

# Environmental Product Declaration

according to ISO 14025 and EN 15804



This declaration is for:  
**ADFORS Novelio®**

Provided by:  
**SAINT-GOBAIN ADFORS CZ s.r.o.**



program operator  
**Stichting MRPI®**  
publisher  
**Stichting MRPI®**  
[www.mrpi.nl](http://www.mrpi.nl)

MRPI® registration  
**1.1.00133.2020**  
EPD registration  
**0001247**  
date of first issue  
**18-06-2020**  
date of this issue  
**18-06-2020**  
expiry date  
**18-06-2025**



**PROGRAM OPERATOR**

Stichting MRPI®  
Kingsfordweg 151  
1043GR  
Amsterdam

**COMPANY INFORMATION**

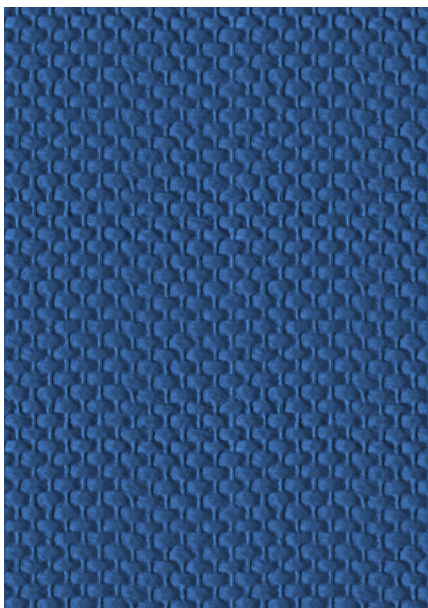


SAINT-GOBAIN ADFORS CZ s.r.o.  
Sokolovská 106  
57001  
Litomyšl  
420461651110  
Michal Doubrava  
www.adfors.com

**SCOPE OF DECLARATION**

This MRPI®-EPD certificate is verified by **Gert Jan van Beijnum, NIBE BV**.  
The LCA study has been done by **Siegrun Kittelberger, sphaera**.  
The certificate is based on an LCA-dossier according to ISO14025 and NEN-EN15804+A1. It is verified according to the 'EPD-MRPI® verification protocol May 2017.v3.1'. EPDs of construction products may not be comparable if they do not comply with NEN-EN15804+A1. 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.

**VISUAL PRODUCT**



**PRODUCT**

ADFORS Novelio®

**MRPI® REGISTRATION**

1.1.00133.2020

**EPD REGISTRATION**

0001247

**DATE OF ISSUE**

18-06-2020

**EXPIRY DATE**

18-06-2025

**DECLARED UNIT/FUNCTIONAL UNIT**

1 m<sup>2</sup>

**DESCRIPTION OF PRODUCT**

Glass fibre wallcoverings are finished fabrics produced from glass fibre yarns and glass voluminized (textured) and textured yarns.

**MORE INFORMATION**

www.adfors.com

**DEMONSTRATION OF VERIFICATION**

CEN standard EN15804 serves as the core PCR[a]

Independent verification of the declaration and data,  
according to EN ISO 14025:2010:  
internal: external: X

(where appropriate[b]) Third party verifier:

Gert Jan van Beijnum, NIBE B.V.

[a] Product Category Rules [b] Optional for B-to-B communication, mandatory for B-to-C communication (see EN ISO 14025:2010, 9.4).

## DETAILED PRODUCT DESCRIPTION

Glass fibre wallcoverings are finished fabrics produced from glass fibre yarns and glass voluminized (textured) and textured yarns. Wallcoverings are delivered with surface finishing in white colour (standard), with white pigment, preglued (easy glue) or with final coloured finishing. Products are typically glued on the wall and painted afterwards. Standard ones need to be painted twice, pigmented once and finalized ones do not require any painting (but can be repainted if necessary). Glass fibres are produced by melting of input materials followed by drawing and coiling. E (Eutal type) glass is used for the purpose of mesh fabric production. Next is glass-fibre weaving, where "greige fabrics" is produced. Different weave methods are used for fabric production. Last step is the hardening process, in which a finishing layer is applied to the greige fabric. The product complies with /EN 15102:2007+A1:2011/ and has the declaration of performance DOP – 2 – Glass Fibre Wall Covering – 03 issued on 28/2/2018. ADFORS Novelio® is applied on internal walls. If well maintained, there is no lifetime limitation. Product can be repainted several times without losing its performance.

COMPONENT (> 1%)	[kg / %]
glass fibre organic	0.13
organic coating	0.03

(\*) > 1% of total mass

## SCOPE AND TYPE

The type of this EPD is "cradle-to-gate" EPD with options. This EPD declares the life cycle analysis (LCA) for a specific product. The software GaBi ts is used to perform the LCA. The background database used is Ecoinvent (v3.4).

The following life cycle stages are considered:

- *Production*

(A1- A3 – Raw material supply, transport and manufacturing);

- *Installation*

(A4 – Transport to building site, A5 – Initial installation into building (including packaging waste processing and additional material for installation));

- *End-of-life*

(C2 – Transport to waste processing, C4 – Disposal (landfilling));

- Benefits and loads beyond the product system boundary.

PRODUCT STAGE	CONSTRUCTION					USE STAGE							END OF LIFE				BENEFITS AND
	PROCESS												STAGE				LOADS BEYOND THE
	STAGE																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	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	X	MNA	X	X	

X = Module assessed

MNA = Module not assessed

### REPRESENTATIVENESS

This EPD declares as specific product ADFORS Novelio® glass fibre wallcovering produced by SAINT-GOBAIN ADFORS CZ s.r.o in two manufacturer's plants (Hodonice, Czech Republic (62%) and Hornstein, Austria (38%)). The EPD covers ADFORS Novelio® glass fibre wallcovering. Starting point for this EPD is ADFORS Novelio® T1013. The other products differ less than 1%.

### ENVIRONMENTAL IMPACT per functional unit or declared unit

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADPE	kg Sb-eq.	4.31 E -05	1.29 E -08	8.87 E -08	4.32 E -05	2.44 E -09	2.52 E -06	INA	INA	INA	INA	INA	INA	INA	INA	2.95 E -09	INA	1.14 E -09	-1.83 E -08
ADPF	MJ	9.02 E +0	6.90 E -02	2.51 E -01	9.34 E +0	1.30 E -02	9.91 E +00	INA	INA	INA	INA	INA	INA	INA	INA	1.58 E -02	INA	3.15 E -02	-3.45 E -01
GWP	kg CO2-eq.	6.30 E -1	4.48 E -03	-4.44 E -02	5.90 E -01	8.46 E -04	3.75 E -01	INA	INA	INA	INA	INA	INA	INA	INA	1.02 E -03	INA	9.73 E -04	-7.39 E -05
ODP	kg CFC11-eq.	5.17 E -08	8.30 E -10	1.19 E -09	5.37 E -08	1.57 E -10	3.84 E -08	INA	INA	INA	INA	INA	INA	INA	INA	1.90 E -10	INA	3.87 E -10	-4.35 E -05
POCP	kg ethene-eq.	1.88 E -04	1.86 E -06	8.36 E -06	1.98 E -04	3.51 E -07	3.30 E -04	INA	INA	INA	INA	INA	INA	INA	INA	4.25 E -07	INA	7.82 E -07	-1.12 E -02
AP	kg SO2-eq.	2.97 E -03	1.77 E -05	9.46 E -05	3.08 E -03	3.34 E -06	1.97 E -03	INA	INA	INA	INA	INA	INA	INA	INA	4.05 E -06	INA	7.21 E -06	-2.29 E -02
EP	kg (PO4)3--eq.	1.97 E -03	5.19 E -06	3.67 E -05	2.01 E -03	9.80 E -07	1.22 E -03	INA	INA	INA	INA	INA	INA	INA	INA	1.19 E -06	INA	2.10 E -06	-2.27 E -02
Toxicity indicators (Dutch market)																			
HTP	kg DCB-eq.	1.39 E +00	1.95 E -03	9.00 E -03	1.40 E +00	3.68 E -04	2.93 E -01	INA	INA	INA	INA	INA	INA	INA	INA	4.46 E -04	INA	3.92 E -04	-7.95 E -03
FAETP	kg DCB-eq.	2.83 E -1	4.45 E -04	4.93 E -03	2.88 E -01	8.42 E -05	1.36 E -01	INA	INA	INA	INA	INA	INA	INA	INA	1.02 E -04	INA	9.54 E -05	-1.12 E -02
MAETP	kg DCB-eq.	9.25 E +2	1.47 E +00	1.75 E +01	9.44 E +02	2.77 E -01	4.93 E +02	INA	INA	INA	INA	INA	INA	INA	INA	3.36 E -01	INA	2.86 E -01	-2.36 E +01
TETP	kg DCB-eq.	7.22 E -03	1.54 E -05	3.74 E -04	7.61 E -03	2.91 E -06	3.35 E -03	INA	INA	INA	INA	INA	INA	INA	INA	3.52 E -06	INA	3.97 E -06	-1.21 E -04

INA = Indicator Not Assessed

ADPE = Abiotic Depletion Potential for non-fossil resources

ADPF = Abiotic Depletion Potential for fossil resources

GWP = Global Warming Potential

ODP = Depletion potential of the stratospheric ozone layer

POCP = Formation potential of tropospheric ozone photochemical oxidants

AP = Acidification Potential of land and water

EP = Eutrophication Potential

HTP = Human Toxicity Potential

FAETP = Fresh water aquatic ecotoxicity potential

MAETP = Marine aquatic ecotoxicity potential

TETP = Terrestrial ecotoxicity potential

### RESOURCE USE per functional unit or declared unit

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	9.61 E -1	9.57 E -4	5.98 E -1	1.56 E +0	INA	7.33 E -1	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	4.25 E -4	INA
PERM	MJ	0.00	0.00	3.30 E -1	3.30 E -1	INA	-3.30 E -1	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	0.00	INA
PERT	MJ	9.61 E -1	9.57 E -4	9.28 E -1	1.89 E +0	1.81 E -4	4.03 E -1	INA	INA	INA	INA	INA	INA	INA	INA	2.19 E -4	INA	4.25 E -4	-4.13 E -2
PENRE	MJ	4.22 E +0	7.02 E -2	-1.84 E +0	9.53 E +0	INA	5.63 E +0	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	7.11 E +0	INA
PENRM	MJ	7.08 E +0	0.00	2.11 E +0	2.11 E +0	INA	4.97 E +0	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	-7.08 E +0	INA
PENRT	MJ	1.13 E +1	7.02 E -2	2.74 E -1	1.16 E +1	1.33 E -2	1.06 E +1	INA	INA	INA	INA	INA	INA	INA	INA	1.61 E -2	INA	3.22 E -2	-4.54 E -1
SM	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00
RSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00
NRSF	MJ	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00
FW	m3	6.69 E -3	1.33 E -5	5.42 E -4	7.25 E -3	2.51 E -6	9.15 E -3	INA	INA	INA	INA	INA	INA	INA	INA	3.04 E -6	INA	3.81 E -5	-1.92 E -4

INA = Indicator Not Assessed

PERE = Use of renewable energy excluding renewable primary energy resources

PERM = Use of renewable energy resources used as raw materials

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

SM = Use of secondary materials

NRSF = Use of non renewable secondary fuels

PERT = Total use of renewable primary energy resources

PENRT = Total use of non-renewable primary energy resources

RSF = Use of renewable secondary fuels

FW = Use of net fresh water

### OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit

	UNIT	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
NHWD	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
RWD	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
CRU	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
MFR	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
MER	kg	0.00	0.00	0.00	0.00	0.00	0.00	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
EEE	MJ	0.00	0.00	0.00	0.00	0.00	9.15 E -2	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00
ETE	MJ	0.00	0.00	0.00	0.00	0.00	1.94 E -1	INA	INA	INA	INA	INA	INA	INA	0.00	INA	0.00	0.00	0.00

INA = Indicator Not Assessed

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

## SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

### *A1. Raw materials supply*

This module considers the extraction and processing of all raw materials and energy which occur upstream to the Novelio® manufacturing process, as well as waste processing up to the end-of waste state.

### *A2. Transport of raw materials to manufacturer*

This includes the transport distance of the raw materials to the manufacturing facility (Hodonice, Czech Republic and Hornstein, Austria) via road (weighted truck transport: 0,18 kg input material, average distance of 203 km).

### *A3. Manufacturing*

This module covers the manufacturing of ADFORS Novelio®glass fibre wallcovering and includes all processes linked to production including packaging and internal transportation. Use of electricity, fuels and auxiliary materials is taken into account as well.

### *A4. Transport to the construction site*

The average transport distance to the construction site for ADFORS Novelio®glass fibre wallcovering is 900 km (truck transport: product incl. packaging 0,19 kg, 900 km).

### *A5. Application and use*

This module includes the environmental aspects and impacts associated with the application of the wallpaper. ADFORS Novelio®glass fibre wallcovering is a paintable fibreglass wall covering applied with vinyl glue on walls inside buildings. For the installation the vinyl glue (0,2 kg/m<sup>2</sup>) is declared in this study. As paint the standard is 2 layers of acrylic paint. Paint and cutting losses are not declared.

### *C2. Transport to End of life*

This module includes transportation distance to landfill (truck transport: 0,16 kg, 50 km).

### *C4. Disposal*

As only one end-of-life scenario landfilling is considered for ADFORS Novelio®glass fibre wallcovering of SAINT-GOBAIN ADFORS CZ s.r.o.



### 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.



### REFERENCES

- CPR Regulation (EU) No. 305/2011 Construction Product Rule (CPR);
- EN 15102:2007+A1:2011 Decorative wall coverings. Roll and panel form.;
- DIN 1259-1 Terminology for glass types and groups;
- DIN EN ISO 14025:2011-10 Environmental labels and declarations — Type III environmental declarations — Principles and procedures;
- EN 15804:2012-04+A1:2013 Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products;
- GaBi ts Software & Documentation Data base for comprehensive analysis LBP, University of Stuttgart and thinkstep AG;
- SBK Determination method v3.0 Environmental performance Building and civil engineering works.



### REMARKS

None