Environmental Product Declaration

According to EN15804+A2 and ISO 14025

This declaration is for:

GRANIKOT REFRESH

Provided by:

VITEX S.A.

program operator
Stichting MRPI®
publisher
Stichting MRPI®
www.mrpi.nl

MRPI® registration
1.1.00530.2024
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COMPANY INFORMATION

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MRPI® REGISTRATION

1.1.00530.2024

DATE OF ISSUE

10-4-2024

EXPIRY DATE

10-4-2029

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Gert-Jan Vroege, Eco-Intelligence. The LCA study has been done by Mart van Assem, Ecomatters. The certificate is based on an LCA-dossier according to EN15804+A2 and ISO 14025. It is verified according to the 'MRPI®-EPD verification protocol November 2020.v4.0'. EPD's of construction products may not be comparable if they do not comply with EN15804+A2. Declaration of SVHC that are listed on the 'Candidate list of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

PROGRAM OPERATOR

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Amsterdam

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Managing Director MRPI

PRODUCT

GRANIKOT REFRESH

DECLARED UNIT/FUNCTIONAL UNIT

to protect and decorate 1 m2 of substrate for 50 years at a specified quality level (minimum 98% opacity)

DESCRIPTION OF PRODUCT

Ultra Durable Paint for Refreshing the External Insulation System based on nano TRIBRID Technology

VISUAL PRODUCT

MORE INFORMATION

https://www.vitex.gr/product/granikot-refresh/

DEMONSTRATION OF VERIFICATION
CEN standard EN15804 serves as the core PCR(a)
Independent verification of the declaration an data according to EN15804+A2 and ISO 14025 internal: external: x
Third party verifier: Gert-Jan Vroege, Eco-Intelligence
[a] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

Ultra Durable Paint for Refreshing the External Insulation System based on nano TRIBRID Technology (Silica - Acrylic – Silicone). Due to its strong inorganic character the painted surfaced dries fast after rainfall and provides a high-water vapour permeable coating. It does not affect the texture of the plaster, as it does not fill the gaps between the grains. Delays in application due to extreme weather conditions are avoided and the painting season is extended. It offers very high added value to the building due to lower renovation cost and longer lifetime as well as lower environmental impact. Protection against fungi (such as mold) and algae.

Production process
Production process includes measurement of ingredients, preparation and pigment dispersion, let-down, quality control and canning.

Technical details
Density 1,35 ± 0,02 kg / L (ISO 2811) for the white; 1.32 kg / L for the EPD representative paint.
Quality: Q1 (according to the durability scheme of the PEF CR for Decorative paints v.1: estimated durability 15 years, 2,33 reapplication for the 50 years reference service life).

Typical use
For renewing External Thermal Insulation Surfaces (ETICS) with proper preparation.

Pack size
The paint is available in the following pack sizes
White: 750ml, 3L, 10L
Bases: 1L, 3L, 10L

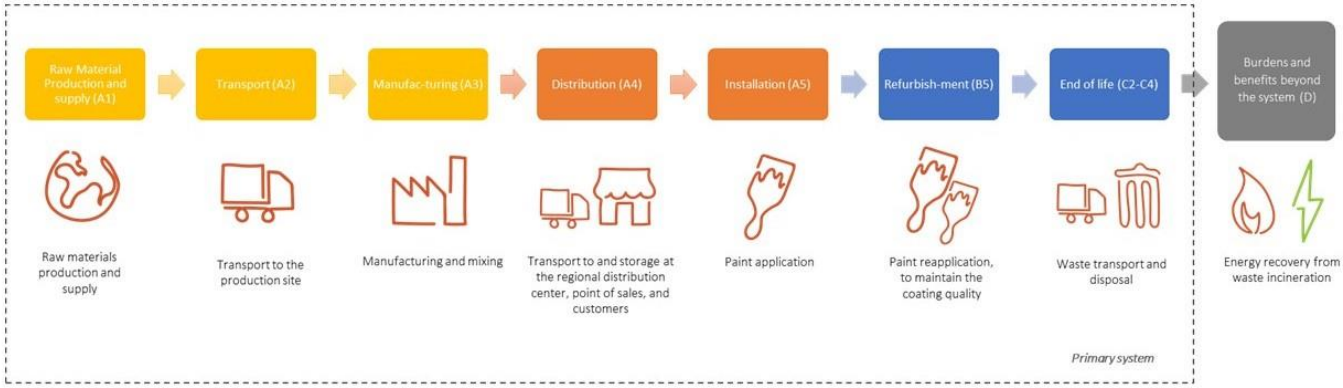
Detailed Product Description	(%)
Light fast pigments	Confidential
Solvent: water	Confidential
Binder, by polymerization in water	Confidential

SCOPE AND TYPE

The type of this EPD is Cradle-to-Grave. All steps from the extraction of natural resources to re-application and the final disposal of the product are included in the environmental performance. This EPD is an average EPD representative for GRANIKOT REFRESH products produced in Greece and sold in Europe. The paint is produced in Aspropyrgos Attiki, Greece and the application market is for customers within the European region. Likewise, for the end-of-life, the fate of the paint product is described within a European context.

The software GaBi 10.5.1.124 is used to perform the LCA. Background processes sourced from Ecoinvent v3.9.1 (2022) and the Raw materials LCI database for the European coatings and printing ink industries (2016).

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USER STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse- Recovery – Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X= Modules Assessed in all modules, these are presented in the tables of result ND= Not Declared																



REPRESENTATIVENESS

The EPD is representative for the four paints belonging to GRANIKOT REFRESH

1. GRANIKOT REFRESH white
2. GRANIKOT REFRESH base white
3. GRANIKOT REFRESH base medium
4. GRANIKOT REFRESH base transparent

This EPD is representative for the products manufactured in Greece and sold in Europe. The paint is produced at one production site: Imeros Topos, 19300 Aspropyrgos Attiki, Greece.

	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	3,05 E-01	3,08 E-01	5,72 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,71 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,35 E-03	0,00 E+00	6,27 E-02	-5,26 E-03
GWP-fossil	kg CO2 eq.	3,19 E-01	2,99 E-01	4,33 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,69 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,35 E-03	0,00 E+00	6,27 E-02	-5,17 E-03
GWP-biogenic	kg CO2 eq.	-1,40 E-02	8,59 E-03	1,38 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,95 E-02	0,00 E+00	0,00 E+00	0,00 E+00	1,05 E-06	0,00 E+00	2,07 E-05	-8,67 E-05
GWP-luluc)	kg CO2 eq.	5,18 E-05	1,34 E-04	9,10 E-05	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	6,59 E-04	0,00 E+00	0,00 E+00	0,00 E+00	6,22 E-07	0,00 E+00	5,44 E-06	-6,07 E-06
ODP	kg CFC11 eq.	2,41 E-08	6,65 E-09	6,21 E-10	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	7,92 E-08	0,00 E+00	0,00 E+00	0,00 E+00	2,96 E-11	0,00 E+00	2,54 E-09	-1,69 E-10
AP	mol H+ eq.	2,41 E-03	1,02 E-03	9,27 E-05	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	8,33 E-03	0,00 E+00	0,00 E+00	0,00 E+00	5,30 E-06	0,00 E+00	4,98 E-05	-1,37 E-05
EP-freshwater	kg PO4 eq.	6,57 E-05	3,69 E-05	5,57 E-06	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,55 E-04	0,00 E+00	0,00 E+00	0,00 E+00	9,37 E-08	0,00 E+00	1,11 E-06	-2,17 E-06
EP-marine	kg N eq.	3,65 E-04	2,89 E-04	4,61 E-05	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,68 E-03	0,00 E+00	0,00 E+00	0,00 E+00	2,01 E-06	0,00 E+00	1,81 E-05	-2,89 E-06
EP-terrestrial	mol N eq.	3,66 E-03	2,91 E-03	1,95 E-04	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,63 E-02	0,00 E+00	0,00 E+00	0,00 E+00	2,14 E-05	0,00 E+00	1,95 E-04	-2,70 E-05
POCP	kg NMVOC eq.	1,75 E-03	1,27 E-03	1,51 E-03	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,08 E-02	0,00 E+00	0,00 E+00	0,00 E+00	7,79 E-06	0,00 E+00	1,14 E-04	-1,12 E-05
ADP-minerals & metals	kg Sb eq.	2,19 E-06	2,59 E-06	1,79 E-07	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,16 E-05	0,00 E+00	0,00 E+00	0,00 E+00	4,33 E-09	0,00 E+00	2,10 E-08	-2,95 E-09
ADP-fossil	MJ, net calorific value	5,91 E+00	4,04 E+00	3,86 E-01	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,61 E+01	0,00 E+00	0,00 E+00	0,00 E+00	1,93 E-02	0,00 E+00	8,55 E-01	-1,02 E-01
WDP	m3 world eq. Deprived	9,46 E+00	3,36 E-02	3,76 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,22 E+01	0,00 E+00	0,00 E+00	0,00 E+00	1,19 E-04	0,00 E+00	2,96 E-03	-1,91 E-03

GWP-total = Global Warming Potential total

GWP-fossil = Global Warming Potential fossil fuels

GWP-biogenic = Global Warming Potential biogenic

GWP-luluc = Global Warming Potential land use and land use change

ODP = Depletion potential of the stratospheric ozone layer

AP = Acidification Potential, Accumulated Exceedence

EP-freshwater = Eutrophication Potential, fraction of nutrients reaching freshwater end compartment

EP-marine = Eutrophication Potential, fraction of nutrients reaching marine end compartment

EP-terrestrial = Eutrophication Potential, Accumulated Exceedence

POCP = Formation potential of tropospheric ozone photochemical oxidants

ADP-minerals&metals = Abiotic Depletion Potential for non fossil resources [2]

ADP-fossil = Abiotic Depletion for fossil resources potential [2]

WDP = Water (user) deprivation potential, deprivation-weighted water consumption [2]

Disclamer [2]

- The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator

ENVIRONMENT IMPACT per functional unit or declared unit (additional indicators A2)

	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	3,05 E-08	1,38 E-08	8,95 E-10	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,06 E-07	0,00 E+00	0,00 E+00	0,00 E+00	7,78 E-11	0,00 E+00	3,49 E-10	-4,72 E-11
IRP	kBq U235 eq.	2,46 E-02	6,91 E-03	1,69 E-03	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	7,81 E-02	0,00 E+00	0,00 E+00	0,00 E+00	3,09 E-05	0,00 E+00	3,33 E-04	-1,54 E-03
ETP-fw	CTUe	2,06 E+01	3,24 E+00	5,28 E+00	7,54 E+01	0,00 E+00	0,00 E+00	0,00 E+00	2,44 E+02	0,00 E+00	0,00 E+00	0,00 E+00	9,55 E-03	0,00 E+00	4,57 E-02	-7,50 E-03
HTP-c	CTUh	7,11 E-10	2,48 E-10	5,24 E-11	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,38 E-09	0,00 E+00	0,00 E+00	0,00 E+00	5,98 E-13	0,00 E+00	9,36 E-12	-1,21 E-12
HTP-nc	CTUh	2,92 E-09	3,11 E-09	4,27 E-10	6,36 E-10	0,00 E+00	0,00 E+00	0,00 E+00	1,68 E-08	0,00 E+00	0,00 E+00	0,00 E+00	1,15 E-11	0,00 E+00	9,13 E-11	-2,44 E-11
SQP	----	2,54 E+00	1,43 E+00	1,80 E-01	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	9,82 E+00	0,00 E+00	0,00 E+00	0,00 E+00	9,81 E-03	0,00 E+00	5,46 E-02	-8,95 E-03

PM = Potential incidence of disease due to PM emissions
IRP = Potential Human exposure efficiency relative to U235 [1]
ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]
HTP-c = Potential Comparative Toxic Unit for humans [2]
HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]
SQP = Potential soil quality index [2]

Disclamer [1]
- This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste.

Disclamer [2]
- The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit (A1 / A2)

	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	1,80 E-04	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	4,20 E-04	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
NHWD	kg	4,96 E-03	1,48 E-02	3,84 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	3,04 E-01	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	7,24 E-02	0,00 E+00
RWD	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
CRU	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
MFR	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
MER	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
EEE	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
ETE	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00

HWD = Hazardous Waste Disposed
RWD = Radioactive Waste Disposed
MFR = Materials for recycling
EEE = Exported Electrical Energy
NHWD = Non Hazardous Waste Disposed
CRU = Components for reuse
MER = Materials for energy recovery
ETE = Exported Thermal Energy

RESOURCE USE per functional unit or declared unit (A1 / A2)

	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	4,94 E-01	9,06 E-02	3,63 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,46 E+00	0,00 E+00	0,00 E+00	0,00 E+00	3,15 E-04	0,00 E+00	3,59 E-03	-1,01 E-02
PERM	MJ	1,07 E-02	5,55 E-03	1,04 E-03	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	4,07 E-02	0,00 E+00	0,00 E+00	0,00 E+00	1,89 E-05	0,00 E+00	1,61 E-04	-4,06 E-04
PERT	MJ	5,05 E-01	9,62 E-02	3,73 E-02	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	1,50 E+00	0,00 E+00	0,00 E+00	0,00 E+00	3,34 E-04	0,00 E+00	3,75 E-03	-1,05 E-02
PENRE	MJ	5,91 E+00	4,04 E+00	3,86 E-01	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,61 E+01	0,00 E+00	0,00 E+00	0,00 E+00	1,93 E-02	0,00 E+00	8,55 E-01	-1,02 E-01
PENRM	MJ	1,15 E-06	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,68 E-06	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
PENRT	MJ	5,91 E+00	4,04 E+00	3,86 E-01	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	2,61 E+01	0,00 E+00	0,00 E+00	0,00 E+00	1,93 E-02	0,00 E+00	8,55 E-01	-1,02 E-01
SM	kg	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
RSF	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
NRSF	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00
FW	m3	2,20 E-01	7,83 E-04	8,76 E-04	0,00 E+00	0,00 E+00	0,00 E+00	0,00 E+00	5,17 E-01	0,00 E+00	0,00 E+00	0,00 E+00	2,76 E-06	0,00 E+00	6,90 E-05	-4,45 E-05

PERE = Use of renewable energy excluding renewable primary energy resources
PERM = Use of renewable energy resources used as raw materials
PERT = Total use of renewable primary energy resources
PENRE = Use of non-renewable primary energy resources excluding non-renewable energy 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 resources
SM = Use of secondary materials
RSF = Use of renewable secondary fuels
NRSF = Use of non renewable secondary fuels
FW = Use of net fresh water

BIOGEEN CARBON CONTENT per functional unit or declared unit (A1 / A2)

	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
BBCpr	Kg C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BCCpa	kg C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

BCCpr = Biogenic carbon content in product
BCCpa = Biogenic carbon content in packaging

CALCULATION RULES

Data quality and data collection period

Data quality requirements follow EN15804+A2:2019, data is checked for plausibility with mass balances in the foreground processes. Used datasets are complete according to the system boundary, and are as current as possible. Data collection period is of reference year 2022, based on 1 year averaged data. Data gaps such as i.e. transport data, end of life scenarios, were covered with data generic values for transport as described in the Product Environmental Footprint Category Rules - Decorative Paints document version 1.0 published by CEPE and reviewed in April 2018. Processes used in the background modelling are referring to the widely used databases of recent release (Ecoinvent 3.9.1, 2022; CEPE, 2016) and are consistent with the foreground modelling in system limits and allocation procedures. The technological and geographical coverage reflects the physical reality as far as possible taking into account the technology mix, location, and representativeness of technologies, input materials, and input energies for the region. Data quality is assessed as fair and adequate to the goal and scope of the study.

Cut-off criteria and allocation procedures

No cut-offs were intentionally applied to inputs and outputs within the system boundaries in the models. Coproduct and system allocation in the foreground system is according to the EN15804+A2. Cut-off and allocation procedures in the background processes are according to the respective methodologies and estimated to be methodologically consistent with the foreground system.

Parameter	Unit	Value
Coverage test data, CR 98%	m2/L	8,64
Paint density	kg/L	1,31
VOC content (ISO 11890-2: 2020)	g/L	11,62
Durability	years	15
Quality level	-	Q1

SENARIOS AND ADDITIONAL TECHNICAL INFORMATION

Product stage is reported in one module

A1-A3. This life cycle stage includes the extraction and processing of raw materials for the product and the packaging, their transportation to the production site by road, and the manufacturing process. The latter includes all processes linked to the production, such as storing, mixing, packing, and internal transportation, covering material and energy consumption, waste treatment and emissions. Data regarding paint production was provided for each paint variation (formulation) and for the production site for the shared processes. Data on packaging, transportation distances and transportation modes are derived from the default scenarios of the product environmental footprint category rules (PEF CR) for decorative paints v.1 (2018). Electricity consumption was modelled based on the primary data on the amount and source of the electricity, with the use of Ecoinvent 3.9.1 database for modelling of the background processes.

Product's distribution to the building site (A4) includes transportation as well as storage and wastage of the products along the distribution leg (formally A4-A5, classified within the study to A4). The distribution leg includes two intermediate points between the production site and the final user: regional distribution center (RDC) and point of sales (PoS). Stage B1 refers to the paint use and follows the scenario of use developed in the PEF CR for decorative paints v1, including leaching biocides during the use stage. Transport and storage data are based on the scenarios developed within the PEF CR for Decorative Paints (v1).

Transportation parameters	Raw materials transportation	Packaging transportation	Transportation to the RDC	Transportation to the PoS according to PEFCR	Transportation to customer
Vehicle type used for transport	Articulated lorry	Articulated lorry	Articulated lorry	Articulated lorry	Passenger car with internal combustion engine
Distance, km	460	250	350	370	60
Capacity, t	7.5-16	7.5-16	7.5-16	7.5-16	N/A
Average load factor, t	3.29	3.29	3.29	3.29	N/A
Bulk density of transported products, kg/m3	1427	1427	1427	1427	N/A

Waste treatment and end of life parameters	Unit	Hazardous waste	Non-hazardous waste	Wet paint waste	Paint in Use
Share sent to incineration with energy recovery	w/w	0,45	0,45	0,45	NA
Share sent to landfilling	w/w	0,55	0,55	0,55	NA
VOC emissions to air	% of VOC content	NA	NA	100%, emissions to air	NA
Biocides leaching	% of biocidal content	NA	NA	100%, emissions to fresh water	100% emissions to fresh water
Energy recovery from incineration, electricity	MJ/kg of incinerated waste	17,1	1,01	1,01	NA
Energy recovery from incineration, heat	MJ/kg of incinerated waste	1,27	2,16	2,16	NA

Stage A5 refers to the paint application and follows the scenario of application developed in the PEF CR for decorative paints v1, including auxiliary materials composition. The stage includes use of auxiliary materials, use of water and water heating, waste water treatment processes, and other waste treatment.

Application parameter	Unit	Value
Auxiliary materials	kg/m2 of painted surface	1,12E-02
Tap water	kg/m2 of painted surface	0,37
Energy for water heating	MJ/m2 of painted surface	0,03
Waste water treatment	kg/m2 of painted surface	0,37
Unused paint disposed	kg/m2 of painted surface	0,0132
Other non-hazardous waste generated	kg/m2 of painted surface	0,0166
Direct emissions to air, VOC	kg/m2 of painted surface	1,36E-03

Parameters	Unit	Value
Reference service life	years	50
Refurbishment process	-	Paint is reapplied following the initial life cycle
Refurbishment cycle	Number per RSL	2,33
Energy input during refurbishment	kWh	all inputs as follows from the initial application
Material input for refurbishment	kg	all inputs as follows from the initial application
Waste material	kg	all outputs as follows from the initial application

Electricity generation on site

VITEX supports development of renewable energy in Greece. The manufacturing facilities are equipped with the 10000 m2 roof solar park that supplies electricity to the grid. In the period under evaluation, 808.566 kWh is supplied to the electricity grid, which potentially could have covered approximately half of the total yearly electricity demand of the company.

DECLARATION OF SVHC

None of the substances contained in the product are listed in the “Candidate List of Substances of Very High Concern for authorisation” or they do not exceed the threshold with the European Chemicals Agency.

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REMARKS

None.