BALDINI VERNICI

ENVIRONMENTAL PRODUCT DECLARATION

MICOSTERYL

ANTI-MOULD SYSTEM

Registration:	Publication date:	Valid until:	Programme:	Programme Operator:
S-P-05946	2022/07/25	2027/07/25	The International EPD® System www.environdec.com	EPD International AB

ECO PLATFORM EPD VERIFIED

EPD® THE INTERNATIONAL EPD® SYSTEM

This EPD has been developed in compliance with ISO 14025:2010 and EN 15804:2012+A2:2019

cromology

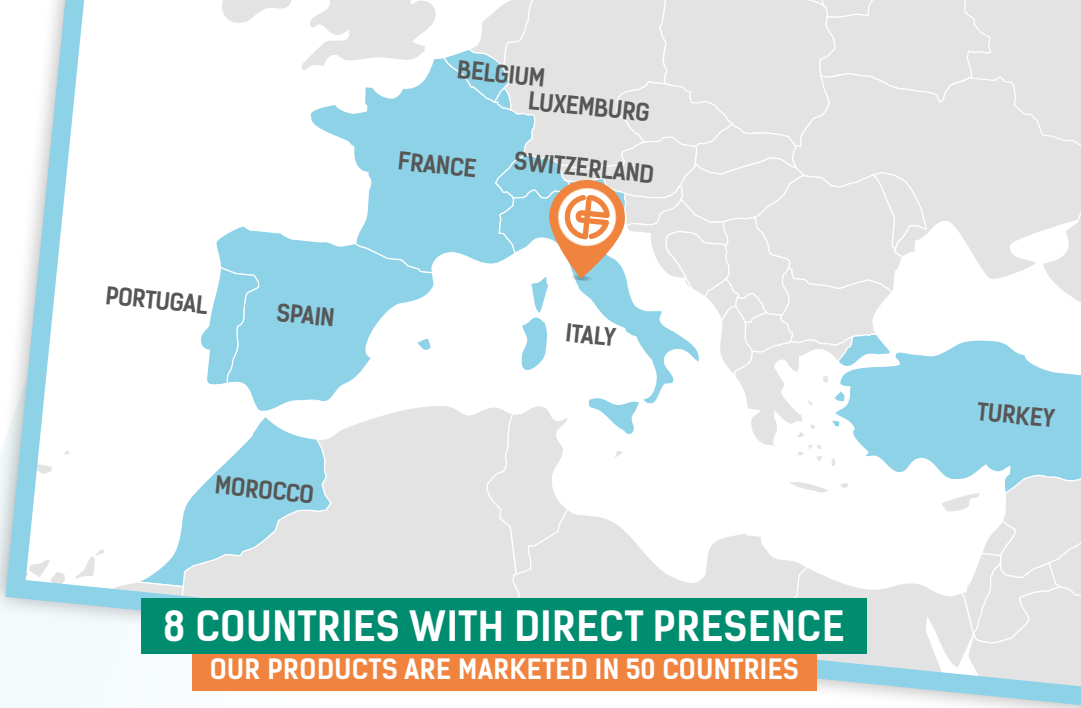
The Cromology Group was founded in 2015, at the end of a decades-long transformation process that began in the late 1990s, **when Lafarge Peintures created the Specialty Materials division that was later Materis Paints and quickly became a player on the global and emerging markets**.

Today, Cromology retains that pioneering spirit of its Dutch origins in the 1700s, confirming itself as a solid, **worldwide group and a leader in Southern Europe,** with a presence in **50 countries**, and a global annual turnover of more than **600 mln/€**. The group's strength is expressed through its **3700 employees** including **100 researchers and highly specialised technicians - 9 production sites and 5 R&D laboratories**.

Cromology's brands are marketed in over 50 countries worldwide, with a direct **presence in 8 countries**. In each market, Cromology's brands are an expression of its history, professionalism and capacity for innovation. **20% of the turnover is generated by new products**.

Cromology Italia believes in a multi-channel strategy diversified by brand, range of services and type of customer: from designers to professional applicators and private customers with an offer of **7 specialised brands, Cromology holds 7% of the Italian market**, an absolute leadership position.

With headquarters in Porcari, in the province of Lucca, the company counts on **two state-of-the-art production sites** of 80,000 square metres, a 45,000 square metre **logistics hub** and the cooperation throughout Italy of **400 collaborators**, including head office staff and a sales network. With its own brand portfolio and a wide range of products and services, **Cromology's aim is to be a trusted partner alongside customers, professionals and private individuals, in order to achieve professional excellence together**.



8 COUNTRIES WITH DIRECT PRESENCE

OUR PRODUCTS ARE MARKETED IN 50 COUNTRIES

3,700 collaborators

100 researchers

50 countries where the products are marketed

8 countries with direct presence

5 R&D laboratories

20% sales generated by new products

9 production sites

7 logistics hubs

665 millions annual turnover

SUSTAINABILITY

WE ARE COMMITTED TO EVERY OPERATIONAL PHASE

The Cromology Group's approach to sustainability stems from its Mission: **to responsibly protect and colour homes to improve everyone's life**.

Cromology places Corporate Social Responsibility (CSR) at the heart of its strategy, at the same level as profitable growth and operational excellence. With a view to continuous improvement, Cromology integrates its CSR objectives into business development and new product launches.

Cromology's CSR approach relates to the Sustainable Development Goals (SDGs) defined by the United Nations. Cromology has identified the 5 SDGs most relevant to its activities and on the basis of these is committed to responsible and sustainable development in order to maximise the value generated for customers, employees, shareholders, suppliers, civil society and local communities.

SUSTAINABLE DEVELOPMENT

CROMOLOGY'S SUSTAINABILITY

ENVIRONMENTAL RESPONSIBILITY
To minimise the impact of activities on the environment.

SAFETY AND PRODUCT LIABILITY
Innovation for offering colours and paints that are increasingly more respectful of the environment and health of users.

SOCIAL RESPONSIBILITY
To ensure the health and safety for its employees; enabling everyone to evolve; fostering the highest standard of integrity and compliance with the regulations in force.

PRODUCT SAFETY AND LIABILITY

- INDOOR AIR QUALITY
- HACCP HYGIENE-HEALTHCARE PREVENTION PROTOCOL
- ISO 9001:2015 QUALITY MANAGEMENT SYSTEM
- UNI EN 15457 ANTI-MOULD EFFICACY
- UNI EN 15458 ANTI-ALGAE EFFICACY
- ISO 22196 BACTERIOSTATIC CERTIFICATE SILVER ACT TECHNOLOGY

ENVIRONMENTAL RESPONSIBILITY

- ISO 14001:2015 ENVIRONMENTAL PROTECTION IN INDUSTRIAL PRODUCTION PROCESSES
- ENVIRONMENTAL PRODUCT DECLARATION
- ECOLABEL
- 100% GREEN ENERGY CERTIFICATION

SOCIAL RESPONSIBILITY

- ISO 45001:2018 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM
- DLGS 231/2001 CORPORATE ADMINISTRATIVE LIABILITY
- CSR

ENVIRONMENTAL DECLARATION

EPD PROGRAMME GENERAL INFORMATION

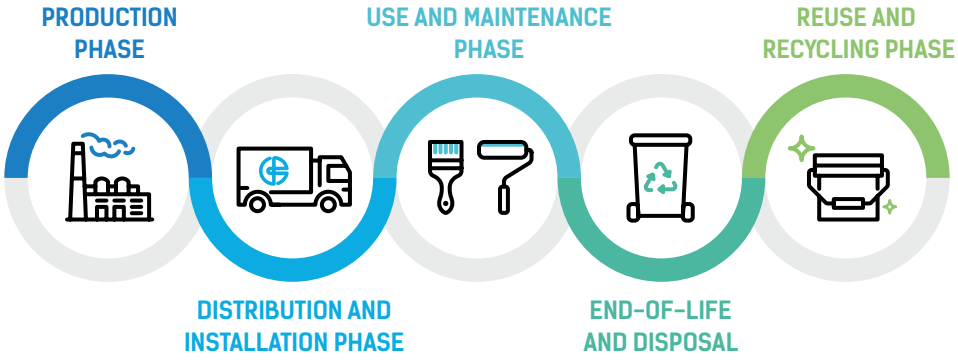
EPD PROGRAMME	The International EPD® System – www.environdec.com
EPD PROGRAMME OPERATOR	EPD International AB Box 210 60, SE-100 31 Stockholm, Sweden.
PRODUCT CATEGORY RULES (PCR)	International EPD System – PCR 2019:14 – "Construction products" – Version 1.11 EN 15804:2012+A2:2019 – "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products."
EPD DRAFTED BY	Leyton Italia s.r.l
DECLARATION HOLDER	Dr. Marco Demi Cromology Italia S.p.A.
CHECKED BY	Guido Croce
GEOGRAPHICAL REFERENCE	International
EPD REGISTRATION NUMBER	S-P-05946
EXPIRY DATE	25/07/2027
PUBLICATION DATE	25/07/2022
PRODUCT DESCRIPTION	Micosteryl
APPLICATION SCOPE	The LCA analysis was conducted according to the ISO 14025, ISO 14040, ISO 14044 and EN15804 standards. Both process-specific data and data from the Ecoinvent 3.6 database were used. The methods for calculating and assessing the impacts were used as defined in 2019 EN 15804 2012+A2:2019. The LCA study covers the production phases of raw materials and energy; transport of materials; production at the company's sites; and the end of life of the material.

EPD®
THE INTERNATIONAL EPD® SYSTEM

The abbreviation EPD stands for **Environmental Product Declaration** and is a document in which the environmental performance of a product is described in the form of standardised and objective data.
It makes it possible to analyse and quantify how much energy and natural resources are used by production and distribution processes, how much CO_2 is emitted into the atmosphere, what materials are used for packaging and how much waste is generated.

In the field of construction, **the EPD is an essential basis for professionals** such as architects and designers when it comes to the overall planning and evaluation of interventions. As the validation of the EPD must be performed by recognised Certification Bodies, it represents an important act of transparency and accountability for the market.

EPDs, created on a voluntary basis, must be prepared with reference to the **LCA (Life Cycle Assessment)** which is an analytical and systematic methodology that assesses the environmental significance of a product or service throughout its entire life cycle. LCA is the methodology that serves as the technical basis for a wide range of possible actions aimed at increasing the sustainability of products, as it helps to understand the impact generated towards the environment by products. The PCR (Product Category Rules) contain the rules for conducting the LCA, which must also comply with the international standard EN 15804 for construction products.
This EPD refers to MICOSTERYL.



THE BALDINI VERNICI BRAND

MISSION

Baldini Vernici is a flexible and dynamic company with consolidated experience.
Present on the market since 1974, it proposes a complete offer oriented to low environmental impact and sustainable development.

Baldini Vernici was among the first brands in the sector to obtain the Ecolabel.
Baldini Vernici's strategy is oriented towards the creation of an offer of paint systems with **high quality standards and solutions that respect environmental requirements and the health of those who apply the products and spend time on the premises**.

Its range, which is constantly being renewed and diversified, is aimed at both the 'do-it-yourself' consumer and the professional.

EMISSIONI NEGLI AMBIENTI INTERNI A+ A+ A B C
A+ CERTIFICATE

FILM PROTECTION TECHNOLOGY UNI EN 15457
ANTI-MOULD EFFICACY

CERTIFICATO HACCP UNI11021
HACCP CERTIFICATE

TECNOLOGIA MICRO-TECH DEFENSE
ANTI-MOULD EFFICACY

SILVER ACT TECHNOLOGY con ioni d'argento ISO 22196
SILVER ACT TECNOLOGY

EU Ecolabel www.ecolabel.eu
EU Ecolabel IT/44/001
ECOLABEL

CONFORME CAM Criteri Ambientali Minimi
CAM

MICOSTERYL ACT

Micosteryl Act is a breathable anti-mould water paint with a specific additive for effective protection against mould formation.
Its high breathability makes it ideal for damp or poorly ventilated rooms. Micosteryl Act contains special film preservatives, which give the paint preventive protection against the formation of moulds and fungi.

COMPLIANT WITH THE HACCP STANDARD
The product is suitable for use in environments where foodstuffs are present according to UNI 11021:2002. Ideal for high traffic areas where maximum hygiene is required.

- GOOD COVERAGE
- EFFICACIOUS ANTI-MOULD ACTION
- UNI EN 15457 ANTI-MOULD TESTED

EMISSIONI NEGLI AMBIENTI INTERNI A+ (A+ A B C)

FILM PROTECTION TECHNOLOGY UNI EN 15457

TECHNICAL DATA	METHOD	MAIN DATA AT 20°C AND 60% R.H.
Contrast ratio	M.U. 1631	95.1 Average
Kubelka-Munk yield	ISO 6504-1	9 - 10
Washability	ISO 11998	-
Dirt trap ΔL	UNI 10792	14.7 Average

CHEMICAL COMPOSITION OF THE PRODUCT

Packaging Volume	PP [kg/kg]	Iron [kg/kg]	Paper [kg/kg]	LDPE [kg/kg]	Wood [kg/kg]
13 L	2.81E-02	2.59E-03	8.79E-05	6.15E-04	4.99E-02
4 L	2.17E-02	0.00E+00	2.86E-04	7.14E-04	7.14E-02

MICOSTERYL ACT	
Water	< 30
Loads	< 70
Emulsions	< 10
Additives	< 10

ENVIRONMENTAL DECLARATION PROCESS

DECLARED UNIT:

For this EPD, in accordance with the reference standards, the concept of "declared unit" is used instead of "functional unit".
The declared unit is the quantity of product required to produce 1 kg of finished product.

SYSTEM BOUNDARIES:

This EPD is of the "cradle to gate with options" type and includes forms A1 (Raw Materials), A2 (Transport), A3 (Production), C1 (Total/Partial Demolition), C2 (Transport to Landfill/Recovery Centre), C3 (Recovery/Reuse Process), C4 (Landfill) and D (Recovery/Reuse Potential).

REFERENCE YEAR:

The data used refer to the calendar year 2020. Study carried out in 2021.

	PRODUCTION PHASE			DISTRIBUTIONE & INSTALLATION PHASE		USE AND MAINTENANCE PHASE							END-OF-LIFE & DISPOSAL PHASE				REUSE & RECYCLING PHASE
	Raw Materials	Transport	Production	Transport	Installation	Use	Maintenance	Repairs	Replacement	Renovation	Energy use	Water use	Demolition (total / partial)	Transport (landfill / recovery centre)	Recovery / reuse	Landfill	Recovery / reuse potential
Forms	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Declaration forms	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	I	I	-	-	-	-	-	-	-	-	-	EU	EU	EU	EU	EU
Specific data	>90%					-	-	-	-	-	-	-	-	-	-	-	-
Variables	Less than +10% for each product group					-	-	-	-	-	-	-	-	-	-	-	-
Site variations	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-

ENVIRONMENTAL PERFORMANCE

MICOSTERYL ACT

ENVIRONMENTAL CALCULATION SIMULATION

EN15804 + A2 INDICATORS					
Impact category	**Unit**	**A1 – A3**	**C1**	**C2 – C4**	**D**
GWP	kg CO_2 eq	4.38E+01	0.00E+00	1.17E+00	0.00E+00
› GWP – Fossil	kg CO_2 eq	4.25E+01	0.00E+00	1.57E-01	0.00E+00
› GWP – Biogenic	kg CO_2 eq	1.32E+00	0.00E+00	1.01E+00	0.00E+00
› GWP – Land use and LU change	kg CO_2 eq	4.93E-02	0.00E+00	1.27E-05	0.00E+00
ODP	kg CFC11 eq	1.62E-05	0.00E+00	9.41E-09	0.00E+00
IRP	kBq U-235 eq	4.15E+00	0.00E+00	3.18E-03	0.00E+00
POCP	kg NMVOC eq	1.30E-01	0.00E+00	2.52E-03	0.00E+00
PM	disease inc.	2.06E-06	0.00E+00	2.79E-08	0.00E+00
AP	mol H+ eq	1.88E-01	0.00E+00	1.06E-03	0.00E+00
EP, freshwater	kg P eq	1.18E-02	0.00E+00	1.09E-05	0.00E+00
EP, marine	kg N eq	3.71E-02	0.00E+00	5.53E-04	0.00E+00
EP, terrestrial	mol N eq	3.82E-01	0.00E+00	5.44E-03	0.00E+00
ETP, freshwater	CTUe	9.24E+02	0.00E+00	3.51E+00	0.00E+00
› ETP, freshwater – organics	CTUe	1.74E+01	0.00E+00	4.02E-01	0.00E+00
› ETP, freshwater – inorganics	CTUe	2.97E+02	0.00E+00	4.03E-01	0.00E+00
› ETP, freshwater – metals	CTUe	6.10E+02	0.00E+00	2.70E+00	0.00E+00
LUP	Pt	2.27E+03	0.00E+00	6.18E-01	0.00E+00
WDP	m^3 depriv.	4.90E+01	0.00E+00	1.29E-02	0.00E+00
RUP, fossils	MJ	6.41E+02	0.00E+00	6.37E-01	0.00E+00
RUP, minerals and metals	kg Sb eq	3.17E-04	0.00E+00	1.34E-07	0.00E+00
HTP, non-cancer	CTUh	9.01E-07	0.00E+00	3.88E-08	0.00E+00
› HTP, non-cancer – organics	CTUh	2.43E-08	0.00E+00	1.04E-09	0.00E+00
› HTP, non-cancer – inorganics	CTUh	1.84E-07	0.00E+00	2.29E-08	0.00E+00
› HTP, non-cancer – metals	CTUh	6.99E-07	0.00E+00	1.49E-08	0.00E+00
HTP, cancer	CTUh	7.98E-08	0.00E+00	6.99E-09	0.00E+00
› HTP, cancer – organics	CTUh	2.45E-08	0.00E+00	6.83E-09	0.00E+00
› HTP, cancer – inorganics	CTUh	0.00E+00	0.00E+00	0.00E+00	0.00E+00
› HTP, cancer – metals	CTUh	5.53E-08	0.00E+00	1.66E-10	0.00E+00

RESOURCE CONSUMPTION

* The results in kg PO4 eq. can be obtained by multiplying the results in kg P eq. by a conversion factor of 3.07.

Impact category	Unit	A1–A3	C1	C2–C4	D
PENRT	MJ	6.90E+02	0.00E+00	6.77E–01	0.00E+00
PENRM	MJ	7.79E+01	0.00E+00	7.79E+01	0.00E+00
PENRE	MJ	4.01E–02	0.00E+00	1.07E–05	0.00E+00
PERT	MJ	4.48E+02	0.00E+00	8.78E–03	0.00E+00
PERM	MJ	4.14E+02	0.00E+00	2.44E–03	0.00E+00
PERE	MJ	3.42E+01	0.00E+00	6.34E–03	0.00E+00
ODP	kg CFC11 eq	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WDP	m^3	0.00E+00	0.00E+00	2.45E–02	0.00E+00

WASTE

Impact category	Unit	A1 – A3	C1	C2 – C4	D
HWD	kg	4.75E–04	0.00E+00	5.50E–03	0.00E+00
NWHD	kg	4.70E+00	0.00E+00	7.71E–01	0.00E+00
RWD	kg	1.50E–03	0.00E+00	4.16E–06	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	1.53E–01	0.00E+00
MER	kg	0.00E+00	0.00E+00	6.88E–01	0.00E+00
EE	MJ per energy carrier	0.00E+00	0.00E+00	0.00E+00	0.00E+00

IPCC INDICATOR

Impact category	Unit	A1–A3	C1	C2 – C4	D
GWP–GHG	kg CO^2 eq	4.19E+01	0.00E+00	2.39E–01	0.00E+00

MICOSTERYL PROTECT

Micosteryl Protect is a washable anti-mould water paint characterised by high opacity and excellent coverage. Micosteryl Protect is characterised by its breathability, which makes it suitable for application in high humidity environments such as bathrooms and kitchens.
Micosteryl Protect thanks to the Film Protection System, a special preservative of the applied paint film, provides preventive protection against the formation of moulds and fungi.
Anti-mould efficacy tested in accordance with UNI EN 15457.

COMPLIANT WITH THE HACCP STANDARD
The product is suitable for use in environments where foodstuffs are present according to UNI 11021:2002. Ideal for high traffic areas where maximum hygiene is required.

- EXCELLENT COVERAGE
- HIGH BREATHABILITY
- UNI EN 15457 ANTI-MOULD TESTED

EMISSIONI NEGLI AMBIENTI INTERNI A+ A+ A B C

FILM PROTECTION TECHNOLOGY UNI EN 15457

TECHNICAL DATA	METHOD	MAIN DATA AT 20°C AND 60% R.H.
Contrast ratio	M.U. 1631	98 Excellent
Kubelka-Munk yield	ISO 6504-1	11
Washability	ISO 11998	CLASS 2
Dirt trap Δl	UNI 10792	15.7 High

ENVIRONMENTAL DECLARATION PROCESS

DECLARED UNIT:

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REFERENCE YEAR:

The data used refer to the calendar year 2020. Study carried out in 2021.

	PRODUCTION PHASE			DISTRIBUTIONE & INSTALLATION PHASE		USE AND MAINTENANCE PHASE							END-OF-LIFE & DISPOSAL PHASE				REUSE & RECYCLING PHASE
	Raw Materials	Transport	Production	Transport	Installation	Use	Maintenance	Repairs	Replacement	Renovation	Energy use	Water use	Demolition (total / partial)	Transport (landfill / recovery centre)	Recovery / reuse	Landfill	Recovery / reuse potential
Forms	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Declaration forms	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	I	I	–	–	–	–	–	–	–	–	–	EU	EU	EU	EU	EU
Specific data	>90%					–	–	–	–	–	–	–	–	–	–	–	–
Variables	Less than +10% for each product group					–	–	–	–	–	–	–	–	–	–	–	–
Site variations	Not relevant					–	–	–	–	–	–	–	–	–	–	–	–

CHEMICAL COMPOSITION OF THE PRODUCT

Packaging Volume	PP [kg/kg]	Iron [kg/kg]	Paper [kg/kg]	LDPE [kg/kg]	Wood [kg/kg]
12 L	3.51E-02	3.23E-03	1.10E-04	7.68E-04	6.23E-02
4 L	2.50E-02	0.00E+00	3.29E-04	8.22E-04	8.22E-02

MICOSTERYL PROTECT	
Water	< 35
Loads	< 55
Emulsions	< 20
Additives	< 10

ENVIRONMENTAL PERFORMANCE

MICOSTERYL PROTECT

ENVIRONMENTAL CALCULATION SIMULATION

EN15804 + A2 INDICATORS					
Impact category	**Unit**	**A1 – A3**	**C1**	**C2 – C4**	**D**
GWP	kg CO_2 eq	2.00E+02	0.00E+00	1.17E+00	0.00E+00
› GWP – Fossil	kg CO_2 eq	1.93E+02	0.00E+00	1.58E-01	0.00E+00
› GWP – Biogenic	kg CO_2 eq	6.56E+00	0.00E+00	1.01E+00	0.00E+00
› GWP – Land use and LU change	kg CO_2 eq	1.40E-01	0.00E+00	1.30E-05	0.00E+00
ODP	kg CFC11 eq	7.91E-05	0.00E+00	9.59E-09	0.00E+00
IRP	kBq U-235 eq	1.87E+01	0.00E+00	3.24E-03	0.00E+00
POCP	kg NMVOC eq	5.51E-01	0.00E+00	2.53E-03	0.00E+00
PM	disease inc.	9.10E-06	0.00E+00	2.80E-08	0.00E+00
AP	mol H+ eq	8.26E-01	0.00E+00	1.06E-03	0.00E+00
EP, freshwater	kg P eq	5.25E-02	0.00E+00	1.10E-05	0.00E+00
EP, marine	kg N eq	1.61E-01	0.00E+00	5.54E-04	0.00E+00
EP, terrestrial	mol N eq	1.68E+00	0.00E+00	5.44E-03	0.00E+00
ETP, freshwater	CTUe	4.27E+03	0.00E+00	3.51E+00	0.00E+00
› ETP, freshwater – organics	CTUe	6.70E+01	0.00E+00	4.03E-01	0.00E+00
› ETP, freshwater – inorganics	CTUe	1.45E+03	0.00E+00	4.05E-01	0.00E+00
› ETP, freshwater – metals	CTUe	2.75E+03	0.00E+00	2.71E+00	0.00E+00
LUP	Pt	2.81E+03	0.00E+00	6.19E-01	0.00E+00
WDP	m^3 depriv.	2.39E+02	0.00E+00	1.27E-02	0.00E+00
RUP, fossils	MJ	2.88E+03	0.00E+00	6.48E-01	0.00E+00
RUP, minerals and metals	kg Sb eq	1.43E-03	0.00E+00	1.37E-07	0.00E+00
HTP, non-cancer	CTUh	4.16E-06	0.00E+00	3.88E-08	0.00E+00
› HTP, non-cancer – organics	CTUh	7.87E-08	0.00E+00	1.04E-09	0.00E+00
› HTP, non-cancer – inorganics	CTUh	8.02E-07	0.00E+00	2.29E-08	0.00E+00
› HTP, non-cancer – metals	CTUh	3.30E-06	0.00E+00	1.49E-08	0.00E+00
HTP, cancer	CTUh	2.84E-07	0.00E+00	6.99E-09	0.00E+00
› HTP, cancer – organics	CTUh	1.04E-07	0.00E+00	6.83E-09	0.00E+00
› HTP, cancer – inorganics	CTUh	0.00E+00	0.00E+00	0.00E+00	0.00E+00
› HTP, cancer – metals	CTUh	1.80E-07	0.00E+00	1.66E-10	0.00E+00

RESOURCE CONSUMPTION

* The results in kg PO4 eq. can be obtained by multiplying the results in kg P eq. by a conversion factor of 3.07.

Impact category	Unit	A1–A3	C1	C2–C4	D
PENRT	MJ	3.10E+03	0.00E+00	6.89E-01	0.00E+00
PENRM	MJ	3.58E+02	0.00E+00	3.58E+02	0.00E+00
PENRE	MJ	6.77E-02	0.00E+00	1.10E-05	0.00E+00
PERT	MJ	6.61E+02	0.00E+00	8.96E-03	0.00E+00
PERM	MJ	5.02E+02	0.00E+00	2.49E-03	0.00E+00
PERE	MJ	1.59E+02	0.00E+00	6.47E-03	0.00E+00
ODP	kg CFC11 eq	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WDP	m^3	0.00E+00	0.00E+00	2.45E-02	0.00E+00

WASTE

Impact category	Unit	A1 – A3	C1	C2 – C4	D
HWD	kg	1.77E-03	0.00E+00	5.50E-03	0.00E+00
NWHD	kg	1.60E+01	0.00E+00	7.41E-01	0.00E+00
RWD	kg	6.42E-03	0.00E+00	4.24E-06	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	3.32E-01	0.00E+00
MER	kg	0.00E+00	0.00E+00	7.33E-01	0.00E+00
EE	MJ per energy carrier	0.00E+00	0.00E+00	0.00E+00	0.00E+00

IPCC INDICATOR

Impact category	Unit	A1–A3	C1	C2 – C4	D
GWP-GHG	kg CO_2 eq	1.91E+02	0.00E+00	2.40E-01	0.00E+00

MICOSTERYL COLOR

Micosteryl Color is a high-quality, anti-mould, breathable water paint for interiors, characterised by a matt finish and excellent whiteness that make it ideal for all rooms in the home. It contains special film preservatives that give the paint protection against the formation of moulds and fungi.

COMPLIANT WITH THE HACCP STANDARD

The product is suitable for use in environments where foodstuffs are present according to UNI 11021:2002. Ideal for high traffic areas where maximum hygiene is required.

- ELEGANT MATT FINISH
- IDEAL FOR ALL ENVIRONMENTS
- UNI EN 15457 TESTED ANIT-MOULD EFFICACY

EMISSIONI NEGLI AMBIENTI INTERNI A+ (A+ A B C)

FILM PROTECTION TECHNOLOGY UNI EN 15457

TECHNICAL DATA	METHOD	MAIN DATA AT 20°C AND 60% R.H.
Contrast ratio	M.U. 1631	96.2 Good
Kubelka-Munk yield	ISO 6504-1	12
Washability	ISO 11998	–
Dirt trap Δl	UNI 10792	< 14.2 Average

ENVIRONMENTAL DECLARATION PROCESS

DECLARED UNIT:

For this EPD, in accordance with the reference standards, the concept of "declared unit" is used instead of "functional unit".
The declared unit is the quantity of product required to produce 1 kg of finished product.

SYSTEM BOUNDARIES:

This EPD is of the "cradle to gate with options" type and includes forms A1 (Raw Materials), A2 (Transport), A3 (Production), C1 (Total/Partial Demolition), C2 (Transport to Landfill/Recovery Centre), C3 (Recovery/Reuse Process), C4 (Landfill) and D (Recovery/Reuse Potential).

REFERENCE YEAR:

The data used refer to the calendar year 2020. Study carried out in 2021.

	PRODUCTION PHASE			DISTRIBUTIONE & INSTALLATION PHASE		USE AND MAINTENANCE PHASE							END-OF-LIFE & DISPOSAL PHASE				REUSE & RECYCLING PHASE
	Raw Materials	Transport	Production	Transport	Installation	Use	Maintenance	Repairs	Replacement	Renovation	Energy use	Water use	Demolition (total / partial)	Transport (landfill / recovery centre)	Recovery / reuse	Landfill	Recovery / reuse potential
Forms	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Declaration forms	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	I	I	–	–	–	–	–	–	–	–	–	EU	EU	EU	EU	EU
Specific data	>90%					–	–	–	–	–	–	–	–	–	–	–	–
Variables	Less than +10% for each product group					–	–	–	–	–	–	–	–	–	–	–	–
Site variations	Not relevant					–	–	–	–	–	–	–	–	–	–	–	–

CHEMICAL COMPOSITION OF THE PRODUCT

Packaging Volume	PP [kg/kg]	Iron [kg/kg]	Paper [kg/kg]	LDPE [kg/kg]	Wood [kg/kg]
0.75 L	0.00E+00	1.26E-01	1.78E-03	9.78E-03	6.67E-02
13 L	3.28E-02	5.24E-02	1.03E-04	7.18E-04	5.83E-02
2.5 L	4.53E-02	0.00E+00	5.33E-04	1.33E-03	1.33E-01
5 L	2.03E-02	0.00E+00	2.67E-04	6.67E-04	6.67E-02

MICOSTERYL COLOR	
Water	< 35
Loads	< 55
Emulsions	< 20
Additives	< 10

ENVIRONMENTAL PERFORMANCE

MICOSTERYL COLOR

ENVIRONMENTAL CALCULATION SIMULATION

EN15804 + A2 INDICATORS					
Impact category	**Unit**	**A1 – A3**	**C1**	**C2 – C4**	**D**
GWP	kg CO_2 eq	5.65E+00	0.00E+00	1.17E+00	0.00E+00
› GWP – Fossil	kg CO_2 eq	5.59E+00	0.00E+00	1.57E-01	0.00E+00
› GWP – Biogenic	kg CO_2 eq	3.04E-02	0.00E+00	1.01E+00	0.00E+00
› GWP – Land use and LU change	kg CO_2 eq	2.80E-02	0.00E+00	1.25E-05	0.00E+00
ODP	kg CFC11 eq	7.56E-07	0.00E+00	9.19E-09	0.00E+00
IRP	kBq U-235 eq	5.92E-01	0.00E+00	3.11E-03	0.00E+00
POCP	kg NMVOC eq	2.81E-02	0.00E+00	2.52E-03	0.00E+00
PM	disease inc.	3.57E-07	0.00E+00	2.78E-08	0.00E+00
AP	mol H+ eq	3.55E-02	0.00E+00	1.05E-03	0.00E+00
EP, freshwater	kg P eq	2.00E-03	0.00E+00	1.09E-05	0.00E+00
EP, marine	kg N eq	7.04E-03	0.00E+00	5.52E-04	0.00E+00
EP, terrestrial	mol N eq	6.70E-02	0.00E+00	5.42E-03	0.00E+00
ETP, freshwater	CTUe	1.10E+02	0.00E+00	3.49E+00	0.00E+00
› ETP, freshwater – organics	CTUe	5.57E+00	0.00E+00	4.01E-01	0.00E+00
› ETP, freshwater – inorganics	CTUe	1.48E+01	0.00E+00	4.00E-01	0.00E+00
› ETP, freshwater – metals	CTUe	8.97E+01	0.00E+00	2.69E+00	0.00E+00
LUP	Pt	2.14E+03	0.00E+00	5.93E-01	0.00E+00
WDP	m^3 depriv.	2.54E+00	0.00E+00	1.24E-02	0.00E+00
RUP, fossils	MJ	9.65E+01	0.00E+00	6.22E-01	0.00E+00
RUP, minerals and metals	kg Sb eq	4.00E-05	0.00E+00	1.32E-07	0.00E+00
HTP, non-cancer	CTUh	1.15E-07	0.00E+00	3.88E-08	0.00E+00
› HTP, non-cancer – organics	CTUh	7.75E-09	0.00E+00	1.04E-09	0.00E+00
› HTP, non-cancer – inorganics	CTUh	4.85E-08	0.00E+00	2.29E-08	0.00E+00
› HTP, non-cancer – metals	CTUh	5.94E-08	0.00E+00	1.49E-08	0.00E+00
HTP, cancer	CTUh	3.11E-08	0.00E+00	6.99E-09	0.00E+00
› HTP, cancer – organics	CTUh	5.54E-09	0.00E+00	6.83E-09	0.00E+00
› HTP, cancer – inorganics	CTUh	0.00E+00	0.00E+00	0.00E+00	0.00E+00
› HTP, cancer – metals	CTUh	2.56E-08	0.00E+00	1.65E-10	0.00E+00

RESOURCE CONSUMPTION

* The results in kg PO4 eq. can be obtained by multiplying the results in kg P eq. by a conversion factor of 3.07.

Impact category	Unit	A1–A3	C1	C2–C4	D
PENRT	MJ	1.03E+02	0.00E+00	6.61E–01	0.00E+00
PENRM	MJ	9.23E+00	0.00E+00	9.22E+00	0.00E+00
PENRE	MJ	3.66E–02	0.00E+00	1.05E–05	0.00E+00
PERT	MJ	3.96E+02	0.00E+00	8.63E–03	0.00E+00
PERM	MJ	3.93E+02	0.00E+00	2.40E–03	0.00E+00
PERE	MJ	3.49E+00	0.00E+00	6.23E–03	0.00E+00
ODP	kg CFC11 eq	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WDP	m^3	0.00E+00	0.00E+00	2.45E–02	0.00E+00

WASTE

Impact category	Unit	A1 – A3	C1	C2 – C4	D
HWD	kg	1.68E–04	0.00E+00	5.50E–03	0.00E+00
NWHD	kg	2.14E+00	0.00E+00	7.04E–01	0.00E+00
RWD	kg	2.96E–04	0.00E+00	4.06E–06	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	3.32E–01	0.00E+00
MER	kg	0.00E+00	0.00E+00	7.33E–01	0.00E+00
EE	MJ per energy carrier	0.00E+00	0.00E+00	0.00E+00	0.00E+00

IPCC INDICATOR

Impact category	Unit	A1–A3	C1	C2 – C4	D
GWP-GHG	kg CO_2 eq	5.47E+00	0.00E+00	2.39E–01	0.00E+00

ADDITIONAL INFORMATION

GREEN PUBLIC PROCUREMENT (GPP)

Minimum Environmental Criteria (MEC) for Constructions. Minimum Environmental Criteria (MEC) are issued by the Ministry of the Environment and concern specific purchase categories.
They provide "environmental considerations", linked to the different phases of tender procedures (subject of the contract, technical specifications, rewarding technical characteristics linked to the most economically advantageous tender, contract execution conditions) aimed at qualifying, from an environmental point of view, both supplies and procurements throughout the entire life cycle of the service/product.

THE PAINT PRODUCT COMPLIES WITH THE MEC BUILDING REGULATIONS IF IT MEETS THE TECHNICAL SPECIFICATIONS

1. EMISSION LIMITS

The manufacturer of Paints and Varnishes **must present documentation proving compliance with the emission limits indicated in the table**, verified by measuring the emissions of its products.
This documentation will consist, for example, of a test report carried out by a third-party laboratory or, if the company has suitable instrumentation, in-house laboratory tests.

2.3 3 Technical specifications of the building*
2.3.5.5 Material emission*

EMISSION LIMIT (µm³)	
Benzene Trichloroethylene (trichloroethylene) di-2-ethylhexylphthalate (DEHP) Dibutyl phthalate (DBP)	**1 (for each substance)**
Total VOCs (22)	1500
Formaldehyde	<60
Acetaldehyde	<300
Toluene	<450
Tetrachloroethylene	<350
Xylene	<300
1,2,4-Trimethylbenzene	<1500
1,4-dichlorobenzene	<90
Ethylbenzene	<1000
2-Butoxyethanol	<1500
Styrene	<350

2. HAZARDOUS SUBSTANCES

The manufacturer of paints and varnishes **must submit a declaration of conformity of the legal representative, accompanied by the Safety Data Sheet (SDS)** of the product. In the event of substances with such classifications not appearing in the SDS, the SDS itself is sufficient documentation to demonstrate compliance with the specific criterion.

2.4.1.3 Hazardous substances*

None of the following must be added intentionally to the components, parts or materials used:

- Cadmium, lead, chromium VI, mercury, arsenic and selenium additives in concentrations exceeding 0.010% by weight.
- Substances identified as "Substances of Very High Concern" (SVHCs) according to Article 59 of Regulation (EC) No 1907/2006 at a concentration greater than 0.10% w/w;
- Substances or mixtures classified or classifiable with the following hazard statements:
  - as carcinogenic, mutagenic or toxic for reproduction in category 1A, 1B or 2 (H340, H350, H350i, H360, H360F, H360D, H360FD, H360Fd, H360Df, H341, H351, H361f, H361d, H361fd, H362);
  - for acute oral, dermal, inhalation toxicity in category 1, 2 or 3 (H300, H301, H310, H311, H330, H331);
  - as dangerous to the aquatic environment in category 1, 2 (H400, H410, H411);
  - as having specific target organ toxicity category 1 and 2 (H370, H371, H372, H373).

3. POSSESSION OF THE ECOLABEL OR EQUIVALENT

The manufacturer of Paints and Varnishes **must present documentation declaring possession of the Ecolabel or an equivalent label**. Alternatively, it may present a type III environmental declaration (i.e. an EPD – Environmental Product Declaration).

2.4 Technical specifications of building components*
2.4.2 Specific criteria for building components*
2.4.2.11 Paints and Varnishes*

Paint products must comply with the ecological and performance criteria of Decision 2014/312/EU2 as amended, on the awarding of the EU Ecolabel for paint products.
Verification: the designer shall prescribe that in the procurement phase the contractor shall ensure compliance with the criterion by using products bearing either:

- the EU Ecolabel or equivalent;
- a Type III environmental declaration in accordance with EN 15804 and ISO 14025

demonstrating compliance with this criterion. This can be verified if the environmental declaration contains the specific information related to the criteria contained in the above-mentioned decisions. Evidence of compliance with this criterion must be submitted to the contracting authority during the execution of the works, in the manner specified in the relevant specifications.

*NB: please refer to the MEC text of 20 May 2017 for more details and insights. The current reference text is the Decree of 11 October 2017, "Minimum Environmental Criteria for the awarding of design services and works for the new construction, renovation and maintenance of public buildings" ("Building MEC"), which amends the previous MEC, published in January 2017.

ACRONYMS

ENVIRONMENTAL IMPACT

ADP: abiotic resource depletion potential;
AP: acidification potential;
EP: eutrophication potential;
GWP: global warming potential;
ODP: stratospheric ozone depletion potential;
POCP: tropospheric ozone creation potential;
WDP: water deprivation potential.

RESOURCE CONSUMPTION

PERT: total use of renewable primary energy resources;
PERM: use of renewable primary energy resources used as raw materials;
PERE: use of renewable primary energy excluding renewable primary energy used as raw materials;
PENRT: total use of non-renewable primary energy resources;
PENRM: use of non-renewable primary energy resources used as raw materials;
PENRE: use of non-renewable primary energy excluding non-renewable primary energy used as raw materials;
SM: use of secondary material;
RSF: use of renewable secondary fuels;
NRSF: use of non-renewable secondary fuels;
FWT: total use of water.

WASTE PRODUCTION

HWD: hazardous waste disposed of;
NHWD: non-hazardous waste disposed of;
RWD: radioactive waste disposed of;
CRU: components for reuse;
MFR: materials for recycling;
MER: materials for energy recovery;
EE: exported energy;
IRP: ionising radiation;
PM: particulate matter;
HTP: human toxicity;
ETP: ecotoxicity potential;
LUP: land use potential;
RUP: resource use potential.

VERIFICATION AND REGISTRATION

ISO standard ISO 21930 and CEN standard EN 15804 serves as the core Product Category Rules (PCR)

Product Category Rules (PCR):
PCR 2019:14 Construction products, version 1.11

(PCR) review was conducted by: The Technical Commitee of the International EPD® System. See www.environdec.com/TC for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile.
The review panel may be contacted via the Secretariat www.environdec.com/contact

Indipendent third-party verification of the declaration and data, according to ISO 14025:2006:
☒ External ☐ Internal
covering
☒ EPD process certification ☐ EPD verification

Third-party verifer:
Guido Croce

Procedure for follow-up during EPD validity involves third party verifier.
☐ Yes ☒ No

The holder of the EPD has ownership and responsibility for the declaration.
CPC CODE: 3511 paints, varnishes and related products

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