cromology
the art of professional painting

ENVIRONMENTAL
PRODUCT DECLARATION

MaxMeyer

smalto all'acqua

Water based varnish

ECO PLATFORM
EPD
VERIFIED

EPD®

THE INTERNATIONAL EPD® SYSTEM

EPD in accordance with ISO 14025:2010
and EN 15804:2012+A2:2019

Registration number:	Publication date:	Valid until:	Program:	Program Operator:
S-P-05095	16/02/2022	16/02/2027	The International EPD® System www.environdec.com	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.**

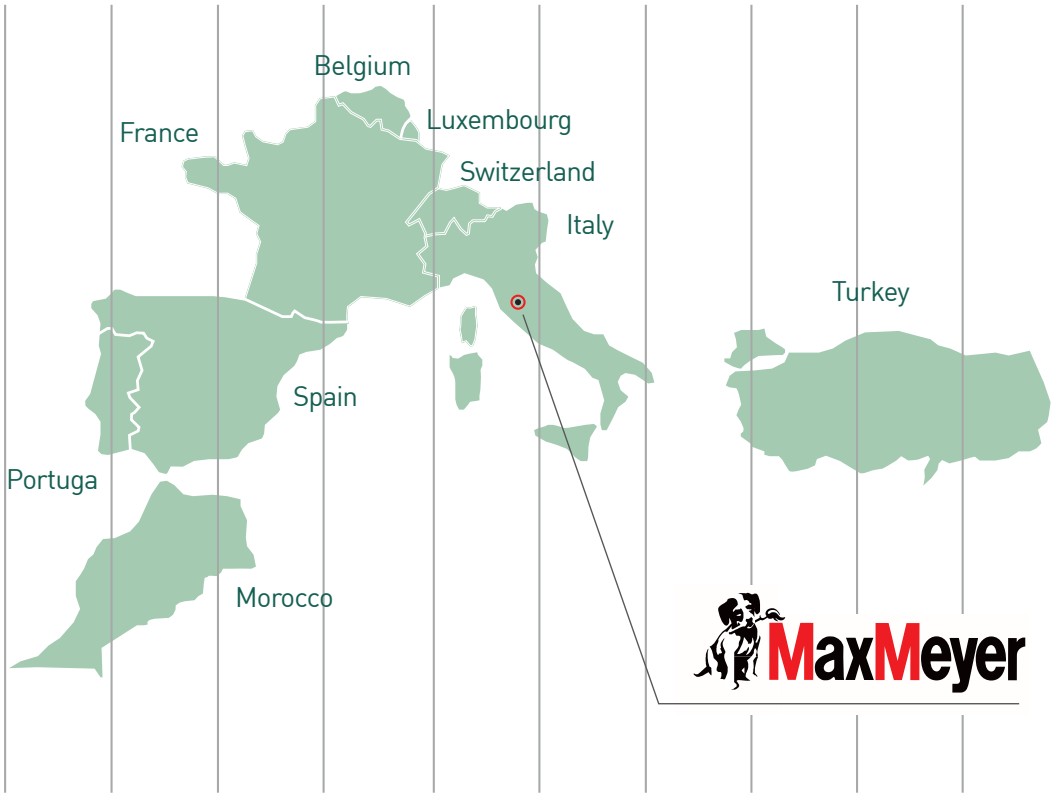
Cromology Italy believes in a multi-channel strategy diversified by brand, range of services and type of customer: from designer to professional applicator and private customer. With an offer of **7 specialized brands, Cromology holds 7% of the Italian market** having so an absolute leading position.

Headquarters are in Porcari, in the province of Lucca. The company has t**wo 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.**

3.700 employees

9 production facilities

20% of sales coming from new products



5 R&D laboratories

7 Logistic hubs

100 researchers

8 Countries with direct presence

600 mln/€ global annual revenue

50 countries where our products are sold

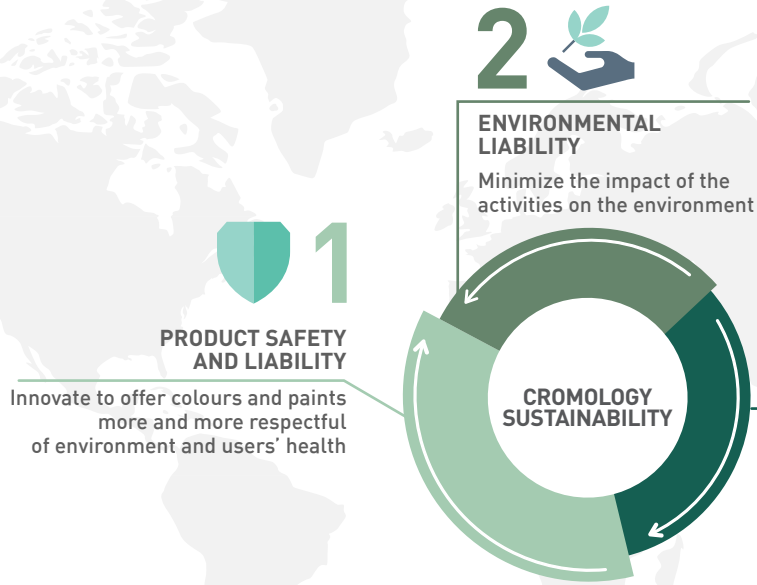
OUR COMMITMENT IN EVERY OPERATIONAL PHASE

Cromology Groups' approach to sustainability raises from our Mission: **protecting and colouring responsibly every home to improve everyone's life.**

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

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

5 MOST RELEVANT GDS FOR CROMOLOGY BUSINESS



1 PRODUCT SAFETY AND LIABILITY

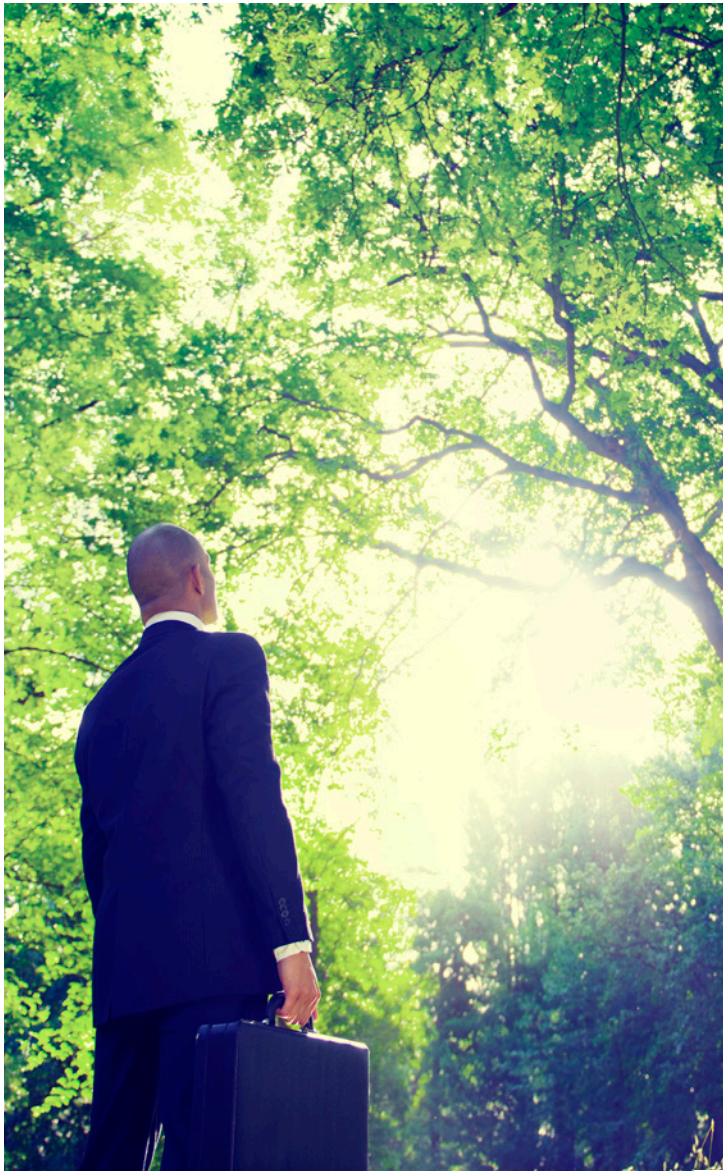
- INDOOR AIR QUALITY
- HACCP - HAZARD ANALYSIS AND CRITICAL CONTROL POINTS
- ISO 9001:2015 QUALITY MANAGEMENT SYSTEM
- UNI EN 15457 MOULD RESISTANT
- UNI EN 15458 ALGAE RESISTANCE
- ISO 22196 ANTIBACTERIAL TEST CERTIFICATE

2 ENVIRONMENTAL LIABILITY

- ISO 14001:2015 ENVIRONMENTAL MANAGEMENT SYSTEM IN MANUFACTURING PROCESS
- ENVIRONMENTAL PRODUCT DECLARATION
- ECOLABEL
- 100% GREEN ENERGY CERTIFICATION

3 SOCIAL RESPONSIBILITY

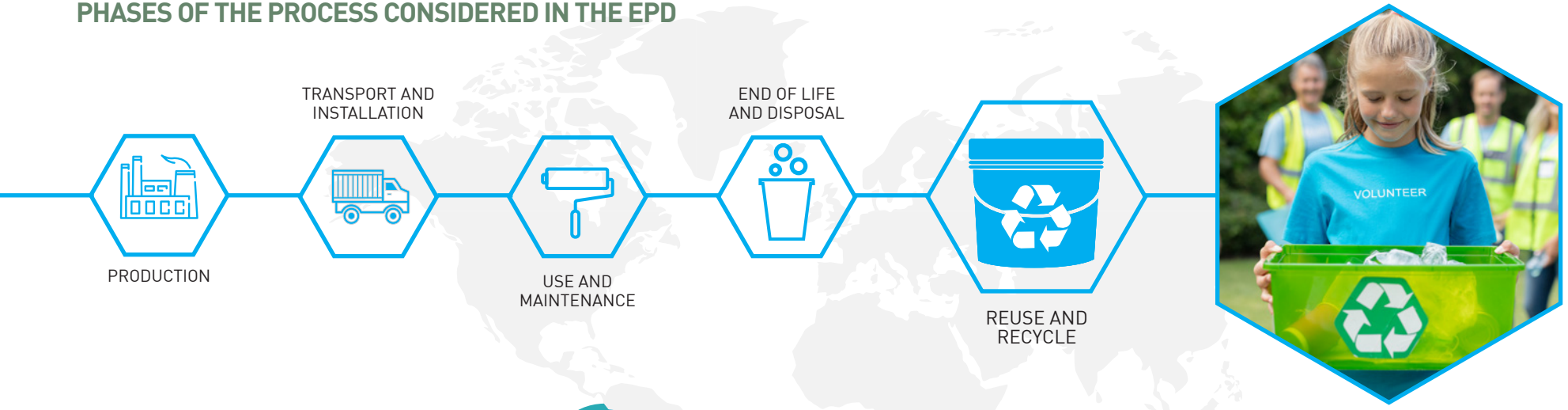
- ISO 45001:2018 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM
- LEGISLATIVE DECREE NO. 231/2001 ADMINISTRATIVE LIABILITY OF COMPANIES



EPD PROGRAMME GENERAL INFORMATION

Programma EPD	The International EPD® System - www.environdec.com
EPD Programm 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 developed from	Leyton Italia s.r.l
Owner of the declaration	Dr. Marco Demi Cromology Italia S.p.A.
Verified from	Guido Croce
Geographical reference	International
EPD Reg. No.	S-P-05095
Publication date	16/02/2022
Expiration date	16/02/2027
Product description	SMALTO ALL'ACQUA - polyurethane water based varnish
Scope	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 material.

PHASES OF THE PROCESS CONSIDERED IN THE EPD



EPD®

THE INTERNATIONAL EPD® SYSTEM

LIFE CYCLE LCA

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 **SMALTO ALL'ACQUA polyurethane water based varnish**

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, quick drying and resistant to bacteria.

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 protect the planet.

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).

smalto
all'acqua

This EPD refers to the glossy, matt and satin water based polyurethane varnishes.

Polyurethane varnishes are ideal to be applied on steel and wood. Their special tough formula with polyurethane makes these products particularly performing and long lasting.

POLYURETHANE varnishes are Formaldehyde free. Formaldehyde is one of the most hazardous chemical polluting agents. It is in every house product, rugs and wooden furniture. It can cause irritation, redness, rash, asthma and cough.

These varnishes protect the planet as they are packed in recycled metal to protect health and reduce the use of virgin plastic.

POLYURETHANE VARNISHES ARE A+ CLASS CERTIFIED, as VOC (Volatile Organic Compounds) emitted in the indoor air are close to zero.

PRODUCT CHEMICAL COMPOSITION

GLOSSY

Emulsions	< 50%
Additives	< 15%
Extenders	< 30%
Water	< 30%

SATIN

Emulsions	< 40%
Additives	< 15%
Extenders	< 35%
Water	< 35%

MATT

Emulsions	< 35%
Additives	< 15%
Extenders	< 40%
Water	< 35%

PACKAGE COMPOSITION

Package	PP [kg/kg]	Ferro [kg/kg]	Carta [kg/kg]	LDPE [kg/kg]	Legno [kg/kg]
SMALTO brullante 0,125L	0,00E+00	3,36E-01	2,02E-02	1,08E-01	1,01E-01
SMALTO brullante 0,75L	0,00E+00	1,45E-01	3,36E-03	8,52E-02	8,40E-02
SMALTO brullante 2L	0,00E+00	2,04E-01	1,26E-03	8,40E-02	7,56E-02

Package	PP [kg/kg]	Ferro [kg/kg]	Carta [kg/kg]	LDPE [kg/kg]	Legno [kg/kg]
SMALTO satinato 0,125L	0,00E+00	3,25E-01	1,95E-02	7,15E-02	9,76E-02
SMALTO satinato 0,75L	0,00E+00	1,40E-01	3,25E-03	1,19E-02	8,13E-02
SMALTO satinato 2L	0,00E+00	1,98E-01	1,22E-03	1,22E-02	7,32E-02

Package	PP [kg/kg]	Ferro [kg/kg]	Carta [kg/kg]	LDPE [kg/kg]	Legno [kg/kg]
SMALTO opaco 0,125L	0,00E+00	3,28E-01	1,97E-02	7,21E-02	9,84E-02
SMALTO opaco 0,75L	0,00E+00	1,41E-01	3,28E-03	1,20E-02	8,20E-02
SMALTO opaco 2L	0,00E+00	1,99E-01	1,23E-03	1,23E-02	7,38E-02

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).

	PRODUCTION STAGE			CONSTRUCTION AND INSTALLATION STAGE		USE AND MAINTENANCE STAGE							END OF LIFE AND WASTE 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	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%					-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	Less than 10% for every group of products					-	-	-	-	-	-	-	-	-	-	-	-
Variation - sites	Not relevant					-	-	-	-	-	-	-	-	-	-	-	-

SIMULATION OF ENVIRONMENTAL IMPACT INDICATORS - SMALTO ALL' ACQUA - GLOSSY

EN15804+A2					
Impact category	Unit	A1 - A3	C1	C2 - C4	D
GWP TOTAL:	kg CO_2 eq	7,95E+00	0,00E+00	9,52E-01	0,00E+00
GWP - Fossil	kg CO_2 eq	7,87E+00	0,00E+00	4,19E-02	0,00E+00
GWP - Biogenic	kg CO_2 eq	4,57E-02	0,00E+00	9,10E-01	0,00E+00
GWP - Land use and LU change	kg CO_2 eq	2,80E-02	0,00E+00	5,51E-06	0,00E+00
ODP	kg CFC11 eq	5,85E-06	0,00E+00	4,81E-09	0,00E+00
IRP	kBq U-235 eq	6,55E-01	0,00E+00	1,59E-03	0,00E+00
POCP	kg NMVOC eq	3,69E-02	0,00E+00	2,39E-03	0,00E+00
PM	disease inc.	4,80E-07	0,00E+00	2,63E-08	0,00E+00
HTP, non-cancer	CTUh	2,11E-07	0,00E+00	3,79E-08	0,00E+00
HTP, cancer	CTUh	3,76E-08	0,00E+00	6,97E-09	0,00E+00
AP	mol H+ eq	3,64E-02	0,00E+00	9,44E-04	0,00E+00
EP, freshwater	kg P eq	2,71E-03	0,00E+00	4,52E-06	0,00E+00
EP, marine	KG N EQ	9,04E-03	0,00E+00	4,60E-04	0,00E+00
EP, terrestrial	mol N eq	8,67E-02	0,00E+00	5,00E-03	0,00E+00
ETP, freshwater TOTAL	CTUe	1,84E+02	0,00E+00	2,94E+00	0,00E+00
ETP, freshwater - organics	CTUe	8,11E+00	0,00E+00	3,85E-01	0,00E+00
ETP, freshwater - inorganics	CTUe	4,23E+01	0,00E+00	8,06E-02	0,00E+00
ETP, freshwater - metals	CTUe	1,33E+02	0,00E+00	2,47E+00	0,00E+00
LUP	Pt	2,14E+03	0,00E+00	4,15E-01	0,00E+00
WDP	m^3 depriv.	2,93E+00	0,00E+00	6,92E-03	0,00E+00
RUP, fossils	MJ	1,17E+02	0,00E+00	3,24E-01	0,00E+00
RUP, minerals and metals	kg Sb eq	3,27E-05	0,00E+00	5,58E-08	0,00E+00
HTP, non-cancer - organics	CTUh	4,87E-09	0,00E+00	9,99E-10	0,00E+00
HTP, non-cancer - inorganics	CTUh	1,40E-07	0,00E+00	2,28E-08	0,00E+00
HTP, non-cancer - metals	CTUh	6,74E-08	0,00E+00	1,40E-08	0,00E+00
HTP, cancer - organics	CTUh	1,07E-08	0,00E+00	6,82E-09	0,00E+00
HTP, cancer - inorganics	CTUh	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP, cancer - metals	CTUh	2,69E-08	0,00E+00	1,42E-10	0,00E+00

USE OF RESOURCES - SMALTO ALL' ACQUA - GLOSSY

* 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	1,25E+02	0,00E+00	3,44E-01	0,00E+00
PENRM	MJ	1,09E+01	0,00E+00	1,09E+01	0,00E+00
PENRE	MJ	3,46E-02	0,00E+00	4,54E-06	0,00E+00
PERT	MJ	3,97E+02	0,00E+00	3,68E-03	0,00E+00
PERM	MJ	3,93E+02	0,00E+00	1,05E-03	0,00E+00
PERE	MJ	3,91E+00	0,00E+00	2,62E-03	0,00E+00
Ozone depletion	kg CFC11 eq	5,85E-06	0,00E+00	4,81E-09	0,00E+00
Net use of fresh water	m^3	2,93E+00	0,00E+00	2,95E+00	0,00E+00

WASTE

Impact category	Unit	A1 - A3	C1	C2 - C4	D
Hazardous waste disposed	kg	2,39E-04	0,00E+00	5,50E-03	0,00E+00
Non- hazardous waste disposed	kg	2,31E+00	0,00E+00	9,25E-01	0,00E+00
Radioactive waste disposed	kg	3,38E-04	0,00E+00	2,17E-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	4,11E-01	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	6,52E-01	0,00E+00
Exported energy	MJ per energy carrier	0,00E+00	0,00E+00	0,00E+00	0,00E+00

IPCC

Impact category	Unit	A1-A3	C1	C2 - C4	D
GWP-GHG	kg CO_2 eq	7,63E+00	0,00E+00	1,28E-01	0,00E+00

SIMULATION OF ENVIRONMENTAL IMPACT INDICATORS - SMALTO ALL' ACQUA - SATIN

INDICATORI EN15804+A2					
Impact category	Unit	A1 - A3	C1	C2 - C4	D
GWP TOTAL:	kg CO_2 eq	7,46E+00	0,00E+00	9,53E-01	0,00E+00
GWP - Fossil	kg CO_2 eq	7,39E+00	0,00E+00	4,25E-02	0,00E+00
GWP - Biogenic	kg CO_2 eq	4,11E-02	0,00E+00	9,10E-01	0,00E+00
GWP - Land use and LU change	kg CO_2 eq	2,79E-02	0,00E+00	5,70E-06	0,00E+00
ODP	kg CFC11 eq	3,58E-06	0,00E+00	5,00E-09	0,00E+00
IRP	kBq U-235 eq	6,34E-01	0,00E+00	1,65E-03	0,00E+00
POCP	kg NMVOC eq	3,55E-02	0,00E+00	2,40E-03	0,00E+00
PM	disease inc.	4,61E-07	0,00E+00	2,63E-08	0,00E+00
HTP, non-cancer	CTUh	2,00E-07	0,00E+00	3,79E-08	0,00E+00
HTP, cancer	CTUh	3,72E-08	0,00E+00	6,97E-09	0,00E+00
AP	mol H+ eq	3,47E-02	0,00E+00	9,47E-04	0,00E+00
EP, freshwater	kg P eq	2,63E-03	0,00E+00	4,57E-06	0,00E+00
EP, marine	KG N EQ	8,72E-03	0,00E+00	4,62E-04	0,00E+00
EP, terrestrial	mol N eq	8,34E-02	0,00E+00	5,01E-03	0,00E+00
ETP, freshwater TOTAL	CTUe	1,65E+02	0,00E+00	2,95E+00	0,00E+00
ETP, freshwater - organics	CTUe	8,47E+00	0,00E+00	3,86E-01	0,00E+00
ETP, freshwater - inorganics	CTUe	3,30E+01	0,00E+00	8,30E-02	0,00E+00
ETP, freshwater - metals	CTUe	1,24E+02	0,00E+00	2,48E+00	0,00E+00
LUP	Pt	2,14E+03	0,00E+00	4,33E-01	0,00E+00
WDP	m^3 depriv.	2,64E+00	0,00E+00	7,23E-03	0,00E+00
RUP, fossils	MJ	1,09E+02	0,00E+00	3,36E-01	0,00E+00
RUP, minerals and metals	kg Sb eq	3,17E-05	0,00E+00	5,77E-08	0,00E+00
HTP, non-cancer - organics	CTUh	4,84E-09	0,00E+00	1,00E-09	0,00E+00
HTP, non-cancer - inorganics	CTUh	1,30E-07	0,00E+00	2,28E-08	0,00E+00
HTP, non-cancer - metals	CTUh	6,59E-08	0,00E+00	1,40E-08	0,00E+00
HTP, cancer - organics	CTUh	1,05E-08	0,00E+00	6,82E-09	0,00E+00
HTP, cancer - inorganics	CTUh	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP, cancer - metals	CTUh	2,68E-08	0,00E+00	1,42E-10	0,00E+00

USE OF RESOURCES - SMALTO ALL' ACQUA - SATIN

* 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	1,16E+02	0,00E+00	3,57E-01	0,00E+00
PENRM	MJ	1,03E+01	0,00E+00	1,02E+01	0,00E+00
PENRE	MJ	3,46E-02	0,00E+00	4,70E-06	0,00E+00
PERT	MJ	3,96E+02	0,00E+00	3,81E-03	0,00E+00
PERM	MJ	3,93E+02	0,00E+00	1,09E-03	0,00E+00
PERE	MJ	3,76E+00	0,00E+00	2,72E-03	0,00E+00
Ozone depletion	kg CFC11 eq	3,58E-06	0,00E+00	5,00E-09	0,00E+00
Net use of fresh water	m^3	2,64E+00	0,00E+00	2,66E+00	0,00E+00

WASTE

Impact category	Unit	A1 - A3	C1	C2 - C4	D
Hazardous waste disposed	kg	2,37E-04	0,00E+00	5,50E-03	0,00E+00
Non- hazardous waste disposed	kg	2,24E+00	0,00E+00	9,71E-01	0,00E+00
Radioactive waste disposed	kg	3,31E-04	0,00E+00	2,25E-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	4,11E-01	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	6,52E-01	0,00E+00
Exported energy	MJ per energy carrier	0,00E+00	0,00E+00	0,00E+00	0,00E+00

IPCC

Impact category	Unit	A1-A3	C1	C2 - C4	D
GWP-GHG	kg CO_2 eq	7,17E+00	0,00E+00	1,29E-01	0,00E+00

SIMULATION OF ENVIRONMENTAL IMPACT INDICATORS - SMALTO ALL' ACQUA - MATT

EN15804+A2					
Impact category	Unit	A1 - A3	C1	C2 - C4	D
GWP TOTAL:	kg CO_2 eq	7,20E+00	0,00E+00	9,53E-01	0,00E+00
GWP - Fossil	kg CO_2 eq	7,13E+00	0,00E+00	4,25E-02	0,00E+00
GWP - Biogenic	kg CO_2 eq	3,88E-02	0,00E+00	9,10E-01	0,00E+00
GWP - Land use and LU change	kg CO_2 eq	2,79E-02	0,00E+00	5,70E-06	0,00E+00
ODP	kg CFC11 eq	6,84E-06	0,00E+00	5,00E-09	0,00E+00
IRP	kBq U-235 eq	6,34E-01	0,00E+00	1,65E-03	0,00E+00
POCP	kg NMVOC eq	3,47E-02	0,00E+00	2,40E-03	0,00E+00
PM	disease inc.	4,49E-07	0,00E+00	2,63E-08	0,00E+00
HTP, non-cancer	CTUh	2,02E-07	0,00E+00	3,79E-08	0,00E+00
HTP, cancer	CTUh	3,61E-08	0,00E+00	6,97E-09	0,00E+00
AP	mol H+ eq	3,39E-02	0,00E+00	9,47E-04	0,00E+00
EP, freshwater	kg P eq	2,61E-03	0,00E+00	4,57E-06	0,00E+00
EP, marine	KG N EQ	8,53E-03	0,00E+00	4,62E-04	0,00E+00
EP, terrestrial	mol N eq	8,19E-02	0,00E+00	5,01E-03	0,00E+00
ETP, freshwater TOTAL	CTUe	1,93E+02	0,00E+00	2,95E+00	0,00E+00
ETP, freshwater - organics	CTUe	6,66E+00	0,00E+00	3,86E-01	0,00E+00
ETP, freshwater - inorganics	CTUe	3,51E+01	0,00E+00	8,30E-02	0,00E+00
ETP, freshwater - metals	CTUe	1,52E+02	0,00E+00	2,48E+00	0,00E+00
LUP	Pt	2,14E+03	0,00E+00	4,33E-01	0,00E+00
WDP	m^3 depriv.	2,68E+00	0,00E+00	7,28E-03	0,00E+00
RUP, fossils	MJ	1,04E+02	0,00E+00	3,36E-01	0,00E+00
RUP, minerals and metals	kg Sb eq	3,23E-05	0,00E+00	5,77E-08	0,00E+00
HTP, non-cancer - organics	CTUh	4,13E-09	0,00E+00	1,00E-09	0,00E+00
HTP, non-cancer - inorganics	CTUh	1,23E-07	0,00E+00	2,28E-08	0,00E+00
HTP, non-cancer - metals	CTUh	7,59E-08	0,00E+00	1,40E-08	0,00E+00
HTP, cancer - organics	CTUh	9,51E-09	0,00E+00	6,82E-09	0,00E+00
HTP, cancer - inorganics	CTUh	0,00E+00	0,00E+00	0,00E+00	0,00E+00
HTP, cancer - metals	CTUh	2,66E-08	0,00E+00	1,42E-10	0,00E+00

USE OF RESOURCES - SMALTO ALL' ACQUA - MATT

* 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	1,11E+02	0,00E+00	3,57E-01	0,00E+00
PENRM	MJ	1,00E+01	0,00E+00	1,00E+01	0,00E+00
PENRE	MJ	3,46E-02	0,00E+00	4,70E-06	0,00E+00
PERT	MJ	3,96E+02	0,00E+00	3,81E-03	0,00E+00
PERM	MJ	3,93E+02	0,00E+00	1,09E-03	0,00E+00
PERE	MJ	3,76E+00	0,00E+00	2,72E-03	0,00E+00
Ozone depletion	kg CFC11 eq	6,84E-06	0,00E+00	5,00E-09	0,00E+00
Net use of fresh water	m^3	2,68E+00	0,00E+00	2,71E+00	0,00E+00

WASTE

Impact category	Unit	A1 - A3	C1	C2 - C4	D
Hazardous waste disposed	kg	2,37E-04	0,00E+00	5,50E-03	0,00E+00
Non- hazardous waste disposed	kg	2,24E+00	0,00E+00	9,71E-01	0,00E+00
Radioactive waste disposed	kg	3,30E-04	0,00E+00	2,26E-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	4,11E-01	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	6,52E-01	0,00E+00
Exported energy	MJ per energy carrier	0,00E+00	0,00E+00	0,00E+00	0,00E+00

IPCC

Impact category	Unit	A1-A3	C1	C2 - C4	D
GWP-GHG	kg CO_2 eq	6,92E+00	0,00E+00	1,29E-01	0,00E+00

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 ($\mu g/m^2$)

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.

**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.*

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

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 excluding non-renewable energy resources used as raw materials
SM = secondary material
RSF = renewable secondary fuels
NRSF = non-renewable secondary fuels
FWT = Total water consumption

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
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 Croce

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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