

Environmental Product Declaration



In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Waterborne lacquer Mega EVO

from

Bona

The Bona logo, consisting of the word "Bona" in a bold, blue, italicized sans-serif font, with a registered trademark symbol (®) to its upper right.

Programme:

The International EPD System, www.environdec.com

Programme operator:

EPD International AB

EPD registration number:

EPD-IES-0022979

Type of EPD:

EPD for a specific product

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2025-09-09

Validity date:

2030-09-08

"An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com."



General information

Programme information

Programme:	The International EPD System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	support@environdec.com

PCR and verification

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): <i>PCR 2019:14 Construction products v.2.0.1</i>
PCR review was conducted by: <i>PCR review was conducted by the Technical Committee of the International EPD® System. See https://environdec.com/about-us/the-international-epd-system-about-the-system for a list of members. Review chair: Rob Rouwette. The review panel may be contacted via the Secretariat www.environdec.com/contact.</i>
Verification
External and independent ('third-party') verification of the declaration and data, according to ISO 14025:2006, via EPD verification through:
☒ Individual EPD verification without a pre-verified LCA/EPD tool
Third-party verifier: <i>Stephen Forson, Viridis Pride Ltd, S.Forson@viridispride.com</i>
Approved by: The International EPD® System
The procedure for follow-up of data during EPD validity involves a third-party verifier:
☐ Yes ☒ No

Ownership and limitations on use of EPD

The EPD owner has sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programs may not be comparable. For two EPDs to be similar, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.

Information about the EPD owner

Owner of the EPD: Bona AB, Ltd

Contact: Bjorn Johansson, Bjorn.Johansson@bona.com

Address: Murmansgatan 130, Malmö, Sweden

Description of the organization: Bona AB is a company that produces and sells products for floor coating, maintenance, and refurbishment of floors. Bona wishes to understand the environmental impacts of its floor coating chemicals used to refurbish old flooring and make this information publicly available as an EPD.

Name and location of production site(s): Malmö, Sweden

Product-related or management system-related certifications: ISO 9001- and 14001-certificates, DIN EN 71-3: 2018-08

LCA practitioner: Amit Lotan, amit.lotan@carbonzero.se

Srikanth panda, srikanth.panda@carbonzero.se

Product information

Product name: Bona Mega EVO

Product identification: Bona Mega EVO is a next-generation 1K waterborne lacquer for wood floors featuring new state-of-the-art self-crosslinking technology that activates upon application.

- Category: 1-component waterborne acrylate/polyurethane topcoat
- Solids content: approx. 31% Sheen (at 60°)
- Drying time: 1-2 h between coats
- Application tools: Bona Roller or Swivel Head Applicator
- Coverage: 8-10 m²/litre (100-120g/m²) per coat

Technical life span can be assumed to be equal to the construction works it is part of, i.e., typically at least 50 years

Visual representation of the product: Bona Jerrican of Mega EVO



Description of production process: The manufacturing process varies by application type but generally involves mixing resins (such as alkyd, epoxy, or acrylic) with water and additives, followed by heating and high-speed agitation. The resulting mixture is then filtered to remove impurities and undergoes quality control checks for properties such as viscosity, color, and drying time. Finally, the coatings are packaged in different sizes and prepared for distribution.

UN CPC code: 35110

Name and location of production site: Malmö, Sweden

Content declaration

The table below represents 1kg of Mega EVO

Product material	Mass (kg)	Post-consumer recycled material (mass% % of product)	Biogenic material (mass% % of product)	Biogenic material (kg C / declared unit)
Water (desalinated/deionised)	0.656	0	0	0
Organic Chemicals	0.344	0	0	0
Total	1	0	0	0

Packaging material	Mass (kg)	Mass-% (versus the product)	Biogenic material (kg C / declared unit)
Cardboard	0.006	0.639	0.003
LDPE	4.592E-6	4.592E-4	0
Polypropylene (PP)	5.510E-6	0.001	0
LLDPE	1.724E-4	0.017	0
HDPE	0.009	0.889	0
Total	0.015	1.546	0.003

None of the raw materials used in this product, nor those used at the time of EPD production, fall within the Candidate List of Substances of Very High Concern for Authorization by the European Chemicals Agency. In any case, the eventual presence of Substances of Very High Concern would be reported in the safety data sheets for each product/product group.

LCA information

Declared unit: 1 kg of Bona Mega EVO

Time representativeness: 2024-01-01 to 2024-12-31

LCA software used: EandoX V.1.0, Ecoinvent 3.11. The characterization factors used in this study refer to PCR 2019:14 and EN 15804+A2 (based on EF 3.1).

Description of system boundaries: Cradle-to-gate with options, modules A1-A3, A4, A5

Life cycle stages not considered: B1-B7, C1-C4, D. The product is used as a coating material and has become an integral part of the coated surface.

Cut-off approach: All input and output flows in a unit process were considered, i.e., the value of all flows in the unit process and the corresponding LCI were considered, where data were available.

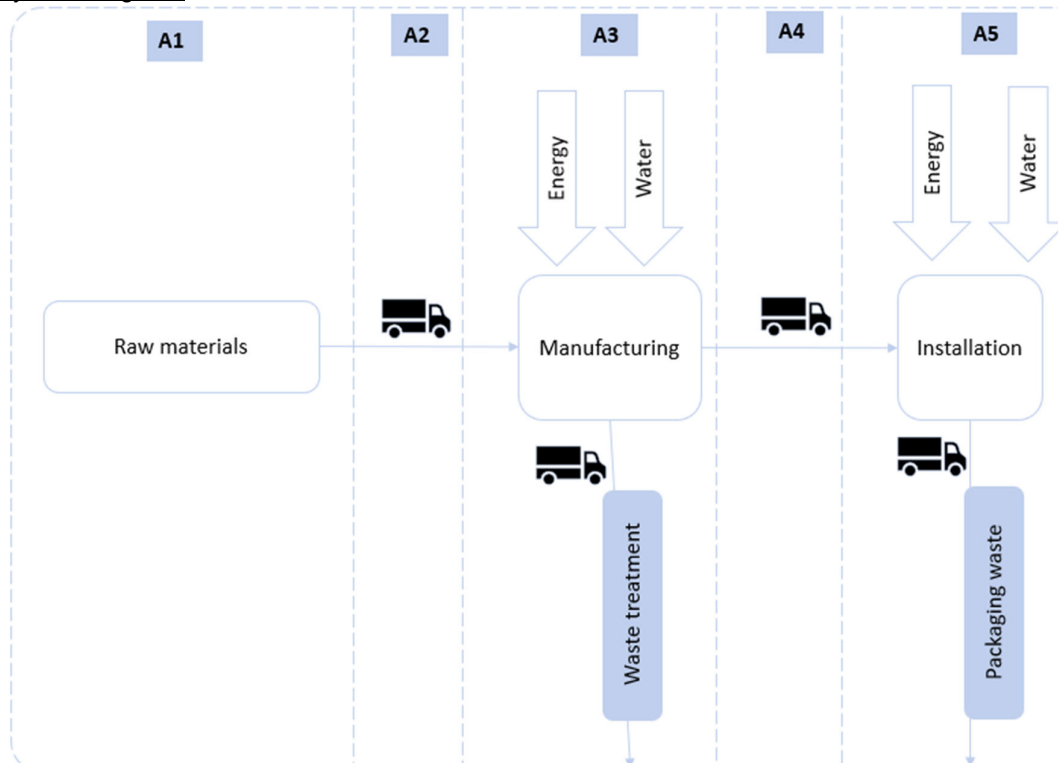
Allocation procedures: The plant produces a range of chemicals. Actual manufacturing data for A3 was recorded for 2024. The allocation utilized a combination of economic (where feasible) and mass allocation methods, as determined by the accounting and production teams.

Electricity used in manufacturing: Bona specifies the electricity mix used for 2024.

Source	Period	GWP-GHG [kg CO ₂ - eq/kWh]
Electricity from photovoltaic (solar panels/PV)	2024	6.00E-03
Electricity from Nuclear - Sweden	2024	1.00E-03
Electricity from Geothermal Energy	2024	5.00E-03

For the total energy used in the manufacturing process, Bona produces Electricity from Solar PV (45%), purchases Electricity from Nuclear Power (45%), and Utilizes Thermal energy from Geothermal Energy (10%).

System diagram:



Modules declared, geographical scope, share of specific data (in GWP-GHG results), and data variation (in GWP-GHG results): “cradle to gate with options” with modules A1-A3, A4, A5”

A1–A3 (“product stage”) cover raw material supply, inbound transport, and manufacturing up to the factory gate, including energy, water, and packaging used in production. A4 covers transport to the construction site, and A5 covers packaging waste disposal.

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	GLO	GLO	SE	GLO	GLO	-	-	-	-	-	-	-	-	-	-	-	-
Specific data used	8.88 %			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Declaration of data sources, reference years, and share of primary data:

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Manufacturing of the product and Packaging	Collected data	EPD owner	2024	Primary data	2.82 %
Generation of electricity used in the manufacturing of a product	Database	Ecoinvent v3.11	2024	Primary data	0.68 %
Transportation	Database	Ecoinvent v3.11	2024	Primary data	5.38 %
Total share of primary data, of GWP-GHG results for A1-A3	8.88 %				

Summary of data quality: Modules A1–A3 cover the production of raw materials and product manufacturing, while Module A4 accounts for transportation to sellers. Upstream processes typically rely on generic or EPD data, whereas manufacturer-specific or average data is used for both production and downstream transport stages. All data collected in 2024 represent one full year.

Transport to the sellers (A4)

Scenario information	Truck	Ship	Train
Vehicle and fuel types	Truck-trailer, Euro 0 - 6 mix, 34 - 40t gross weight / 24.7t payload capacity Using 0.021 kg diesel per tkm	Container ship, 5.000 to 200.000 dwt payload capacity 27500 tons, deep sea Using 0.0027 kg heavy fuel oil per tkm	Electric freight train, 370t gross weight, payload capacity 726 tons. Using 0.05 kWh of electricity per tkm
Distance /km	587	2246	148
Capacity utilisation /%	61 Dataset default value	53 Dataset default value	40 Dataset default value
Bulk density of transported products/kg/m3	1000	1000	1000
Volume capacity utilization factor	1	1	1

Packaging disposal routes (A5)

Material	Recycling rate	Incineration rate	Landfill rate
Cardboard	0.00	100.00	0.00
LLDPE	55.00	45.00	0.00
Polypropylene (PP)	55.00	45.00	0.00
HDPE	55.00	45.00	0.00
LDPE	55.00	45.00	0.00

Environmental performance

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins, and/or risks.

Main environmental performance results per 1kg of declared unit

Mandatory impact category indicators according to EN 15804

Indicator	Unit	A1-A3	A4	A5
GWP-Total	kg CO ₂ eq.	2.08E+0	1.38E-1	1.12E-2
GWP-Fossil	kg CO ₂ eq.	2.09E+0	1.38E-1	1.69E-3
GWP-Biogenic	kg CO ₂ eq.	-1.82E-02	1.47E-04	1.81E-02
GWP-Luluc	kg CO ₂ eq.	2.48E-3	6.79E-5	1.48E-6
ODP	kg CFC 11 eq.	1.46E-5	2.80E-9	2.04E-11
AP	mol H ⁺ eq.	1.20E-2	9.08E-4	6.55E-6
EP-freshwater	kg P eq.	2.49E-4	1.41E-5	2.71E-7
EP- marine	kg N eq.	2.35E-3	2.58E-4	2.75E-6
EP-terrestrial	mol N eq.	2.01E-2	2.82E-3	2.14E-5
POCP	kg NMVOC eq.	8.62E-3	9.58E-4	7.96E-6
ADP-minerals&metals	kg Sb eq.	8.69E-6	4.32E-7	7.59E-9
ADP-fossil	MJ	4.22E+1	1.98E+0	2.42E-2
WDP	m ³	7.00E-1	1.32E-2	2.72E-4
Acronyms	GWP-total: Global Warming Potential; GWP-fossil: Global Warming Potential fossil fuels; 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; EP-freshwater: Eutrophication potential, fraction of nutrients reaching freshwater end compartment; See "additional Norwegian requirements" for indicator given as PO ₄ eq. EP-marine: Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-terrestrial: Eutrophication potential, Accumulated Exceedance; POCP: Formation potential of tropospheric ozone; ADP-M&M: Abiotic depletion potential for non-fossil resources (minerals and metals); ADP-fossil: Abiotic depletion potential for fossil resources; WDP: Water deprivation potential, deprivation weighted water consumption			

Additional mandatory and voluntary impact category indicators

Indicator	Unit	A1-A3	A4	A5
GWP-GHG ¹	kg CO ₂ eq.	2.13E+0	1.38E-1	1.78E-3
PM	Disease incidence	1.03E-7	8.20E-9	3.14E-10
IRP	kBq U235 eq.	2.69E-1	5.12E-3	4.36E-5
ETP-fw	CTUe	2.43E+1	2.68E-1	1.10E-2
HTTP-c	CTUh	9.62E-10	2.77E-11	4.02E-12
HTTP-nc	CTUh	1.19E-8	1.01E-9	2.24E-11
SQP	Dimensionless	4.93E+0	1.07E+0	1.65E-2
Acronyms	PM = Particulate matter emissions; IRP = Ionising radiation, human health; ETP-fw = Ecotoxicity (freshwater); ETP-c = Human toxicity, cancer effects; HTP-nc = Human toxicity, non-cancer effects; SQP = Land use related impacts / soil quality			

Resource use indicators

Indicator	Unit	A1-A3	A4	A5
PERE	MJ	2.34E+0	5.53E-2	7.50E-2
PERM	MJ	7.40E-2	0.00E+0	-7.40E-2
PERT	MJ	2.41E+0	5.53E-2	9.34E-4
PENRE	MJ	4.07E+1	1.98E+0	3.88E-1
PENRM	MJ	1.30E+0	0.00E+0	-3.64E-1
PENRT	MJ	4.20E+1	1.98E+0	2.42E-2
SM	kg	0.00E+0	0.00E+0	0.00E+0
RSF	MJ	0.00E+0	0.00E+0	0.00E+0
NRSF	MJ	0.00E+0	0.00E+0	0.00E+0
FW	m ³	1.74E-2	3.07E-4	6.34E-6
Acronyms	PERE = Use of renewable primary energy excluding renewable primary energy resources 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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water			

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Waste indicators

Indicator	Unit	A1-A3	A4	A5
HW	kg	3.35E-3	2.46E-3	4.04E-6
NHW	kg	1.98E-1	2.29E-2	4.35E-5
RW	kg	1.79E-3	0.00E+0	0.00E+0
Acronyms	HW = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed of.			

Output flow indicators

Indicator	Unit	A1-A3	A4	A5
CRU	kg	0.00E+0	0.00E+0	0.00E+0
MFR	kg	3.54E-2	0.00E+0	4.99E-3
MER	kg	0.00E+0	0.00E+0	0.00E+0
EEE	MJ	1.69E-2	0.00E+0	3.14E-2
ETE	MJ	3.49E-2	0.00E+0	6.16E-2
Acronyms	CRU = Components for reuse; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electric energy; ETE = Exported thermal energy			

Information describing the biogenic carbon content at the factory gate

Biogenic carbon content	Unit (expressed per declared unit)
Biogenic carbon content in the product	0.00E+0
Biogenic carbon content in accompanying packaging	0.003
Note:	1 kg of biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kilograms of CO ₂ .

Disclaimers

ILCD classification	Indicator	Disclaimer
ILCD Type 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD Type 2	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
ILCD Type 3	Abiotic depletion potential for non-fossil resources (ADP-minerals & metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2
	Potential Soil Quality Index (SQP)	2
Disclaimer 1 – This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health in the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure, nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon, and certain construction materials is also not measured by this indicator.		
Disclaimer 2 – The results of this environmental impact indicator shall be used with care, as the uncertainties on these results are high or as there is limited experience with the indicator.		

Abbreviations

Abbreviation	Definition
General Abbreviations	
EN	European Norm (Standard)
EPD	Environmental Product Declaration
EF	Environmental Footprint
GPI	General Programme Instructions
ISO	International Organization for Standardization
LCA	Life Cycle Assessment
PCR	Product Category Rules
c-PCR	Complementary Product Category Rules
CEN	European Committee for Standardization
CLC	Co-location centre
CPC	Central product classification
GHS	Globally harmonized system of classification and labelling of chemicals
GRI	Global Reporting Initiative
Environmental Impact Indicators (EN 15804)	
GHG	Greenhouse gas
GWP	Global Warming Potential (kg CO ₂ eq.)
GWP-fossil	Global Warming Potential from fossil sources (kg CO ₂ eq.)
GWP-biogenic	Global Warming Potential from Biogenic Sources (kg CO ₂ -eq.)
GWP-luluc	Global Warming Potential from land use and land use change (kg CO ₂ eq.)
GWP-total	Total Global Warming Potential (kg CO ₂ eq.)
GWP-GHG	Global Warming Potential for greenhouse gases (kg CO ₂ eq.)
ODP	Ozone Depletion Potential (kg CFC-11 eq.)
AP	Acidification Potential (mol H ⁺ eq.)
EP	Eutrophication Potential
EP-freshwater	Freshwater eutrophication potential (kg P eq.)
EP-marine	Marine eutrophication potential (kg N eq.)
EP-terrestrial	Terrestrial eutrophication potential (mol N eq.)
POCP	Photochemical Ozone Creation Potential (kg NMVOC eq.)
ADP	Abiotic Depletion Potential
ADP-minerals&metals	Abiotic depletion potential for non-fossil resources (kg Sb eq.)
ADP-fossil	Abiotic depletion potential for fossil resources (MJ)
WDP	Water Deprivation Potential (m ³)
Resource Use Indicators	
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials (MJ)
PERM	Use of renewable primary energy resources as raw materials (MJ)
PERT	Total use of renewable primary energy resources (MJ)
PENRE	Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (MJ)
PENRM	Use of non-renewable primary energy resources used as raw materials (MJ)
PENRT	Total use of non-renewable primary energy resources (MJ)
SM	Use of secondary material (kg)
RSF	Use of renewable secondary fuels (MJ)
NRSF	Use of non-renewable secondary fuels (MJ)
FW	Use of net fresh water (m ³)
Waste Indicators	
HW	Hazardous Waste (disposed) (kg)
NHW	Non-Hazardous Waste (disposed) (kg)
RW	Radioactive Waste (disposed) (kg)
Output Flow Indicators	
CFR	Components for Reuse (kg)
MR	Material for Recycling (kg)
MER	Materials for Energy Recovery (kg)
EEE	Exported Energy, Electricity (MJ)
EET	Exported Energy, Thermal (MJ)

Lifecycle Stages / Modules	
A1	Raw material supply
A2	Transport
A3	Manufacturing
A4	Transport to the site
A5	Construction/Installation
B1	Use
B2	Maintenance
B3	Repair
B4	Replacement
B5	Refurbishment
B6	Operational energy use
B7	Operational water use
C1	Deconstruction/Demolition
C2	Transport to waste processing
C3	Waste processing
C4	Disposal
D	Reuse-Recovery-Recycling potential
Other Relevant Terms	
SVHC	Substances of Very High Concern
EC No.	European Community Number
CAS No.	Chemical Abstracts Service Number
MJ	Megajoule
kg	Kilogram
m ³	Cubic Meter
NM VOC	Non-Methane Volatile Organic Compounds
Sb eq.	Antimony Equivalents
P eq.	Phosphorus Equivalents
N eq.	Nitrogen Equivalents
CFC-11 eq.	Chlorofluorocarbon-11 Equivalents
CO ₂ eq.	Carbon Dioxide Equivalents
kg C	Kilograms of Carbon
Kg CO ₂ eq.	Kilograms of Carbon Dioxide Equivalent
ND	Not Declared

References

EandoX	LCA Software Version 1.0
EN 15804:2012+A2	Sustainability of construction works – Environmental product declaration – Core rules for the product category of construction products
EPD International (2024)	General Programme Instructions International EPD System, version 5.0
ISO 14020:2022	International Standard ISO 14020 – Environmental statements and programs for products – Principles and general requirements
ISO 14025:2006	International Standard ISO 14025 – Environmental labels and declarations — Type III environmental declarations — Principles and procedures
ISO 14040:2006	International Standard ISO 14040: Environmental Management – Life cycle assessment – Principles and framework. Second edition 2006-07-01.
PCR 2019:2014	Construction Products v2.0.1 Product Category aligned with EN 15804:2014+A2

Version history

Version 1.0
2025-09-30

