered as the reference year.

The background databases are Ecoinvent v3.10 (2024) database for the general model and CEPE Raw Material database v3.0 for raw materials.

For electricity, the consumption electricity mix from the publication "Ember Electricity Data Explorer - 2023" from ember-climate.org for Saudi Arabia (0,666 kgCO₂eq/kWh) has been used for Hempel's manufacturing site in Jeddah (Saudi Arabia).

The quality of the data and the uncertainties associated with the inventories of each input are also analysed in accordance to Table E.1 of Annex E - Schemes to be applied for data quality assessment of generic and specific data of the EN 15804:2012+A2:2019 standard.

Cut-off criteria

For the present analysis, more than 99% of the mass and energy inputs and outputs of the system have been considered, leaving out diffuse emissions in the factory and the production of manufacturing infrastructure such as industrial machinery and equipment. On the other hand, those suppliers or manufacturers of raw materials that supply less than 5% of the total raw material consumption have been omitted. The remaining suppliers have been adjusted proportionally to 100% to balance this deficit.

LCA Results

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts

| | | | GWP-total | GWP-fossil | GWP-biogenic | GWP-luluc | ODP | AP | EP-freshwater |
|---|--------------------------------------|------|-----------------------|-----------------------|-----------------------|-----------------------|-------------|-----------------------|--|
| | | | kg CO ₂ eq | kg CO ₂ eq | kg CO ₂ eq | kg CO ₂ eq | kg CFC11 eq | mol H ⁺ eq | kg (PO ₄) ³⁻ eq |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG | AGG | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG | AGG | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG | AGG | AGG | AGG | AGG |
| | Total (of product stage) | A1-3 | 1,27E+00 | 1,25E+00 | 2,32E-02 | 1,44E-04 | 1,14E-07 | 8,46E-03 | 3,61E-05 |
| Construction process stage | Transport | A4 | MND | MND | MND | MND | MND | MND | MND |
| | Construction | A5 | MND | MND | MND | MND | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND | MND | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND | MND | MND | MND | MND |
| | Repair | B3 | MND | MND | MND | MND | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND | MND | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND | MND | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND | MND | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND | MND | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Transport | C2 | 4,52E-03 | 4,51E-03 | 5,66E-07 | 1,46E-07 | 6,54E-11 | 6,20E-06 | 1,09E-08 |
| | Waste processing | C3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Disposal | C4 | 9,38E-02 | 9,37E-02 | 9,77E-05 | 4,56E-06 | 2,63E-10 | 7,10E-05 | 8,17E-08 |
| Potential benefits and loads beyond the system boundaries | Reuse, recovery, recycling potential | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

GWP-total = Global warming potential, total;
 GWP-fossil = Global warming potential, fossil;
 GWP-biogenic = Global warming potential, biogenic;
 GWP-luluc = Global warming potential, land use and land use change;

ODP = Depletion potential of the stratospheric ozone layer;
 AP = Acidification potential, accumulated exceedance; and
 EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts

| | | | EP-marine | EP-terrestrial | POCP | ADP-mineral&metals | ADP-fossil | WDP | PM |
|---|--------------------------------------|------|-----------|----------------|-------------|--------------------|-------------------------|----------------------------------|-------------------|
| | | | kg N eq | mol N eq | kg NMVOC eq | kg Sb eq | MJ, net calorific value | m ³ world eq deprived | disease incidence |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG | AGG | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG | AGG | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG | AGG | AGG | AGG | AGG |
| | Total (of product stage) | A1-3 | 1,30E-03 | 1,33E-02 | 4,18E-03 | 4,49E-06 | 2,14E+01 | 3,72E+00 | 1,02E-07 |
| Construction process stage | Transport | A4 | MND | MND | MND | MND | MND | MND | MND |
| | Construction | A5 | MND | MND | MND | MND | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND | MND | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND | MND | MND | MND | MND |
| | Repair | B3 | MND | MND | MND | MND | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND | MND | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND | MND | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND | MND | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND | MND | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Transport | C2 | 1,29E-06 | 1,42E-05 | 9,98E-06 | 2,66E-10 | 6,04E-02 | 5,46E-05 | 2,72E-10 |
| | Waste processing | C3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Disposal | C4 | 2,78E-05 | 3,04E-04 | 1,27E-04 | 3,79E-09 | 2,29E-01 | 1,90E-04 | 1,64E-09 |
| Potential benefits and loads beyond the system boundaries | Reuse, recovery, recycling potential | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment;
 EP-terrestrial = Eutrophication potential, accumulated exceedance;
 POCP = Formation potential of tropospheric ozone;
 ADP-mineral&metals = Abiotic depletion potential for non-fossil resources;

ADP-fossil = Depletion potential of the stratospheric ozone layer;
 WDP = Water (user) deprivation potential, deprivation-weighted water consumption; and
 PM = Particulate matter.

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts

| | | | IRP | ETP-fw | HTP-c | HTP-nc | SQP |
|---|--------------------------------------|------|-------------------------|----------|----------|----------|---------------|
| | | | kBq U ²³⁵ eq | CTUe | CTUh | CTUh | dimensionless |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG | AGG | AGG |
| | Total (of product stage) | A1-3 | 9,65E-02 | 1,05E+01 | 1,56E-09 | 2,09E-09 | 7,32E+00 |
| Construction process stage | Transport | A4 | MND | MND | MND | MND | MND |
| | Construction | A5 | MND | MND | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND | MND | MND |
| | Repair | B3 | MND | MND | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 | 0 | 0 |
| | Transport | C2 | 4,12E-06 | 3,93E-03 | 3,53E-13 | 3,00E-11 | 2,41E-04 |
| | Waste processing | C3 | 0 | 0 | 0 | 0 | 0 |
| | Disposal | C4 | 6,20E-05 | 3,31E-01 | 2,04E-11 | 3,20E-09 | 5,46E-01 |
| Potential benefits and loads beyond the system boundaries | Reuse, recovery, recycling potential | D | 0 | 0 | 0 | 0 | 0 |

IRP = Potential human exposure efficiency relative to U235;
ETP-fw = Potential comparative toxic unit for ecosystems;
HTP-c = Potential comparative toxic unit for humans;

HTP-nc = Potential comparative toxic unit for humans; and
SQP = Potential soil quality index.

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

| Parameters describing resource use, primary energy | | | PERE | PERM | PERT | PENRE | PENRM | PENRT |
|---|--------------------------------------|------|----------|----------|----------|----------|----------|----------|
| | | | MJ | MJ | MJ | MJ | MJ | MJ |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG | AGG | AGG | AGG |
| | Total (of product stage) | A1-3 | 1,42E+00 | 4,97E-02 | 1,47E+00 | 2,30E+01 | 5,09E-01 | 2,35E+01 |
| Construction process stage | Transport | A4 | MND | MND | MND | MND | MND | MND |
| | Construction | A5 | MND | MND | MND | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND | MND | MND | MND |
| | Repair | B3 | MND | MND | MND | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Transport | C2 | 9,83E-05 | 0 | 9,83E-05 | 6,42E-02 | 0 | 6,42E-02 |
| | Waste processing | C3 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Disposal | C4 | 2,15E-03 | 0 | 2,15E-03 | 2,44E-01 | 0 | 2,44E-01 |
| Potential benefits and loads beyond the system boundaries | Reuse, recovery, recycling potential | D | 0 | 0 | 0 | 0 | 0 | 0 |

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;
 PERM = Use of renewable primary energy resources used as raw materials;
 PERT = Total use of renewable primary energy resources;

PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials;
 PENRM = Use of non-renewable primary energy resources used as raw materials;
 PENRT = Total use of non-renewable primary energy resource

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

| Parameters describing resource use, secondary materials and fuels, use of water | | | SM | RSF | NRSF | FW |
|---|--------------------------------------|------|-----|---------------------------|---------------------------|----------------|
| | | | kg | MJ net calorific value | MJ net calorific value | m ³ |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG | AGG |
| | Total (of product stage) | A1-3 | 0 | 0 | 0 | 7,98E-02 |
| Construction process stage | Transport | A4 | MND | MND | MND | MND |
| | Construction | A5 | MND | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND | MND |
| | Repair | B3 | MND | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 | 0 |
| | Transport | C2 | 0 | 0 | 0 | 2,26E-06 |
| | Waste processing | C3 | 0 | 0 | 0 | 0 |
| | Disposal | C4 | 0 | 0 | 0 | 8,95E-06 |
| Potential benefits and loads beyond the system boundaries | Reuse, recovery, recycling potential | D | 0 | 0 | 0 | 0 |

SM = Use of secondary material;
RSF = Use of renewable secondary fuels;

NRSF = Use of non-renewable secondary fuels;
FW = Net use of fresh water

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

| Other environmental information describing waste categories | | | HWD | NHWD | RWD |
|---|--------------------------------------|------|----------|----------|----------|
| | | | kg | kg | kg |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG |
| | Total (of product stage) | A1-3 | 9,54E-05 | 3,42E-02 | 1,95E-05 |
| Construction process stage | Transport | A4 | MND | MND | MND |
| | Construction | A5 | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND |
| | Repair | B3 | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 |
| | Transport | C2 | 4,15E-07 | 2,54E-06 | 2,13E-09 |
| | Waste processing | C3 | 0 | 0 | 0 |
| | Disposal | C4 | 1,49E-06 | 1,00E+00 | 3,78E-08 |
| Potential benefits and loads beyond the system boundaries | Reuse, recovery, recycling potential | D | 0 | 0 | 0 |

HWD = Hazardous waste disposed;
 NHWD = Non-hazardous waste disposed;
 RWD = Radioactive waste disposed

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing output flows – at end of life

| | | | CRU | MFR | MER | EE | Biogenic carbon (product) | Biogenic carbon (packaging) |
|--|--------------------------------------|-------|----------|----------|----------|-----------------------|---------------------------|-----------------------------|
| | | | kg | kg | kg | MJ per energy carrier | kg C | kg C |
| Product stage | Raw material supply | A1 | AGG | AGG | AGG | AGG | AGG | AGG |
| | Transport | A2 | AGG | AGG | AGG | AGG | AGG | AGG |
| | Manufacturing | A3 | AGG | AGG | AGG | AGG | AGG | AGG |
| | Total (of product stage) | A1 -3 | 2,85E-02 | 2,58E-02 | 8,23E-04 | 5,46E-03 | 0 | 0 |
| Construction process stage | Transport | A4 | MND | MND | MND | MND | MND | MND |
| | Construction | A5 | MND | MND | MND | MND | MND | MND |
| Use stage | Use | B1 | MND | MND | MND | MND | MND | MND |
| | Maintenance | B2 | MND | MND | MND | MND | MND | MND |
| | Repair | B3 | MND | MND | MND | MND | MND | MND |
| | Replacement | B4 | MND | MND | MND | MND | MND | MND |
| | Refurbishment | B5 | MND | MND | MND | MND | MND | MND |
| | Operational energy use | B6 | MND | MND | MND | MND | MND | MND |
| | Operational water use | B7 | MND | MND | MND | MND | MND | MND |
| End of life | Deconstruction, demolition | C1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Transport | C2 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Waste processing | C3 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Disposal | C4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Potential benefits and loads beyond the system | Reuse, recovery, recycling potential | D | 0 | 0 | 0 | 0 | 0 | 0 |

CRU = Components for reuse;
MFR = Materials for recycling

MER = Materials for energy recovery;
EE = Exported Energy

Scenarios and additional technical information

| Scenarios and additional technical information | | | |
|--|--|-------|----------|
| Scenario | Parameter | Units | Results |
| A4 – Transport to the building site | Module not declared | | |
| A5 – Installation in the building | Module not declared | | |
| B2 – Maintenance | Module not declared | | |
| B3 – Repair | Module not declared | | |
| B4 – Replacement | Module not declared | | |
| B5 – Refurbishment | Module not declared | | |
| Reference service life | Module not declared | | |
| B6 – Use of energy; B7 – Use of water | Module not declared | | |
| C1 to C4 End of life, | Waste for final disposal: Landfill | % | 100 |
| | Transport to waste processing: Truck, fuel consumption | kgkm | 3.66E-05 |
| | Transport to waste processing: Distance | km | 30 |
| | Transport to waste processing: Capacity utilisation | % | 85 |
| Module D | Module declared | | |

Interpretation

The results displayed in Figure 1 apply to 1 kilogram of Topaz Signature Luxury Matt coating. It illustrates the relative contributions of the different modules assessed to various environmental impact categories and to primary energy use. Most impacts relate to the raw materials that compose the coating (included in Module A1-A3).

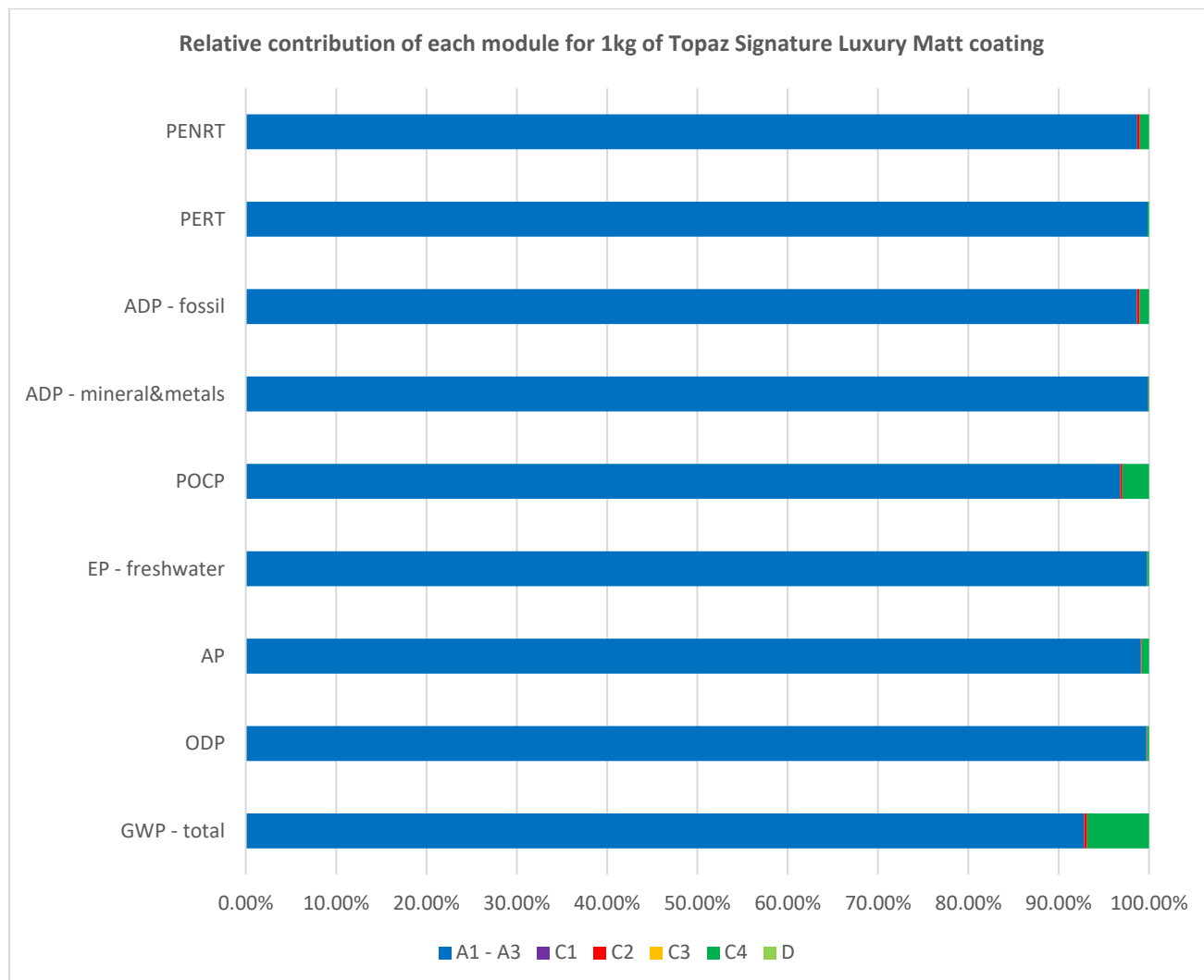


Figure 1: *Relative contribution of each module for 1 kilogram of Topaz Signature Luxury Matt coating.*

Raw materials and transport (29,16%), packaging (70,71%) and manufacturing consumption (0,13%) account for the total use of renewable primary energy resources (PERT). Raw materials and transport (78,99%) have the greatest impact on the use of non-renewable primary energy resources (PENRT), while the impact of the production process (due to plant consumption and product packaging) accounts for 21,01%. Pre-product manufacturing (raw materials and transport) is the main contributor in all impact categories for A1-A3 modules, with an average of 72,51%.

GWP-biogenic indicator emissions are mainly caused by the packaging of raw materials, whose waste management is carried out in A1-A3 modules (fabrication stage). This explains why biogenic emissions do not follow “-1+1” biogenic CO₂ sequestration flow, as the product itself does not contain biogenic carbon.

References

- BSI. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products. BS EN 15804:2012+A2:2019. London, BSI, 2019.
- BSI. Environmental labels and declarations – Type III Environmental declarations – Principles and procedures. BS EN ISO 14025:2010 (exactly identical to ISO 14025:2006). London, BSI, 2010.
- BSI. Environmental management – Life cycle assessment – Principles and framework. BS EN ISO 14040:2006. London, BSI, 2006.
- BSI. Environmental management – Life cycle assessment – requirements and guidelines. BS EN ISO 14044:2006. London, BSI, 2006.
- Ecoinvent Version 3.10: Database for Life Cycle Assessment. Swiss Centre for Life Cycle Inventories (Ecoinvent Centre), 2024.
- CEPE Raw Material database v3.0: Raw materials LCI database for the European coatings and printing ink industries. The European Council of the Paint, Printing Ink, and Artist's Colours Industry (CEPE), 2016.
- Life Cycle Assessment: Topaz Signature Luxury Matt coating. LCA report by The Catalonia Institute of Construction Technology (ITeC), 2025.