# ENVIRONMENTAL **PRODUCT DECLARATION**





Registration number: S-P-05089 Publication date: 16/02/2022

Valid until: 16/02/2027

Program: The International EPD® System www.environdec.com Program Operator: EPD International AB

### 1. CROMOLOGY GROUP

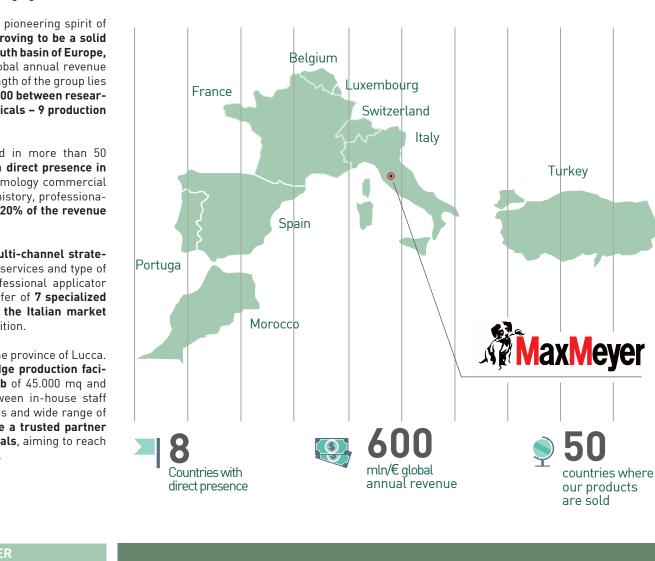
Cromology was founded in 2015, after a decades-long process of transformation started in the late 90's, when Lafarge Peintures created the Specialty Materials which then became Materis Paints. It quickly became a global player in the emerging markets.

Nowadays Cromology keeps that pioneering spirit of its Dutch origin from the 1700, proving to be a solid worldwide group, leader in the south basin of Europe, present in 50 countries with a global annual revenue of more than 600 mln/€. The strength of the group lies in its 3700 employees – of which 100 between researchers and highly dedicated technicals – 9 production facilities and 5 R&D laboratories.

Cromology brands are marketed in more than 50 countries all over the world, with **direct presence in 8 countries**. In each market, Cromology commercial brands are an expression of the history, professionalism and capacity for innovation. **20% of the revenue comes from new products.** 

Cromology Italy believes in a multi-channel strategy diversified by brand, range of services and type of customer: from designer to professional applicator and private customer. With an offer of **7 specialized** brands, Cromology holds **7% of the Italian market** having so an absolute leading position.

Headquarters are in Porcari, in the province of Lucca. The company has two cutting-edge production facilities of 80.000 mq, a logistic hub of 45.000 mq and can rely on 400 employees between in-house staff and sales network. With its brands and wide range of products, Cromology wants to be a trusted partner for his customers and professionals, aiming to reach together professional excellence.



production

facilities

CLOWOLOGA

employees

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5 💎

laboratories

R&D

Logistic

researchers

hubs

20%

new products

of sales coming from

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### 2. SUSTAINABILITY

### CLOWOLOGA

#### **OUR COMMITMENT IN EVERY OPERATIONAL PHASE**

Cromology Groups' approach to sustainability rai from our Mission: protecting and colouring respon bly every home to improve everyone's life.

Cromology puts RSI at the core of its strategy, at same level of profitable growth and operational exe lence. In a perspective of continuous improvement Cromology includes its RSI targets in the developm of its business as well as in the launch of new produ

Cromology's approach to RSI relates to United Natio GDS. Cromology has identified 5 most relevant GDS its business and relies on these to create a sustaina and responsible development in order to maximize va for clients, employees, shareholders, suppliers, civil ciety and local communities.

### **5 MOST RELEVANT GDS FOR CROMOLOGY BUSINESS**



crom	OLOGY the of of professional particip				<b>MaxMeyer</b>
	PRODUCT SAFETY AND LIABILITY vate to offer colours and paints more and more respectful environment and users' health	EL	2 5 NVIRONMENTAL IABILITY Inimize the impact of the ctivities on the environment		PONSIBILITY ealth and safety
PRO	DDUCT SAFETY D LIABILITY		VIRONMENTAL BILITY	the opportun high standard compliance t	ees; give anyone ity to evolve; promote ds of integrity and o current regulations IAL PONSIBILITY
	INDOOR AIR QUALITY HACCP - HAZARD A NALYSIS AND CRITICAL CONTROL POINTS ISO 9001:2015 QUALITY MANAGEMENT SYSTEM UNI EN 15457	EPD*	ISO 14001:2015 ENVIRON- MENTAL MANAGEMENT SYSTEM IN MANUFACTURING PROCESS ENVIRONMENTAL PRODUCT DECLARATION		ISO 45001:2018 OCCUPATIO- NAL HEALTH AND SAFETY MANAGEMENT SYSTEM LEGISLATIVE DECREE NO. 231/2001 ADMINISTRATIVE LIABILITY OF COMPANIES
	UNI EN 15457 UNI EN 15458 ALGAE RESISTANCE ISO 22196 ANTIBACTERIAL TEST CERTIFICATE	Ecolabel www.ecolabel	100% GREEN ENERGY CERTIFICATION		

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### CLOWOLOGA

Programma EPD

Product Category

EPD developed from

Owner of the declaration

Geographical reference

Rules (PCR)

Verified from

EPD Reg. No.

Publication date

Expiration date

Product description

EPD Programm operator



The International EPD® System - www.environdec.com

construction products."

Dr. Marco Demi Cromology Italia S.p.A.

Leyton Italia s.r.l

Guido Croce

International

S-P-05089

16/02/2022

16/02/2027

material.

**BIOACTIVE Anti mould paint** 

EPD International AB Box 210 60, SE-100 31 Stockholm, Sweden.

International EPD System - PCR 2019:14 - "Construction products" - Version

1.11 EN 15804:2012+A2:2019 - "Sustainability of construction works - En-

vironmental product declarations - Core rules for the product category of

LCA analysis has been carried out according to ISO 14025, ISO 14040, ISO 14044 and EN1584 standards. Both specific data of the manufacturing process and Ecoinvent 3.6 database have been used. As calculation and evaluation methods of the impacts have been used those in the EN 15804

2012+A2:2019 standard. LCA analysis covers the phases of extraction and transport of raw material and energy; manufacturing; end of life of the

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Scope

**EPD - BIOACTIVE MAXMEYER** 

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#### PHASES OF THE PROCESS CONSIDERED IN THE EPD TRANSPORT AND NO OF LIFE NUSE AND USE AND USE AND NUSE A

THE INTERNATIONAL EPD® SYSTEM

EPD abbreviation comes from the English term **Environmental Product Declaration** and it is a verified and registered document that communicates transparent and comparable information about the life-cycle environmental impact of products. It analyses and quantifies how much energy and natural resources are used in production and transportation, how much CO2 is emitted, what materials are used for packaging and the quantity of waste generated.

In the construction field, **EPD is a must for professional architects and designers** when they need to plan and evaluate what actions need to be taken. As EPD must be validated by International Standards, it represents a fundamental act of transparency and liability towards the market.

Where the EPD is the final report, created on a voluntary basis, its foundation is a **lifecycle assessment (LCA)** - the factual and standardized analysis methodology of a product's or service's entire life cycle in terms of sustainability. **LCA is a technical basis for a wide range of possible actions oriented to improve products sustainability**, as it helps to understand the impact generated by a product on the environment. PCR – Product Category Rules provides the instructions for how the life-cycle assessment (LCA) should be conducted, which must also comply with EN 15084 construction products international standard. This EPD regards Max Meyer **BIOACTIVE Anti mould paint.** 



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**MaxMeyer** 

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5. MAXMEYER BRAND (LA MISSION)



### LA MISSION

Our mission is to focus on sustainable, innovative products that develop the comfort of our houses. MaxMeyer's products are:

- Low VOC and A+ certified for the emissions of pollutants in the indoor air, according to Decree no. 2011-321 of March 23.
- **Formaldehyde-free**. Formaldehyde is one of the most dangerous polluting chemicals It is used in many household products, rugs and wooden furniture. It can cause irritation, redness, rash, asthma and cough.
- Put in recycled plastic or recyclable steel packaging. to reduce drastically plastic consumption.
- "Practical" as they make consumer's life easier, being anti-drop, guick drying and resistant to bacteria.

protect the planet.

Therefore products are at the core of **new MaxMeyer's vision**, where the house blends into the landscape, is eco-friendly and it is the place where to feel safe.

#### **«RESPECT HEALTH, RESPECT THE PLANET» LOGO REFERS TO PRODUCTS** WITH THE FOLLOWING FEATURES:



#### PRODUCTS PACKED IN RECYCLED PLASTIC OR IN RECYCLABLE **PACKAGING.** We contribute to reduce the use of plastic and choose to

### FORMALDEHYDE-FREE PRODUCTS

Formaldehyde is one of the most dangerous polluting chemicals. It is used in many household products, rugs and wooden furniture. It can cause irritation, redness, rash, asthma and cough.

#### A+ CLASS PRODUCTS

The regulation gives information about the level of pollutants in the indoor environment, presenting a risk of toxicity by inhalation, on a scale of classes that goes from A+ (very low emissions) to C (high emissions).

«Respect health, respect the planet» logo is registered from Patent and Trademark Office of the Ministry for Economic Development as company trademark, since 6 August 2019 (no. 302019000058242).

### 6. BIOACTIVE PRODUCT



# BIOACTIVE

This EPD refers to the so-called Bioactive wall paint in sale formats 1l, 4l and 10l.



**BIOACTIVE** is a breathable product with special preservatives in its film that prevent mould stopping its reproduction. Many factors can cause growing of mould: low-ventilation rooms, rooms subject to condensation, low thermal insulation and wrong heating and ventilation habits. BIOACTIVE paint is great to create a barrier against mould. Mould is not only unaesthetic, but it can also threaten health, environments and wellbeing of people as well as damaging walls.



#### WHAT IS MOULD?

Mould is one type of fungus that grows in the form of multicellular filaments thriving on walls. Mould first appears in small black spots that later grow becoming black areas that can end up to chalking and degenerating paints and plasterwork.

Risana gli ambienti umidi e previene la formazione di muffa	ATTREA
	0
HIGH HIGH HIGH HIGH HIGH HIGH HIGH HIGH	

Package

**BIOACTIVE 1L** 

**BIOACTIVE 4L** 

**BIOACTIVE 10L** 

PP [kg/kg]

4,16E-02

3.15E-02

4,44E-02

Ferro [kg/kg]

0,00E+00

0.00E+00

0,00E+00

Carta [kg/kg]

1,81E-03

1.81E-04

4,52E-04

### **PRODUCT CHEMICAL COMPOSITION**

Emulsions	< 20%
Additives	< 5%
Extenders	< 65%
Water	< 35%

LDPE [kg/kg]

6,63E-03

8.43E-04

7,53E-04

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Legno [kg/kg]

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CLOWOLOGA

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DECLARED UNIT

This EPD uses the concept of **«declared unit»** instead of «functional unit» according to current regulations.

### **REFERENCE YEAR**

Data come from calendar years 2019-2020. Study was conducted in 2021.

### SYSTEM BOUNDARIES

This «Cradle to gate with options» EPD, includes modules A1 (raw materials), A2 (transport), A3 (production), C1 (de-construction/demolition), C2 (transport to waste processing), C3 (waste processing/reuse), C4 (disposal) and D (reuse- recovery- recycling- potential).

						$\left\langle \right\rangle$		, \$	>.	S		3	>		² ] ∕	$\succ$	
	F															STAGE	REUSE AND RECYCLE STAGE
	Raw material supply	Transport	Manufacturing	Transport	Construction installation processing	Use	Maintenance	Repair	Replecement	Refurbishment	Operational energy use	Operational water use	De-costruction demolition	Transport	Waste processing	Disposal	Reuse - Recovery Recycling - Potential
Modules	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	Х	х	Х	Х	ND	ND	ND	ND	ND	ND	ND	ND	Х	Х	Х	х	Х
Geography	EU	I	Ι	-	-	-	-	-	-	-	-	-	EU	EU	EU	EU	EU
Specific data			>90%			-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	Le	ss tha group	n 10% o of pro	for evo	ery	-	-	-	-	-	-	-	-	-	-	-	-
Variation - sites		No	t relev	ant		-	-	-	-	-	-	-	-	-	-	-	-



EPD - BIOACTIVE MAXMEYER

# 8. ENVIRONMENTAL PERFORMANCE

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# **MaxMeyer**

### SIMULATION OF ENVIRONMENTAL IMPACT INDICATORS

EN15804+A2					
Impact category	Unit	A1 - A3	C1	C2 - C4	D
GWP TOTAL:	kg CO <sub>2</sub> eq	4,04E+01	0,00E+00	1,15E+00	0,00E+00
GWP - Fossil	kg $\rm CO_2$ eq	3,91E+01	0,00E+00	1,40E-01	0,00E+00
GWP - Biogenic	kg CO <sub>2</sub> eq	1,17E+00	0,00E+00	1,01E+00	0,00E+00
GWP - Land use and LU change	kg $\rm CO_2$ eq	4,70E-02	0,00E+00	6,69E-06	0,00E+00
ODP	kg CFC11 eq	1,45E-05	0,00E+00	5,27E-09	0,00E+00
IRP	kBq U-235 eq	3,78E+00	0,00E+00	1,75E-03	0,00E+00
POCP	kg NMVOC eq	1,22E-01	0,00E+00	2,45E-03	0,00E+00
PM	disease inc.	1,92E-06	0,00E+00	2,66E-08	0,00E+00
HTP, non-cancer	CTUh	8,30E-07	0,00E+00	3,86E-08	0,00E+00
HTP, cancer	CTUh	7,96E-08	0,00E+00	6,99E-09	0,00E+00
AP	mol H+ eq	1,73E-01	0,00E+00	9,84E-04	0,00E+00
EP, freshwater	kg P eq	1,12E-02	0,00E+00	9,73E-06	0,00E+00
EP, marine	KG N EQ	3,45E-02	0,00E+00	5,31E-04	0,00E+00
EP, terrestrial	mol N eq	3,54E-01	0,00E+00	5,19E-03	0,00E+00
ETP, freshwater TOTAL	CTUe	8,52E+02	0,00E+00	3,30E+00	0,00E+00
ETP, freshwater - organics	CTUe	1,60E+01	0,00E+00	3,86E-01	0,00E+00
ETP, freshwater - inorganics	CTUe	2,66E+02	0,00E+00	3,45E-01	0,00E+00
ETP, freshwater - metals	CTUe	5,69E+02	0,00E+00	2,56E+00	0,00E+00
LUP	Pt	2,26E+03	0,00E+00	4,12E-01	0,00E+00
WDP	m³ depriv.	4,39E+01	0,00E+00	1,17E-02	0,00E+00
RUP, fossils	MJ	5,88E+02	0,00E+00	3,60E-01	0,00E+00
RUP, minerals and metals	kg Sb eq	2,86E-04	0,00E+00	6,98E-08	0,00E+00
HTP, non-cancer - organics	CTUh	2,24E-08	0,00E+00	1,03E-09	0,00E+00
HTP, non-cancer - inorganics	CTUh	1,82E-07	0,00E+00	2,29E-08	0,00E+00
HTP, non-cancer - metals	CTUh	6,31E-07	0,00E+00	1,47E-08	0,00E+00
HTP, cancer - organics	CTUh	2,62E-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	5,34E-08	0,00E+00	1,61E-10	0,00E+00
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#### **USE OF RESOURCES**

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

Impact category	Unit	A1-A3	C1	C2-C4	D
PENRT	MJ	6,32E+02	0,00E+00	3,84E-01	0,00E+00
PENRM	MJ	7,06E+01	0,00E+00	7,06E+01	0,00E+00
PENRE	MJ	3,96E-02	0,00E+00	5,15E-06	0,00E+00
PERT	MJ	4,43E+02	0,00E+00	5,12E-03	0,00E+00
PERM	MJ	4,12E+02	0,00E+00	1,44E-03	0,00E+00
PERE	MJ	3,10E+01	0,00E+00	3,68E-03	0,00E+00
Ozone depletion	kg CFC11 eq	1,45E-05	0,00E+00	5,27E-09	0,00E+00
Net use of fresh water	m <sup>3</sup>	4,39E+01	0,00E+00	4,39E+01	0,00E+00
WASTE					
Impact category	Unit	A1 - A3	C1	C2 - C4	D
Hazardous waste disposed	KG	5,17E-04	0,00E+00	5,50E-03	0,00E+00
Non- hazardous waste disposed	kg	4,53E+00	0,00E+00	6,85E-01	0,00E+00
Radioactive waste disposed	kg	1,38E-03	0,00E+00	2,28E-06	0,00E+00
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	6,00E-01	0,00E+00

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**}** 



Impact category	Unit	A1-A3	C1	C2 - C4	D
GWP-GHG	kg CO <sub>2</sub> eq	3,86E+01	0,00E+00	2,21E-01	0,00E+00

kg

MJ per energy carrier

0,00E+00

0,00E+00

0,00E+00

0,00E+00

7,99E-01

0,00E+00

8. ENVIRONMENTAL PERFORMANCE

Materials for energy recovery

Exported energy

0,00E+00

0,00E+00

## 9. ADDITIONAL INFORMATION

CLOWOLORA



### GREEN PUBLIC PROCUREMENT (GPP) – BUILDING MINIMUM ENVIRONMENTAL CRITERIA (MEC)

#### REQUIREMENTS FOR PAINT AND VARNISH PRODUCERS

**MEC** are issued by the Ministry of the Environment and are established for multiple product categories. They provide «environmental considerations» linked to the different stages of the bidding (subject of the contract, technical specifications, rewarding technical features linked to the most convenient offer, execution of tasks) aimed to qualify, from the environmental point of view, both supplies and awarding through the entire product/service lifecycle.

### PAINT PRODUCTS MUST MEET THESE TECHNICAL SPECIFICATIONS TO COMPLY WITH BUILDING MEC

#### **1. EMISSION LIMITS**

Paints and varnishes **producer must prove compliance with emission limits in table below providing documentary evidence** by verifying through measurements their products' emissions.

2.3 Technical specifications of the building\* 2.3.5.5 Materials' emission\*

#### EMISSION LIMIT (µm<sup>2</sup>)

Benzene Trichloroethylene 2-ethylhexyl phthalate(DEHP) Dibutyl phthalate (DBP)	1 (for each substance)		
Total VOC (22)	1500		
Formaldehyde	<60		
Acetaldehyde	<300		
Toluene	<450		
tetrachloroethylene	<350		
xylene	<300		
1,2,4-trimethylbenzene	<1500		
1,4-dichlorobenzene	<90		
Ethylbenzene	<1000		
2-dibutoxyethanol	<1500		
Styrene	<350		

#### 2. HAZARDOUS SUBSTANCES

Paints and varnishes producer **must show statement of compliance of the legal representative, accompanied by the Material Safety Data Sheet (MSDS)** of the product. Whether there are no hazardous substances in MSDS, the Sheet itself is the documentation that proves compliance.

#### 2.4.1.3 Hazardous substances

*In components, parts or material used must not be added intentionally:* 

• additives based on cadmium, lead, chrome VI, mercury, arsenic and selenium in concentrations above 0.010% by weight.

• substances identified as "substance of very high concern" (SVHCs) pursuant to Article 59 of the EC Regulation No 1907/2006 in concentrations above 0.10% by weight.

• Substances or mixtures classified or classifiable under the following hazard statements:

- carcinogenic, mutagenic or toxic for reproduction of category 1A, 1B or 2 [seguono varie sigle];(H340, H350, H350i, H360, H360F, H360D, H360FD, H360Fd, H360Df, H341, H351, H361f, H361d, H361fd, H362];

- High oral, dermal, oxygen toxicity of category 1, 2 or 3 (H300, H301, H310, H311, H330, H331);

- Marine hazard of category 1,2 (H400, H410, H411);

- Having organ specific toxic effect of category 1 and 2 (H370, H371, H372, H373).

3. OWNING OF AN ECOLABEL TRADEMARK OR EQUIVALENT

Paints and varnishes producer **must show** documentation about the owning of an Ecolabel or equivalent trademark. The producer can alternatively show an EPD type III.

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 ecological and performance criteria pursuant to 2014/312/UE2 decision as subsequently amended for the award of the EU Ecolabel for indoor and outdoor paints and varnishes.

Verification: the designer must require the contractor to make sure, during the equipment procurement phase, about the compliance with this criteria using products that alternatively have:

- EU Ecolabel or an equivalent trademark

- EPD type III, conforming with UNI EN 15804 and ISO 14025 which shows compliance to this criteria. This can verified in the EPD: specific information about criteria contained in the above-mentioned decisions must be present.

Documentation must be submitted to the contracting authority during implantation of Works, as indicated in the contract documents. **1.** 

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\*for further information please see CAM dated 20 May 2017. Current referente text is Decree of October 11, 2017 "Adoption of minimum environmental criteria for the assignment of design and construction services for the new construction, renovation and maintenance of buildings and for the management of public administration sites" ("CAM Edilizia") amending previous CAM, issued in January 2017.

### 9. ADDITIONAL INFORMATION

### CLOWOLORA



#### ACRONYMS

#### ENVIRONMENTAL IMPACTS

ADP = abiotic depletion potential **AP** = acidification potential **EP** = eutrophierung potential GWP = global warming potential **ODP** = ozone depletion potential **POCP** = Photochemical Ozone Creation Potential WDP = water deprivation potential

excluding non-renewable energy resources used as raw materials

#### **PRODUZIONE RIFIUTI**

HWD = hazardous waste disposed NHWD = non-hazardous waste disposed **RWD** = radioactive waste disposed **CRU** = customer reusable units **MFR** = Materiali per il riciclaggio; **MER** = materials for recycling

#### MATERIAL CONSUMPTION

**PERT** = Primary energy renewable – total **PERM** = Primary energy renewable - material **PERE** = Primary energy renewable - energy resources **PENRT** = Total use of non renewable primary energy resources **PENRM** = non renewable primary energy resources used as raw materials **PENRE** = Use of non-renewable primary energy resources SM = secondary material **RSF** = renewable secondary fuels **NRSF** = non-renewable secondary fuels **FWT =** Total water consumption

**EE** = exported energy

### VERIFICATION AND VALIDATION

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 Secretarian

www.environdec.com/contact

Indipendent third-party verification of th declaration and data, according to ISO 14025:2006: ⊠ External □ Internal covering □EPD process certification ⊠ EPD verification

Third-party verifer: Guido Croće

Procedure for follow-up during EPD validity involves third party verifier. □Yes ⊠No

EPD owner has the property and the responsibility of the declaration.

CPC CODE: 3511 Paints and varnishes and related products

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