Environmental Product Declaration

In accordance with ISO 14025 and EN 15804:2012+A2:2019 for:

INTUMESCEN 2K

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-02410
Publication date:	2021-04-12
Valid until:	2025-12-13

Quide, S.A.
quide@quideva.com
Polígono Industrial Itziar, E-20/N-1
20820 Deba-Gipuzkoa (SPAIN)

An EPD should provide current information and may be updated if conditio change. The stated validity is therefore subject to the continued registratio and publication at www.environdec.com

General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product category rules (PCR): PCR 2019:14 Construction products, version 1.1

PCR review was conducted by: The Technical Committee 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

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

☒ External ☐ Internal

covering:

☐ EPD process certification ☒ EPD verification

Third party verifier: Tecnalia R&I Certificacion, SL

info@tecnaliacertificacion.com

Auditor: Francisco J. Campo

Accredited by: ENAC nº125/C-PR283 accreditation

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

☒ Yes ☐ No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

The verifier and the programme operator do not have any claim nor have any responsibility of the legality of the product.

EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: Quide S.A.

Contact:

Miguel García Izco

calidad@quideva.com

Description of the organisation:

QUIDE was founded in 1950 and since then it is dedicated to the manufacture of products for wood treatment: varnishes, adhesives, plasters, stains, sanding machines and maintenance products.

QUIDE seeks to offer a top-quality product and service to cover all the needs that wood professionals in the national and international market may demand.

QUIDE has a R+D+i department that works on the development of new products and the optimization of current ones, in addition to collaborating with technology centres and universities. All this allowed the development of water-based products and for wood fireproofing. From an environmental point of view, QUIDE is developing products that are more respectful with the environment and people, through water-based products, the use of less impacting packaging, and the improvement of manufacturing processes.

Production site:

Quide S.A.

Planta de barnices (E-20)

P.I. Itziar E 20, 20820, Deba, Gipuzkoa

Product information

Product name: INTUMESCEN 2K

Product description:

INTUMESCEN 2K is a two-component intumescent varnish for interior wooden structures.

It provides high coverage and it is totally transparent and shiny.

Intumescent varnishes expand when heated, creating an insulating and protective layer on the wood surface.

It is classified as Bs2d0 according to EN 13823:2012 + A1:2016 and EN ISO 11925-2:2011.

The recommended covering is the application of 3 coats, 300 g/m2 each coat.

LCA information

Declared unit: 1kg of INTUMESCEN 2K

Time representativeness: the manufacturing data correspond to the year 2019 while the product formulation corresponds to the 2020

Geographical scope: Europe

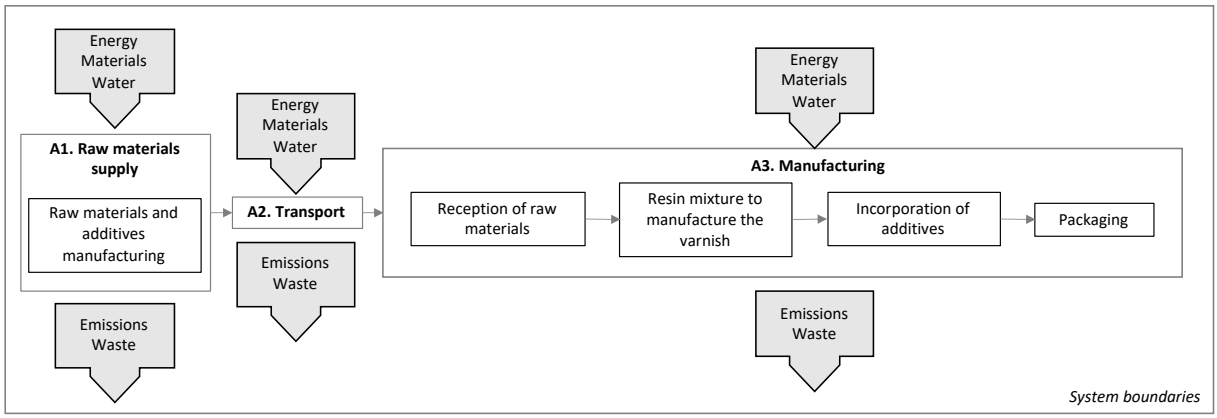
Database and LCA software used: ecoinvent v3.6 and Simapro v9.1.1.1.

Description of system boundaries:

Cradle to gate (A1–A3).

A4-A5, C1-C4 stages and module D are excluded, as the product meets the requirements listed in the PCR for their exclusion.

System diagram:



Manufacturing process:

The manufacturing process consists of mixing the raw materials and additives to produce both components of INTUMESCEN 2K varnish.

Therefore, QUDE produces two mixes, Component A and Component B. Each component is packed in a packaging containing 22 kg of component.

More information: www.quideva.com

Cut-off rules: According to the PCR, 95% of total inflows and outflows (mass and energy) identified in the life cycle inventory included in this report have been included.

Data quality: Specific data refer to the manufacturing process of the products produced by QUIDE and are representative of the geography and technology. On the other hand, generic data from the ecoinvent v3.6 database has been used. The database was updated in 2019 and is representative of the geographical area where the processes take place.

Allocation: When allocation was necessary, it was based on mass.

The electricity mix considered in module A3 corresponds to that declared by the electricity supplier, whose impact for the GWP-GHG indicator is 0.391 kg CO2eq/kWh. The sources are 9.6% renewable, 11.8% cogeneration, 32.8% combined cycle with natural gas, 7.6% coal, 3.4% fuel/gas, 33.3% nuclear and 1.5% others.

Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Geography	EU	EU	ES	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Specific data used	>90%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	Not applicable			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – plants	Not applicable			-	-	-	-	-	-	-	-	-	-	-	-	-	-

X: Module declared, ND: Module not declared

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%
Resin	0.4450	0%	0%
Carbon source	0.0525	0%	0%
Crosslinking component	0.3250	0%	0%
Water	0.1750	0%	0%
Others	0.0025	0%	0%
TOTAL	1	0%	0%
Packaging materials	**Weight, kg**	**Weight-% (versus the product)**	
High density polyethylene	0.055	5.5%	
Polypropylene	0.001	0.1%	
TOTAL	0.056	5.6%	

No substances included in the Candidate List of Substances of Very High Concern for authorization under REACH Regulations are present in the product, either above the threshold for registration with the European Chemicals Agency or above 0,1% (wt/wt).

Environmental Information

Potential environmental impact – mandatory indicators according to EN 15804+A2

Results per declared unit				
Indicator		**Acronym**	**Unit**	**Total A1-A3**
Global Warming Potential	fossil	GWP-fossil	kg CO_2 eq.	2.64E+00
	biogenic	GWP-biogenic	kg CO_2 eq.	3.04E-03
	land use and land use change	GWP-luluc	kg CO_2 eq.	4.46E-03
	TOTAL	GWP-total	kg CO_2 eq.	2.65E+00
Depletion potential of the stratospheric ozone layer		ODP	kg CFC 11 eq.	3.59E-07
Acidification potential, Accumulated Exceedance		AP	mol H^+ eq.	2.44E-02
Eutrophication potential, fraction of nutrients reaching freshwater end compartment		EP-freshwater	kg P eq	8.34E-05
Eutrophication potential, fraction of nutrients reaching freshwater end compartment		EP-freshwater	kg PO_4 eq	2.56E-04
Eutrophication potential, fraction of nutrients reaching marine end compartment		EP-marine	kg N eq.	2.28E-03
Eutrophication potential, Accumulated Exceedance		EP-terrestrial	mol N eq.	4.68E-02
Formation potential of tropospheric ozone		POCP	kg NMVOC eq.	8.16E-03
Abiotic depletion potential for non-fossil resources		ADP-minerals&metals*	kg Sb eq.	1.65E-04
Abiotic depletion for fossil resources potential		ADP-fossil*	MJ	4.78E+01
Water (user) deprivation potential, deprivation-weighted water consumption		WDP	m^3	5.67E+00

** The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.*

Potential environmental impact - additional mandatory and voluntary indicators (EN 15804+A1)

Results per declared unit			
Indicator	**Acronym**	**Unit**	**Total A1-A3**
Global warming potential	GWP-GHG[1]	kg CO_2 eq.	2.58E+00
Depletion potential of the stratospheric ozone layer	ODP	kg CFC-11 eq	3.05E-07
Acidification potential	AP	kg SO_2 eq	1.88E-02
Eutrophication potential	EP	kg PO_4^{3-} eq	2.83E-03
Formation potential of tropospheric ozone	POCP	kg NMVOC	8.18E-03
Formation potential of tropospheric ozone	POCP	kg C_2H_4 eq	1.17E-03
Abiotic depletion potential – Elements	ADPe	kg Sb eq	1.65E-04
Abiotic depletion potential – Fossil fuels	ADPf	MJ	4.50E+01
Water scarcity potential	WS	m^3 eq	5.47E+00

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

Use of resources

Results per declared unit			
Indicator	**Acronym**	**Unit**	**Total A1-A3**
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ	1.75E+00
Use of renewable primary energy resources used as raw materials	PERM	MJ	0.00E+00
Total use of renewable primary energy resources	PERT	MJ	1.75E+00
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE	MJ	3.00E+01
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ.	1.77E+01
Total use of non-renewable primary energy resources	PENRT	MJ	4.78E+01
Use of secondary material	SM	kg	0.00E+00
Use of renewable secondary fuels	RSF	MJ	0.00E+00
Use of non-renewable secondary fuels	NRSF	MJ	0.00E+00
Use of net fresh water	FW	m^3	1.36E-01

Waste production and output flows

Waste production

Results per declared unit		
Indicator	**Unit**	**Total A1-A3**
Hazardous waste disposed	kg	6.17E-05
Non-hazardous waste disposed	kg	5.25E-01
Radioactive waste disposed	kg	1.24E-04

Output flows

Results per declared unit		
Indicator	**Unit**	**Total A1-A3**
Components for re-use	kg	0.00E+00
Material for recycling	kg	1.47E-02
Materials for energy recovery	kg	5.49E-02
Exported energy, electricity	MJ	0.00E+00
Exported energy, thermal	MJ	0.00E+00

Information on biogenic carbon content

Results per declared unit		
Biogenic carbon content	**Unit**	**Quantity**
Biogenic carbon content in product	kg C	0
Biogenic carbon content in packaging	kg C	0

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO_2.

References

General Programme Instructions of the International EPD® System. Version 3.01.

PCR 2019:14. Construction products. Version 1.1

ISO 14040:2006 Environmental management – Life cycle assessment – Principles and framework

ISO 14044:2006 Environmental management – Life cycle assessment – Requirements and guidelines

ISO 14025:2010 Environmental labels and declarations – Type III Environmental declarations – Principles and procedures

EN 15804:2012+A2:2019. Sustainability of construction works - Environmental product declarations -Core rules for the product category of construction products

EN 15804:2012+A1:2014. Sustainability of construction works - Environmental product declarations -Core rules for the product category of construction products

VERIFICATION STATEMENT CERTIFICATE

CERTIFICADO DE DECLARACIÓN DE VERIFICACIÓN

Certificate No. / Certificado nº: EPD05101

TECNALIA R&I CERTIFICACION S.L., confirms that independent third-party verification has been conducted of the Environmental Product Declaration (EPD) on behalf of:
TECNALIA *R&I CERTIFICACION S.L., confirma que se ha realizado verificación de tercera parte independiente de la Declaración Ambiental de Producto (DAP) en nombre de:*

QUIDE, S.A.
Polígono Indistrial Itziar, E 20
20820 DEBA (Gipuzkoa) SPAIN

for the following product(s):
para el siguiente(s) producto(s):

Barniz intumescente INTUMESCEN 2K
INTUMESCEN 2K intumescent varnish

with registration number **S-P-02410** in the International EPD® System *(www.environdec.com)*
*con número de registro **S-P-02410** en el Sistema International EPD® (www.environdec.com)*

it´s in conformity with:
es conforme con:

- **ISO 14025:2010 Environmental labels and declarations. Type III environmental declarations.**
- **EN 15804:2012+A2:2019 Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products.**
- **General Programme Instructions for the International EPD® System v.3.01.**
- **PCR 2019:14 Construction products, v1.1.**
- **CPC Code: 3511**

Issued date / *Fecha de emisión:*	14/12/2020
Update date / *Fecha de actualización:*	14/12/2020
Valid until / *Válido hasta:*	13/12/2025
Serial Nº / *Nº Serie:*	EPD0510100-E

Carlos Nazabal Alsua
Director Gerente
Manager

This certificate is not valid without its related EPD.
Este certificado no es válido sin su correspondiente EPD.

El presente certificado está sujeto a modificaciones, suspensiones temporales y retiradas por TECNALIA R&I CERTIFICACION.
This certificate is subject to modifications, temporary suspensions and withdrawals by TECNALIA R&I CERTIFICACION.

El estado de vigencia del certificado puede confirmarse mediante consulta en www.tecnaliacertificacion.com.
The validity of this certificate can be checked through consultation in www.tecnaliacertificacion.com.

ENAC CERTIFICACIÓN Nº 125/C-PR283

EPD®

www.environdec.com