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Statement of Verification

BREG EN EPD No.: 000044

This is to verify that the

Environmental Product Declaration

provided by: **PPG Architectural Coatings UK Limited**

is in accordance with the requirements of:

EN 15804:2012+A1:2013

BRE Global Scheme Document SD207

This declaration is for: Johnstone's Trade Covaplus Vinyl Matt

Company Address

Huddersfield Road Birstall Batley West Yorkshire WF17 9XA





FBaker	Emma Baker	05 October 2023
Signed for BRE Global Ltd	Operator	Date of this Issue
27 March 2015		27 May 2025
Date of First Issue		Expiry Date



BF1805-C Rev 0.1

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Issue 04

Environmental Product Declaration

EPD Number: 000044

General Information

EPD Programme Operator	Applicable Product Category Rules						
BRE Global Watford, Herts WD25 9XX United Kingdom	BRE Environmental Profiles 2013 Product Category Rules for Type III environmental product declaration of construction products to EN 15804:2012+A1:2013						
Commissioner of LCA study	LCA consultant/Tool						
PPG Architectural Coatings UK Ltd. Huddersfield Road Birstall - Batley, West Yorkshire WF17 9XA United Kingdom	Matthew Percy Product Stewardship Functional Expert PPG Nederland B.V. Amsterdamseweg 14 1422 AD, Uithoorn The Netherlands						
Declared/Functional Unit	Applicability/Coverage						
Johnstone's Trade Covaplus Vinyl Matt to protect and decorate 1m ² of substrate, suitably prepared, on the basis of one layer of paint at a spreading rate of 12.5 m ² /L	Product Specific						
ЕРД Туре	Background database						
Cradle to Gate with options	Ecoinvent 3.5						
Demonstra	tion of Verification						
CEN standard EN 15	804 serves as the core PCR ^a						
Independent verification of the declara	ation and data according to EN ISO 14025:2010 ⊠ External						
	riate ^b)Third party verifier: ne Anderson						
a: Product category rules b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)							
Co	mparability						
EN 15804:2012+A1:2013. Comparability is further depe	programmes may not be comparable if not compliant with endent on the specific product category rules, system boundaries ause 5.3 of EN 15804:2012+A1:2013 for further guidance						

Information modules covered

1	Produc	t	Consti	ruction	Rel	ated to		Jse sta Iding fa	<u> </u>	Relat the bເ			End-	of-life		Benefits and loads beyond the system boundary
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	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
\checkmark	V	V	V	$\overline{\mathbf{A}}$								Ŋ	V	$\mathbf{\nabla}$	V	

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

PPG Architectural Coatings UK Ltd Huddersfield Road Birstall - Batley, West Yorkshire WF17 9XA United Kingdom

Construction Product:

Product Description

Johnstone's Trade Covaplus Vinyl Matt Emulsion is formulated for interior use on walls and ceilings. It provides a durable finish that is resistant to fading. It has a longer wet edge time to help reduce flashing and patchy finishes on surfaces.

The EPD for this products covers the following product variants:

- Johnstone's Trade Covaplus Vinyl Matt Base L
- Johnstone's Trade Covaplus Vinyl Matt Base M
- Johnstone's Trade Covaplus Vinyl Matt Base D
- Johnstone's Trade Covaplus Vinyl Matt Base Z
- Johnstone's Trade Covaplus Vinyl Matt Base Z2

Technical Information

Property	Value, Unit
Spreading rate	17 m²/L
Time to Touch Dry	1-2 hrs
Time to Recoat	2-4 hrs

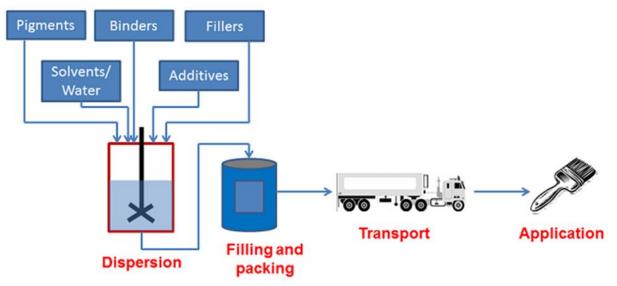
Main Product Contents

Material/Chemical Input	%
Additive	<3%
Biocide	<0.05%
Binder	8-10%
Filler	25-30%
Pigment	<12%
Water	50-60%

Manufacturing Process

The manufacturing process involves the mixing and dispersing of raw materials into a homogeneous mixture. The product is then packaged for distribution to the customer.

Process flow diagram



Construction Installation

All surfaces to be painted should be clean, dry and free from loose and flaking material. Prime bare surfaces with the appropriate Johnstone's Trade Primer. Rub down previously gloss painted surfaces with fine waterproof abrasive paper and rinse thoroughly. Stir well before use. Easy to apply by brush or roller. Do not apply in temperatures below 10°C.

Use Information

No activities are required during the use phase

End of Life

Coatings are often not removed from their substrate, so the end-of-life disposal of the product is that of the end-of-life disposal of the underlying substrate. For interior wall paints this can be landfill or incineration.

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Life Cycle Assessment Calculation Rules

Declared / Functional unit description

Johnstone's Trade Covaplus Vinyl Matt to protect and decorate $1m^2$ of substrate, suitably prepared, on the basis of one layer of paint at a spreading rate of $17 m^2/L$.

System boundary

The system boundaries of the product LCA follow the modular design defined by /EN15804/. This cradle-togate with options study includes the Product stage (A1-A3), Transport Stage (A4), Installation Stage (A5), Deconstruction/Demolition (C1), End-of-life transport (C2), Waste Processing (C3), and Disposal (C4).

Data sources, quality and allocation

Formulation is based on the current recipe extracted from PPG recipe systems. Data related to in-house PPG manufacturing processes has been collected from PPG reporting systems for the 2018 calendar year. This is based on recorded utility use and waste disposal and is of high quality.

For life cycle modelling of the process, SimaPro V.9.0 is used. All relevant background datasets are taken from Ecoinvent V3.5 database supplied with SimaPro and are documented in supporting Ecoinvent documentation.

Many Ecoinvent processes, such as waste disposal, are multi-input and not just for the material specified. For these processes the allocation used for the material in question is the one specified in the Ecoinvent process. Allocation of waste to reuse and waste disposal streams is made on the basis of recent data from reliable sources.

In cases where allocation is necessary, this has been performed on the basis of mass.

Cut-off criteria

Cut off criteria are: 1% of the renewable and non-renewable energy usage 1% of the mass of the process under consideration. The total neglected flows shall be no more than: 5% of the energy usage 5% of the total mass. Exceptions are if flows have significant effects of or energy use in their extraction, use or disposal, or are classed as hazardous waste, then these are specifically included.

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LCA Results

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

Parameters	describing e	enviro	nmental	impacts					
			GWP	ODP	AP	EP	POCP	ADPE	ADPF
			kg CO ₂ equiv.	kg CFC 11 equiv.	kg SO₂ equiv.	kg (PO ₄) ³⁻ equiv.	kg C₂H₄ equiv.	kg Sb equiv.	MJ, net calorific value.
	Raw material supply	A1	AGG	AGG	AGG	AGG	AGG	AGG	AGG
Product stage	Transport	A2	AGG	AGG	AGG	AGG	AGG	AGG	AGG
Flouder stage	Manufacturing	A3	AGG	AGG	AGG	AGG	AGG	AGG	AGG
	Total (of product stage)	A1-3	1.10E-01	1.36E-08	8.72E-04	6.78E-05	1.10E-04	3.28E-07	1.50E+00
Construction	Transport	A4	4.47E-03	8.27E-10	1.44E-05	2.39E-06	2.32E-06	1.37E-08	6.78E-02
process stage	Construction	A5	4.01E-02	1.27E-09	1.16E-04	1.48E-05	2.28E-05	1.72E-08	7.04E-01
	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
Use stage	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
	Deconstruction, demolition	C1	9.75E-06	1.72E-12	7.25E-08	1.56E-08	1.14E-08	5.48E-12	1.40E-04
	Transport	C2	1.93E-04	3.56E-11	6.20E-07	1.03E-07	1.00E-07	5.90E-10	2.92E-03
End of life	Waste processing	СЗ	5.51E-02	4.84E-11	3.50E-06	1.17E-06	3.36E-07	6.78E-10	4.89E-03
	Disposal	C4	5.49E-03	4.47E-11	1.29E-06	3.02E-07	3.97E-07	2.65E-10	4.13E-03
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	MND	MND	MND	MND	MND	MND	MND

GWP = Global Warming Potential;

ODP = Ozone Depletion Potential;

AP = Acidification Potential for Soil and Water;

EP = Eutrophication Potential;

POCP = Formation potential of tropospheric Ozone; ADPE = Abiotic Depletion Potential – Elements;

ADPF = Abiotic Depletion Potential – Fossil Fuels;

LCA Results (continued)

Parameters	Parameters describing resource use, primary energy									
			PERE	PERM	PERT	PENRE	PENRM	PENRT		
			MJ	MJ	MJ	MJ	MJ	MJ		
	Raw material supply	A1	AGG	AGG	AGG	AGG	AGG	AGG		
Draduct etc.co	Transport	A2	AGG	AGG	AGG	AGG	AGG	AGG		
Product stage	Manufacturing	A3	AGG	AGG	AGG	AGG	AGG	AGG		
	Total (of product stage)	A1-3	1.79E-01	1.22E-01	3.00E-01	1.47E+00	2.23E-01	1.69E+00		
Construction	Transport	A4	7.26E-04	0.00E+00	7.26E-04	6.89E-02	0.00E+00	6.89E-02		
process stage	Construction	A5	3.36E-02	-1.14E-01	3.48E-02	8.02E-01	-2.39E-01	8.02E-01		
	Use	B1	MND	MND	MND	MND	MND	MND		
	Maintenance	B2	MND	MND	MND	MND	MND	MND		
	Repair	B3	MND	MND	MND	MND	MND	MND		
Use stage	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		
	Deconstruction, demolition	C1	1.17E-06	0.00E+00	1.17E-06	1.42E-04	0.00E+00	1.42E-04		
	Transport	C2	3.12E-05	0.00E+00	3.12E-05	2.97E-03	0.00E+00	2.97E-03		
End of life	Waste processing	СЗ	1.29E-04	-2.32E-03	1.29E-04	5.08E-03	-6.38E-02	5.08E-03		
	Disposal	C4	7.27E-05	-1.62E-03	7.27E-05	4.25E-03	-4.45E-02	4.25E-03		
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	MND	MND	MND	MND	MND	MND		

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials; PERM = Use of renewable primary energy resources used as raw PENRE = Use of non-renewable primary energy excluding nonrenewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials;

materials; PERT = Total use of renewable primary energy resources;

PENRT = Total use of non-renewable primary energy resource

LCA Results (continued)

			SM	RSF	NRSF	FW
			kg	MJ net calorific value	MJ net calorific value	m³
	Raw material supply	A1	AGG	AGG	AGG	AGG
Draduatatara	Transport	A2	AGG	AGG	AGG	AGG
Product stage	Manufacturing	A3	AGG	AGG	AGG	AGG
	Total (of product stage)	A1-3	0.00E+00	0.00E+00	0.00E+00	2.07E-03
Construction	Transport	A4	0.00E+00	0.00E+00	0.00E+00	1.25E-05
process stage	Construction	A5	0.00E+00	0.00E+00	0.00E+00	4.36E-04
	Use	B1	MND	MND	MND	MND
	Maintenance	B2	MND	MND	MND	MND
	Repair	B3	MND	MND	MND	MND
Use stage	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
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	2.25E-08
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	5.38E-07
End of life	Waste processing	СЗ	0.00E+00	0.00E+00	0.00E+00	4.10E-06
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	4.30E-06
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	MND	MND	MND	MND

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)

Other environmental information describing waste categories									
			HWD	NHWD	RWD				
			kg	kg	kg				
	Raw material supply	A1	AGG	AGG	AGG				
Draduat ato ga	Transport	A2	AGG	AGG	AGG				
Product stage	Manufacturing	A3	AGG	AGG	AGG				
	Total (of product stage)	A1-3	1.58E-02	6.45E-02	6.51E-06				
Construction	Transport	A4	4.26E-05	3.58E-03	4.66E-07				
process stage	Construction	A5	2.60E-03	7.79E-03	9.95E-07				
	Use	B1	MND	MND	MND				
	Maintenance	B2	MND	MND	MND				
	Repair	В3	MND	MND	MND				
Use stage	Replacement	B4	MND	MND	MND				
	Refurbishment	B5	MND	MND	MND				
	Operational energy use	B6	MND	MND	MND				
	Operational water use	B7	MND	MND	MND				
	Deconstruction, demolition	C1	1.33E-07	7.91E-07	9.65E-10				
	Transport	C2	1.84E-06	1.54E-04	2.01E-08				
End of life	Waste processing	СЗ	1.24E-03	2.26E-04	1.46E-08				
	Disposal	C4	9.85E-05	1.44E-02	2.46E-08				
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	MND	MND	MND				

HWD = Hazardous waste disposed;

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

LCA Results (continued)

			CRU	MFR	MER	EE
			kg	kg	kg	MJ per energy carrier
	Raw material supply	A1	AGG	AGG	AGG	AGG
Product stage	Transport	A2	AGG	AGG	AGG	AGG
FIDUUCI Slage	Manufacturing	A3	AGG	AGG	AGG	AGG
	Total (of product stage)	A1-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Construction	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
process stage	Construction	A5	0.00E+00	1.95E-03	0.00E+00	0.00E+00
	Use	B1	MND	MND	MND	MND
	Maintenance	B2	MND	MND	MND	MND
	Repair	В3	MND	MND	MND	MND
Use stage	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
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
End of life	Waste processing	СЗ	0.00E+00	0.00E+00	0.00E+00	6.61E-02
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Potential penefits and oads beyond he system poundaries	Reuse, recovery, recycling potential	D	MND	MND	MND	MND

CRU = Components for reuse; MFR = Materials for recycling MER = Materials for energy recovery; EE = Exported Energy

Scenarios and additional technical information

Scenario	Parameter	Units	Results
	Transport to the construction site is assumed to occur by he	avy duty lorry	·
	Transport by Lorry		Lorry 16-32 tonne EURO
A4 – Transport to the building site	Distance: (Road)	km	300
	Capacity utilisation (incl. empty returns)	%	50
	Bulk density of transported products	kg/m ³	1.24-1.36
A5 – Installation in the building	The coating is applied to the interior wall surface using a rol 50 m ² . One disposable plastic sheet is used to protect the fl entire job. After application the roller and plastic sheeting willost through spills and residual paint in the can. The scenario above allows for the calculation of impact for t related to the declared unit, however for the product related completely used before disposal of the packaging. All values	oor from drops ill be disposed he tools and a aspects it is a	s and spills for the l of. 1% of the paint is ancillaries for the job assumed the paint is
	Roller for application	kg	2.14 × 10 ⁻³
	Polyethylene sheeting for spill protection	kg	2.28 × 10 ⁻²
	Polypropylenes roller tray	kg	4.00 × 10 ⁻³
	Amount of paint lost during application due drips splashes, and residue in the can/bucket	%	1
	Disposal of steel (From primary packaging. Assume 29% landfill, 71% incineration)	kg	5.31 × 10 ⁻³
	Disposal of polyethylene (From spill sheeting and brush packaging. Assume 29% landfill, 71% incineration)	kg	4.02 × 10 ⁻⁵
	Disposal of polypropylene (From roller components and roller tray. Assume 29% landfill, 71% incineration)	kg	5.54 × 10 ⁻³
	Disposal of wood (From pallet and brush. Assume 31% recycling, 48% incineration and 20% landfill)	kg	4.34 × 10 ⁻³
	Disposal of miscellaneous plastic waste (From brush. Assume 29% landfill, 71% incineration)	kg	5.46 × 10 ⁻⁴
	VOC Emitted	kg	5.35 × 10⁻⁵
Reference service ife	The service life is highly dependent on the environment in w the EPD gives values for the first application of the coating f coating in the environment in which it is used.	for the lifetime	applicable to the
C1 to C4 End of life,	Product is demolished with the building on which it is applied The disposal occurs by landfill (29.6 %), incineration with en incineration without energy recovery (5 %).		
	Transport distance to incineration/landfill	km	30
	Amount disposed at end of life	kg	3.42 × 10 ⁻²

Summary, comments and additional information

Analysis

Johnstone's Trade Covaplus Vinyl Matt is available in a number of tinting bases Base L, Base D, Base M, Base Z and Base Z2) for point of sale in-can tinting to give the possibility of approximately 16,000 different colours.

Analysis of the relative contributions of each Module shows that most of the impact comes from the raw materials stage (A1) for most of the indicators. This is shown in Figure 1 for the Base L. This high contribution of raw materials to the impact indicators is not unexpected. As paints are at the end of the chemical value chain much of the expenditure of energy, raw materials, processing, waste processing, etc. in bringing the product to existence has occurred prior to the entry of the raw materials onto the PPG production site.

The high contribution to the global warming indicator from Module C3 comes from the end of life scenario where a high proportion of the product is disposed via incineration with energy recovery

A further breakdown of the contribution of the different raw material types to environmental indicators in Module A1 shows that the majority of each impact comes from the titanium dioxide and the binder (Figure 2). This is typical for coatings products and not unexpected given these two raw materials are often present in high proportions and have a relatively high environmental impact.

The results presented in this EPD are for the L Base product and represent the upper limit of the environmental impact for Johnstone's Trade Covaplus Vinyl Matt product group.

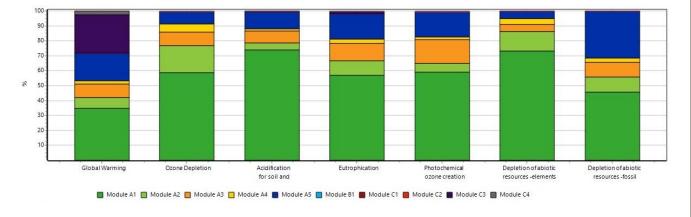


Figure 1

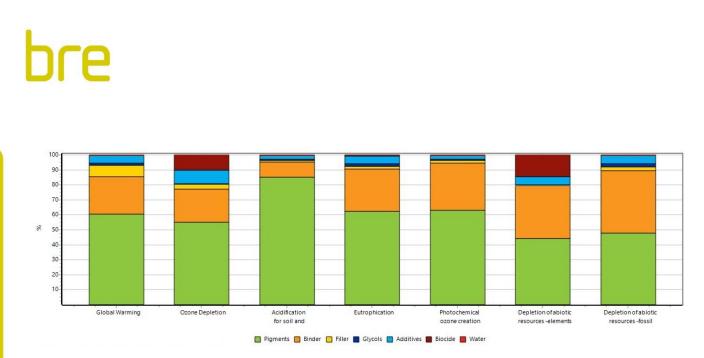


Figure 2

References

BSI. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products. BS EN 15804:2012+A1:2013. London, BSI, 2013.

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.