

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO14025 and EN15804:2012 + A2:2019 for

Supreme Stucco Putty

Programme:	The International EPD® System www.environdec.com
Programme operator:	EPD International AB Stockholm, SWEDEN
Local Operator:	EPD International AB, EPD MENA
EPD registration number:	S-P-09869
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Geographical scope:	Oman











PROGRAMME INFORMATION

Programme

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ISO standard ISO 21930 and CEN standard EN 15804 serves as the core Product Category Rules (PCR) Product Category Rules (PCR): 2019:14 Version 1.2.5, 2024-12-20, Construction Products and CPC 54 Construction Services, EN 15804:2012 + A2:2019 Sustainability of Construction Works

PCR review was conducted by:The Technical Committee of the International EPD® System. Review chair: Claudia A. Peña, University of Concepción, Chile

Independent third-party verification of the declaration and data, according to ISO 14025:2006

EPD process certification

EPD verification



Third party verifier: Prof. Ing. Vladimír Kočí, Ph.D., MBA

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third party verifier:

Yes

NΙΔ



The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same 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 equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

COMPANY PROFILE

Since its foundation in 1942, Asian Paints has come a long way to become India's leading and Asia's third largest paint company, with a turnover of around USD 4 billion. We operate in 16 countries and has 26 manufacturing facilities in the world, servicing consumers in over 60 countries.

The company has come a long way since its small beginnings in 1942. It was set up as a partnership firm by four friends who were willing to take on the world's biggest, most famous paint companies operating in India at that time. Over the course of 25 years, Asian Paints became a corporate force and India's leading paints company. Driven by its strong consumer-focus and innovative spirit, the company has been the market leader in paints since 1967. Today, it is double the size of any other paint company in India. Asian Paints manufactures a wide range of paints for decorative and industrial use.

Asian Paints Berger has a strong manufacturing base in the Middle East, with dedicated plants in Dubai, Sohar, and Bahrain. These fully automated units create our range of Middle East specific products. They are equipped with aseptic processing areas, computerised dosing stations to create finely calibrated formulations, R&D centres that incubate innovative paint technologies, and automated loading bays to respond to orders in an agile fashion.

Our team thrives on a culture of inclusivity, and we lay emphasis on collaboration. Our folks have a strong sense of ownership and revel in the open and interactive work culture. Innovation and invention are of prime importance in any organisation and in our industry, doubly so. Performance and agility are highly valued at Asian Paints Berger. Diversity is cherished and nourished, as we believe our people's unique perspectives can add strength and creativity to the Asian Paints Berger offering.

Continuous learning is the key to the growth of the individual and the organisation. Training forms an important part of the experience at Asian Paints Berger — leadership qualities are reinforced, and competencies are upgraded. We also regularly recruit new and emerging talents from top institutes.

The group has a strong presence in five regions of the world, including Middle East, South Asia, South East Asia and South Pacific, through its five corporate brands – Asian Paints Berger, Asian Paints, SCIB Paints, Apco Coatings, Taubmans, and Kadisco.



COMPANY PROFILE

Driven by Research

Asian Paints Berger's success lies in its unrelenting R & D and its association with international professional bodies. We access the latest worldwide trends through our network of Technology Centres around the globe. As a result of these persistent efforts, Asian Paints Berger's product range is designed to be weatherproof, acting as an effective means of protection against the various destructive and corrosive elements of nature.

Our R&D plays many roles:

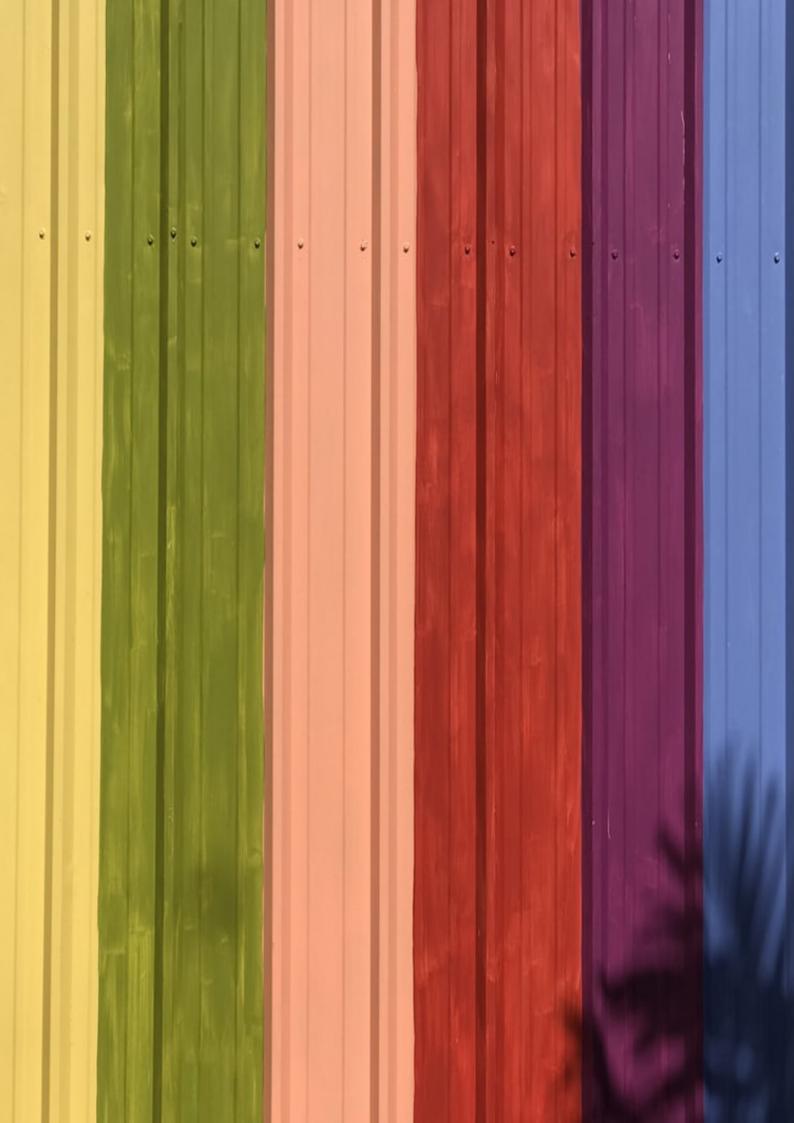
- It supports manufacturing in process cycle time reduction and enhances productivity.
- Solves environmental issues by minimising waste generation and through recycling.
- Supports marketing with technical tools/USPs to sell new products.
- Assists the Materials department by discovering raw material alternatives, so that they can negotiate better with vendors or, have the flexibility to find new suppliers.

Certified Quality Approvals

Asian Paints Berger is strongly committed to quality, and our operations in the Middle East are ISO 9001, ISO 14001 and ISO 45001 certified.

Besides being backed by various international third party certificates like Taywood Engineering (Australia), Geoscience Laboratories (USA) and PRA (UK), Asian Paints Berger has also obtained approvals from leading companies in the Middle East such as BAPCO, SABIC, ARAMCO, PDO, JSRS etc. to ensure that only the best products reach customers.





PRODUCT INFORMATION

Product name: Supreme Stucco Putty

UN CPC code: 35110

Geographical scope: Oman

Supreme Stucco Putty is an acrylic copolymer emulsion based stucco putty meant for filling or smoothening out cracks and dents on interior walls or similar surfaces. It provides a smooth surface for paint application. Thinning if required can be done by adding water blending to a smooth paste. It has excellent cutting and filling properties. Supreme range of products have been designed to give an 'easy to use', 'cost & time efficient' and a durable painting solution for the customers and consumers.

Recommended Areas of Application

Area of Use: Interior

Substrate: Plastered wall, asbestos, Concrete, Brickwork, false ceiling and similar surfaces.

Technical Data

Shade / Color range : White

Composition Nominal: Acrylic Copolymer Emulsion

% Volume Solids : $50 \pm 2\%$ Theoretical Specific Gravity : 1.76 ± 0.05 Theoretical

VOC : < 0.01g/litre as per ISO 11890 EU

Pack Size : 30 kg

Theoretical Coverage : 2.9 Sqm/Kg @ 100μ DFT

Practical Coverage : Practical coverage may depend on surface profile, method of application and weather

conditions

Drying time

Surface dry	Touch dry	Recoatability	Hard Dry	
30 Minutes	1 hr	2 hours	4 hours	

Applications Details

- On the prepared surface apply one coat of Supreme PVA Primer.
- After drying sand lightly and apply Supreme Stucco Putty using a putty applicator to obtain asmooth and uniform surface.
- On drying and sand with emery paper 320 and apply top coat as recommended.
- This putty is not meant for filling of deep cracks, neither is suitable for application for exteriors.

Recommended Paint System

One coat x Supreme Primer Sealer/ Supreme AR Primer/ Supreme PVA Primer

One or Two coats x Supreme Stucco Putty

Two coats x Supreme Int Emulsion/ Other Emulsion

^{*}For detailed system recommendation based on specific requirements please contact Asian Paints Berger Executive.

SYSTEM BOUNDARY

	Product Stage				Product Stage Construction Process Stage			Use Stage				End of Life Stage			Benefits and Loads		
	Raw Materials Supply	Transport	Manufacturing	Transport From the Gate to the Site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	Deconstruction & Demolition	Transport	Waste Processing	Disposal	Reuse-Recycling-Recovery Potential
Module	A1	A2	А3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	D
Modules Declared	Х	Х	Х	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	GLO	GLO	UAE	GLO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Specific Data Used	>90%									-							
Variation - products	0%								-								
Variation - Sites		09	%								-						

(X= Included in LCA, ND= Not Declared, NR= Not Related)

This EPD's system boundary is cradle to grave. The results of the LCA with the indicators as per EPD requirement are given in the following tables for product manufacture (A1, A2, A3), construction process stage (A4). According to EN 15804+A2:2019 standard, if the product or material is physically integrated with other products during installation then they cannot be physically separated at the end of life stage. For this reason, modules C1-C4 and Module D are excluded.

A1: Raw Material Supply

Production starts with raw materials. Raw material stage includes raw material extraction/preparation and pre-treatment processes before production.

A2: Transportation

Transport is relevant for delivery of raw materials and other materials to the plant and the transport of materials within the plant. Transport of raw materials to production site is taken as the weight average values for transport from supplier for the year of 2022.

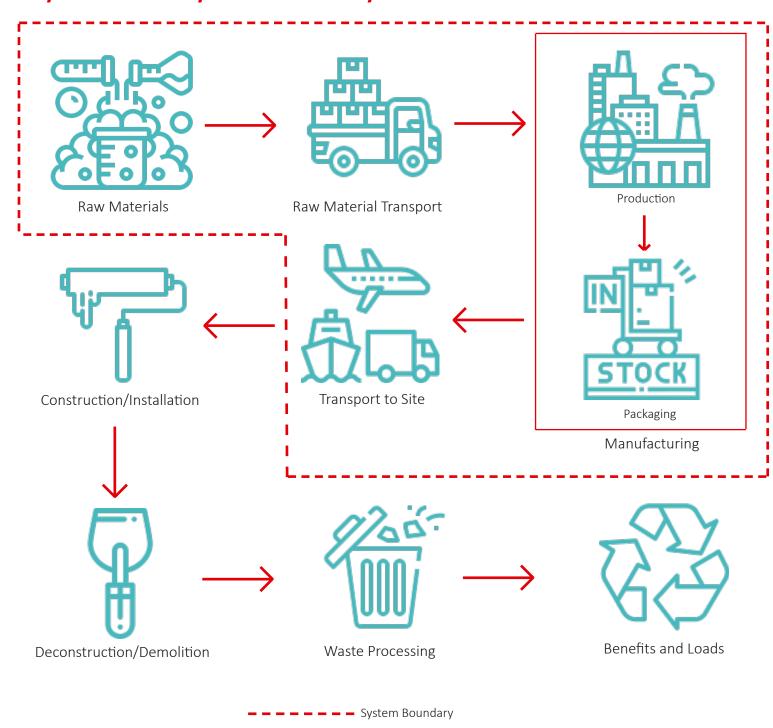
A3:Manufacturing

Manufacturing prosses comprises of mixing the chemicals using electric energy to form the paint. Then, the final products are quality checked and packaged for delivery.

A4: Transport to Site

Transport of final product to site is taken as the weight average values for transportation for the year of 2022.

System Boundary of the LCA Study



LCA INFORMATION

Functional Unit/Declared Unit	1 kg of Supreme Stucco Putty
Goal and Scope	This EPD evaluates the environmental impacts of 1 kg of Supreme Stucco Putty
System Boundary	The system boundary covers A1 – A3 product stages and A4 transport referred as 'Raw material supply', 'Transport', 'Manufacturing', and 'Transport to Client'
Estimates and Assumptions	There are no additional product scenarios developed for this EPD.
Cut-Off Rules	No cut-off is applied. All raw materials and energy inputs are included. Any inventory for which no data available is amount to less than 1% in weight.
Background Data	This LCA modeling was done SimaPro 9.3 LCA software using the Ecoinvent 3.9.1
Geographical Scope	The geographical scope of this EPD is Oman.
Data Quality	Raw materials, energy and water consumption, waste and raw material & product transport data is collected from production site. RSL is 10 years provided that it complies with the conditions of use. RSL depends on application area and usage.
Period Under Review	All primary data collected from Asian Paints is for the period year of 2022.
Allocations	There are no co-products in the production of paint products. Hence, there is no need for co-product allocation.
Reach Regulation	The product does not contain any substance of very high concern (SVHC) and is subject to authorization under the REACH Regulation.
Comparability	A comparison or an evaluation of EPD data is only possible where EN 15804+A2 has been followed, and the same building context and product-specific characteristics of performance are taken into account and the same stages have been included in the system boundary. According to EN 15804 A2, EPD of construction products may not be comparable if they do not comply with this standard.
Packaging	Paint products produced by Asian Paints is delivered to end users with plastic (PP) packaging and wood pallets.

Composition of Product

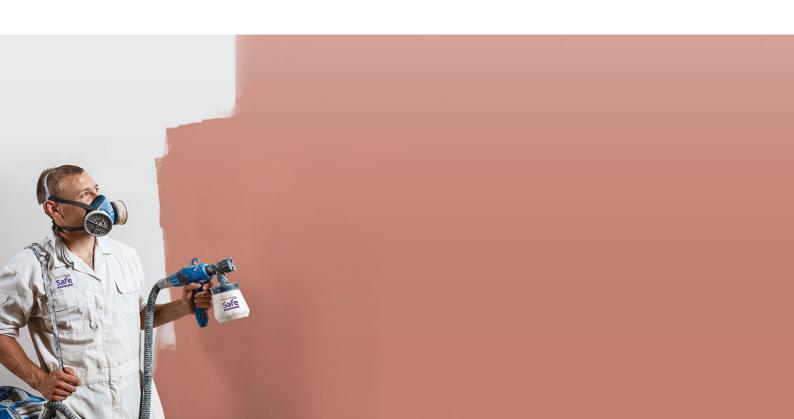
Product Components	Weight, %	Post Consumer Material Weight, %	Renewable Material Weight, %
Extender	60-70	0	0
Water	20-30	0	0
Emulsion	0-5	0	0
Others	Rest	0	0

Packaging Contents

Product Components	Weight, kg	Post Consumer Material Weight, %	Renewable Material Weight, %		
PPCP Bucket	0.033	0	0		
PE Tape	0.0004	0	0		

Information on Biogenic Carbon Content According to EN15804+A2

Biogenic Carbon Content	Unit	Quantity
Biogenic carbon content in product	kg C	0
Biogenic carbon content in packaging	kg C	0





LCA RESULTS

Environmental Impacts for 1 kg of Supreme Stucco Putty									
Impact Category	Unit	A1	A2	A3	A1-A3	A4			
GWP - Fossil	kg CO ₂ eq	0.499	49.3E-3	0.126	0.674	0.038			
GWP - Biogenic	kg CO ₂ eq	0	0	0	0	0			
GWP - Luluc	kg CO ₂ eq	0.004	25.7E-6	118E-6	0.005	19.8E-6			
GWP - Total	kg CO ₂ eq	0.503	0.049	0.126	0.674	0.038			
ODP	kg CFC-11 eq	22.2E-9	737E-12	1.19E-9	24.1E-9	575E-12			
AP	mol H+ eq	0.003	206E-6	0.001	0.004	136E-6			
EP - Freshwater (P)	kg P eq	144E-6	3.9E-6	29.5E-6	178E-6	3.1E-6			
EP - Marine	kg N eq	0.001	64.9E-6	111E-6	0.001	44.7E-6			
EP - Terrestrial	mol N eq	0.007	0.001	0.001	0.009	474E-6			
POCP	kg NMVOC	0.002	256E-6	434E-6	0.003	0.000			
ADPE	kg Sb eq	9.45E-6	155E-9	367E-9	9.97E-6	123E-9			
ADPF	MJ	6.943	0.691	3.158	10.792	0.541			
WDP	m³ depriv.	0.277	0.003	0.030	0.310	0.002			
PM	disease inc.	30.3E-9	3.85E-9	6.42E-9	40.6E-9	3.1E-9			
IR	kBq U-235 eq	0.025	0.001	0.007	0.033	461E-6			
ETP - FW	CTUe	6.38	0.385	0.338	7.11	0.302			
HTTP - C	CTUh	704E-12	44.5E-12	124E-12	873E-12	34.8E-12			
HTTP - NC	CTUh	18.4E-9	979E-12	1.71E-9	21.1E-9	776E-12			
SQP	Pt	2.64	0.404	2.410	5.45	0.322			
Acronyms	GWP-total: Climate change, GWP-fossil: Climate change- fossil, GWP-biogenic: Climate change - biogenic, GWP-luluc: Climate change - land use and transformation, ODP: Ozone layer depletion, AP: Acidification terrestrial and freshwater, EP-freshwater: Eutrophication freshwater, EP-marine: Eutrophication marine, EP-terrestrial: Eutrophication terrestrial, POCP: Photochemical oxidation, ADPE: Abiotic depletion - elements, ADPF: Abiotic depletion - fossil resources, WDP: Water scarcity, PM: Respiratory inorganics - particulate matter, IR: lonising radiation, ETP-FW: Ecotoxicity freshwater, HTP-c: Cancer human health effects, HTP-nc: Non-cancer human health effects, SQP: Land use related impacts, soil quality.								
Legend	A1: Raw Material, A2: Rav	v Material Transport,	A3: Manufacturing, A1	-A3: Sum of A1, A2 and	A3, A4: Transport				
Disclaimer 1	This impact category deal does not consider effects of facilities. Potential ionizing	due to possible nuclea	r accidents, occupation	nal exposure nor due to	radioactive waste dis	posal in underground			
Disclaimer 2	The results of this enviror limited experienced with		tor shall be used with	care as the uncertaint	ies on these results a	re high or as there is			



LCA RESULTS

Resource Use for 1 kg of Supreme Stucco Putty									
Impact Category	Unit	A1	A2	А3	A1-A3	A4			
PERE	MJ	0.684	0.009	0.390	1.08	0.007			
PERM	MJ	0	0	0	0	0			
PERT	MJ	0.684	0.009	0.390	1.08	0.007			
PENRE	MJ	6.95	0.691	3.16	10.80	0.541			
PENRM	MJ	0	0	0	0	0			
PENRT	MJ	6.95	0.691	3.16	10.80	0.541			
SM	kg	0	0	0	0	0			
RSF	MJ	0	0	0	0	0			
NRSF	MJ	0	0	0	0	0			
FW	m³	0.006	116E-6	0.001	0.007	92.0E-6			

Acronyms

PERE: Use of renewable primary energy excluding resources used as raw materials, PERM: Use of renewable primary energy resources used as raw materials, PERT: Total use of renewable primary energy, PENRE: Use of non-renewable primary energy excluding 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, SM: Secondary material, RSF: Renewable secondary fuels, NRSF: Non-renewable secondary fuels, FW: Net use of fresh water.

Waste Ouput Flows for 1 kg of Supreme Stucco Putty									
Impact Category	Unit	A1	A2	А3	A1-A3	A4			
HWD	kg	0	0	0.171	0.171	0			
NHWD	kg	0	0	0.023	0.023	0			
RWD	kg	0	0	0	0	0			
CRU	kg	0	0	0	0	0			
MFR	kg	0	0	0	0	0			
MER	kg	0	0	0	0	0			
EE (Electrical)	MJ	0	0	0	0	0			
EE (Thermal)	MJ	0	0	0	0	0			

Acronyms

HWD: Hazardous waste disposed, NHWD: Non-hazardous waste disposed, RWD: Radioactive waste disposed, CRU: Components for reuse, MFR: Material for recycling, MER: Materials for energy recovery, EE (Electrical): Exported energy electrical, EE (Thermal): Exported energy, Thermal.

Climate Impact							
Impact Category	Unit	A1	A2	A3	A1-A3	A4	
*GHG-GWP	kg	0.505	0.049	0.126	0.681	0.039	

GHG-GWP = Global Warming Potential total excl. biogenic carbon following IPCC AR5 methodology

^{*} The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus equal to the GWP indicator originally defined in EN 15804:2012+A1:2013

REFERENCES

/GPI/ General Programme Instructions of the International EPD® System. Version 4.0.

/ISO 14020:2000/ Environmental labels and declarations — General principles

/EN 15804:2012+A2:2019/ Sustainability of construction works - Environmental Product Declarations — Core rules for the product category of construction products

/ISO 14025/ DIN EN ISO 14025:2009-11: Environmental labels and declarations - Type III environmental declarations — Principles and procedures

/ISO 14040/44/ DIN EN ISO 14040:2006-10, Environmental management - Life cycle assessment - Principles and framework (ISO14040:2006) and Requirements and guidelines (ISO 14044:2006)

/PCR for Construction Products and Construction Services/ Prepared by IVL Swedish Environmental Research Institute, Swedish Environmental Protection Agency, SP Trä, Swedish Wood Preservation Institute, Swedisol, SCDA, Svenskt Limträ AB, SSAB, The International EPD System, 2019:14 Version 1.3.1

/The International EPD® System/ The International EPD® System is a programme for Type III environmental declarations, maintaining a system to verify and register EPD®s as well as keeping a library of EPD®s and PCRs in accordance with ISO 14025. www.environdec.com

/Ecoinvent / Ecoinvent Centre, www.ecoinvent.org

/SimaPro/ SimaPro LCA Software, Pré Consultants, the Netherlands, www.pre-sustainability.com

/Asian Paints/ www.asianpaintsarabia.com/

VERIFICATION & REGISTRATION

Programme

The International EPD® System

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THE INTERNATIONAL EPD® SYSTEM



THE INTERNATIONAL EPD SYSTEM

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