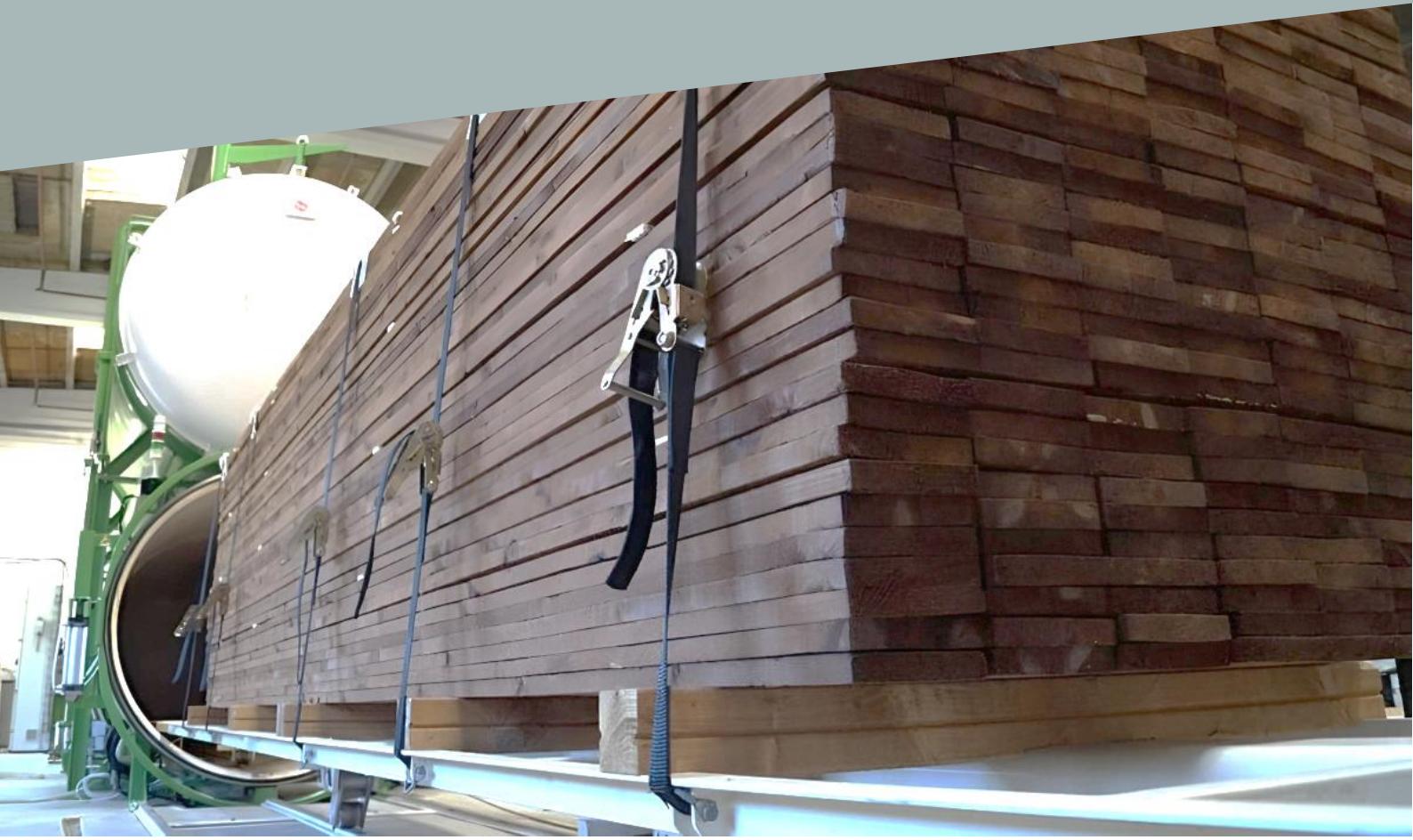




Owner: Danish Anti Fire ApS  
No.: MD-24130-EN  
Issued: 05-02-2025  
Valid to: 05-02-2030

3<sup>rd</sup> PARTY VERIFIED  
**EPD**

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804





DANISH ANTI FIRE

**Owner of declaration**

Danish Anti Fire ApS  
 Sandvadsvej 2, DK-4600 Køge  
 CVR nr.: 38464302



DANISH ANTI FIRE

**Programme**

EPD Danmark  
[www.epddanmark.dk](http://www.epddanmark.dk)



- Industry EPD  
 Product EPD

**Declared product**

Fire-retardant impregnation of wood products.

Number of declared product variations: 7

The quantity of fire-retardant material used depends on the type of wood being impregnated. This EPD therefore includes 7 intervals of the fire retardant (incl. water) quantity.

- Fire retardant impregnation 15-25 kg/m<sup>3</sup>
- Fire retardant impregnation 25-35 kg/m<sup>3</sup>
- Fire retardant impregnation 35-45 kg/m<sup>3</sup>
- Fire retardant impregnation 45-55 kg/m<sup>3</sup>
- Fire retardant impregnation 55-65 kg/m<sup>3</sup>
- Fire retardant impregnation 65-75 kg/m<sup>3</sup>
- Fire retardant impregnation 75-85 kg/m<sup>3</sup>

Each interval is modelled as a worst case (the largest quantity in the interval). The impregnated wood is not an included product in this EPD, only the impregnation.

**Production site**

Overgade 11B, DK-6670 Holsted (Denmark)

**Use of Guarantees of Origin**

- No certificates used  
 Electricity covered by GO  
 Biogas covered by GO

**Declared/Functional unit**Fire-retardant impregnation of 1 m<sup>3</sup> wood**Year of production site data (A3)**

2023.

**EPD version**

Version 1.0.

**Issued:**  
 05-02-2025

**Valid to:**  
 05-02-2030

**Basis of calculation**

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

**Comparability**

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

**Validity**

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

**Use**

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

**EPD type**

- Cradle-to-gate with modules C1-C4 and D  
 Cradle-to-gate with options, modules C1-C4 and D  
 Cradle-to-grave and module D  
 Cradle-to-gate  
 Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

- internal  external

## Third party verifier:

Mie Ostenfeldt  
 Ostenfeldt Consulting

Martha Katrine Sørensen  
 EPD Danmark

**Life cycle stages and modules (ND = not declared)**

Product		Construction process		Use								End-of-Life			Beyond the system boundary	
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X



# Product information

## Product description

The product materials are listed below.

Interval: Fire retardant impregnation 15-25 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	3,00	12%
Water	22,00	88%
<b>TOTAL</b>	<b>25,00</b>	<b>100%</b>

Interval: Fire retardant impregnation 25-35 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	4,20	12%
Water	30,80	88%
<b>TOTAL</b>	<b>35,00</b>	<b>100%</b>

Interval: Fire retardant impregnation 35-45 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	5,40	12%
Water	39,60	88%
<b>TOTAL</b>	<b>45,00</b>	<b>100%</b>

Interval: Fire retardant impregnation 45-55 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	6,6	12%
Water	48,40	88%
<b>TOTAL</b>	<b>55,00</b>	<b>100%</b>

Interval: Fire retardant impregnation 55-65 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	7,80	12%
Water	57,20	88%
<b>TOTAL</b>	<b>65,00</b>	<b>100%</b>

Interval: Fire retardant impregnation 65-75 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	9,00	12%
Water	66,00	88%
<b>TOTAL</b>	<b>75,00</b>	<b>100%</b>

Interval: Fire retardant impregnation 75-85 kg/m <sup>3</sup>		
Material	Amount [kg]	Weight-% of declared product
Burnblock	10,20	12%
Water	74,80	88%
<b>TOTAL</b>	<b>85,00</b>	<b>100%</b>

## Product packaging:

Sales packaging is listed below.

Packaging	Amount [kg]	Weight-% of sales packaging
Wood beam	1,15	81%
Shrink Film	0,27	19%
<b>TOTAL</b>	<b>1,42</b>	<b>100%</b>

There are no differences in sales packaging.

## Representativity

This EPD covers the declared unit of fire-retardant impregnation of 1 m<sup>3</sup> wood in seven intervals, impregnated by Danish Anti Fire ApS in Holsted, Denmark. Product specific data is from the period between 1/1-2023 and 31/12-2023.

Background data is from the 15804 ecoinvent database (v.3.10). Generally, the used background datasets are of high quality and are only a couple of years old. The geographical scope is Denmark and the End-of-life scenario is model accordingly.

## Hazardous substances

The fire impregnated wood does not contain substances listed on the "Candidate List of substances of very high concern for Authorisation" in quantities exceeding 0,1% by weight.

<http://echa.europa.eu/candidate-list-table>

## Products use

The fire-retardant treatment ensures that wood becomes less flammable.

## Essential characteristics

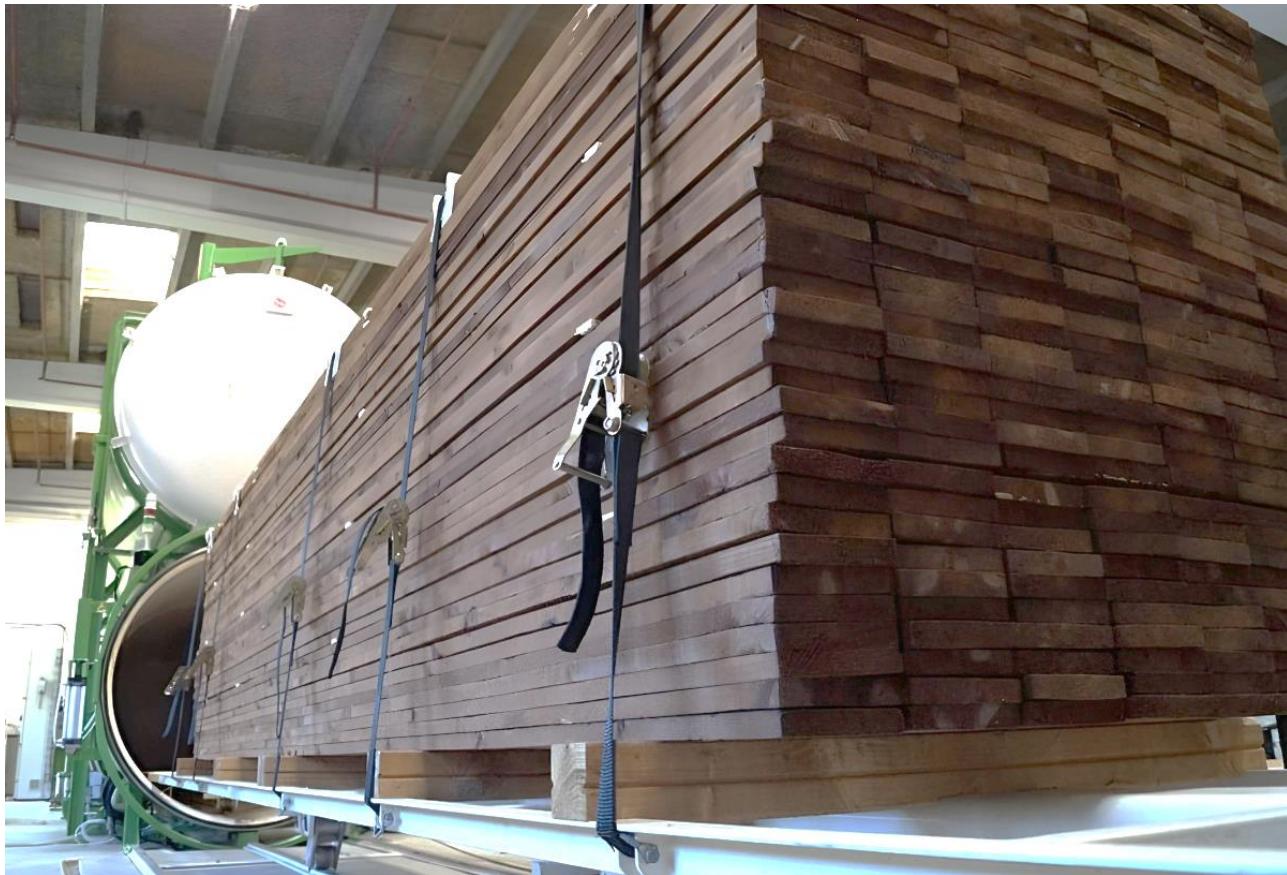
The fire-retardant products are CE-labeled and have performance declaration. This information regarding the CE-label, performance declaration as well as other technical information can be obtained by contacting Danish Anti Fire.

<https://antifire.dk/>

## Reference Service Life (RSL)

Not defined.

## Picture of product



## LCA background

### Declared unit

The LCI and LCIA results in this EPD cover the declared unit of fire-retardant impregnation of 1 m<sup>3</sup> wood.

Name	Value	Unit
Declared unit	1	m <sup>3</sup>
Fire retardant impregnation 15-25 kg/m <sup>3</sup>	25	kg/m <sup>3</sup>
Fire retardant impregnation 25-35 kg/m <sup>3</sup>	35	kg/m <sup>3</sup>
Fire retardant impregnation 35-45 kg/m <sup>3</sup>	45	kg/m <sup>3</sup>
Fire retardant impregnation 45-55 kg/m <sup>3</sup>	55	kg/m <sup>3</sup>
Fire retardant impregnation 55-65 kg/m <sup>3</sup>	65	kg/m <sup>3</sup>
Fire retardant impregnation 65-75 kg/m <sup>3</sup>	75	kg/m <sup>3</sup>
Fire retardant impregnation 75-85 kg/m <sup>3</sup>	85	kg/m <sup>3</sup>

Each interval is modelled as a worst case.

### Functional unit

Not defined.

### PCR

This EPD is developed in accordance with the core rules for the product category of construction products in EN 15804+A2:2019.

### Energy modelling principles

Danish Anti Fire purchases guarantee of origin (100% green) to cover the production in Holsted. In the data collection period, the green electricity was a mix of biomass, solar, wind and hydro. The LCA study is therefore modelled as described in the following.

The foreground system is modelled using electricity produced by a mix of biomass (4,12%), solar (23,36%), wind (57,28%) and hydro

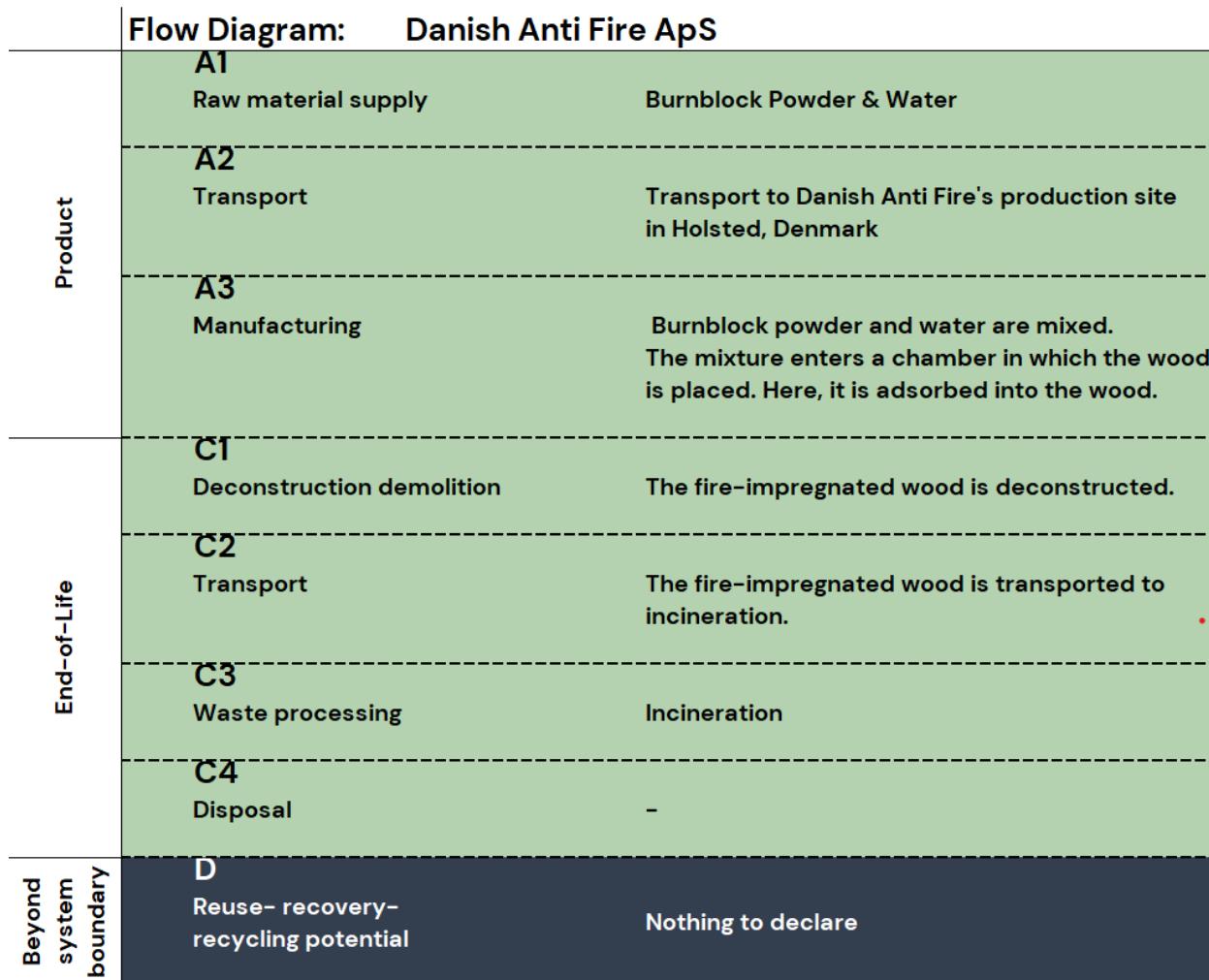


(15,24%), see the table below for the emission factor

Dataset	EF	Unit
Electricity	0,0378	kg CO <sub>2</sub> e/kWh

The background system is modelled using electricity grid mixes both upstream and downstream.

## Flowdiagram



## System boundary

This EPD is based on a cradle-to-gate LCA with modules C1-C4 and D in which 100 weight-% has been accounted for.

The cut-off criterium per module is set at a maximum of 5% of energy usage and mass while the cut-off criterium per unit process is set at a maximum of 1% of energy usage and mass. This is in compliance with the rules stated in EN 15804+A2, 6.3.6. Cut-offs, in this EPD, are below the cut-off criteria.

There are no known excluded processes.

### **Product stage (A1-A3) includes:**

A1 - Extraction and processing of raw materials

A2 - Transport to the production site

A3 - Manufacturing processes

For its fire-retardant treatment of wood products, Danish Anti Fire utilizes Burnblock powder which is combined with water and applied to the wood during the impregnation process. Burnblock has developed an EPD for their powder. Results from A1-A3 from the Burnblock EPD, is used as input for A1 in Danish Anti Fires EPD. The treated wood is dried packaged and prepared for transport to customers.

The amount of fire-retardant impregnation varies based on the type of wood being impregnated. To account for all the different wood types treated by Danish Anti Fire, this EPD includes seven intervals for the quantity of Burnblock (incl. water).

The LCI and LCIA results are presented in aggregated as A1-A3.

### **Construction process stage (A4-5) includes:**

The construction process stage is not declared.

### **Use stage (B1-B7) includes:**

The use stage is not declared.

### **End-of-Life (C1-C4) includes:**

The End-of-Life is modelled by assuming that the fire impregnated wood (100%) is collected with mixed construction waste and incinerated. A percentage of the fire impregnated wood is expected to be reused/recycled. However, this percentage is unknown.

It is assumed that deconstruction/demolition is done manually which is why there are no impacts allocated to module C1.

Transport to waste management (C2) is modelled by assuming a distance of 100 km to incineration in Denmark.

### **Re-use, recovery and recycling potential (D) includes:**

There are no impacts allocated to module D as nothing is credited.



# LCA results

## Fire retardant impregnation 15-25 kg/m<sup>3</sup>

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	2,14E+01	0,00E+00	5,70E-02	7,18E+00	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	2,17E+01	0,00E+00	5,70E-02	7,18E+00	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	8,93E-02	0,00E+00	0,00E+00	3,24E-04	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	6,12E-02	0,00E+00	1,90E-05	1,62E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	2,73E-06	0,00E+00	1,13E-09	1,21E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	2,80E-01	0,00E+00	1,19E-04	6,14E-04	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	6,30E-03	0,00E+00	3,86E-06	1,01E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	6,19E-02	0,00E+00	2,85E-05	2,83E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	9,14E-01	0,00E+00	3,08E-04	3,10E-03	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	1,92E-01	0,00E+00	1,97E-04	7,96E-04	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	5,48E-04	0,00E+00	1,85E-07	1,38E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	2,93E+02	0,00E+00	8,02E-01	6,63E-01	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	1,23E+01	0,00E+00	4,51E-03	6,06E-02	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication - aquatic freshwater; EP-marine = Eutrophication - aquatic marine; EP-terrestrial = Eutrophication - terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential - minerals and metals; ADPf = Abiotic Depletion Potential - fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,26E-06	0,00E+00	4,20E-09	5,31E-09	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	1,46E+00	0,00E+00	1,04E-03	1,39E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	3,97E+02	0,00E+00	1,75E-01	2,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,62E+01	0,00E+00	4,32E-02	4,96E-02	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	5,97E+01	0,00E+00	1,20E-01	2,37E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	2,27E+02	0,00E+00	9,48E-02	1,74E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,56E+02	0,00E+00	1,38E-02	2,03E-02	0,00E+00	0,00E+00
PERM	[MJ]	1,25E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,57E+02	0,00E+00	1,38E-02	2,03E-02	0,00E+00	0,00E+00
PENRE	[MJ]	3,05E+02	0,00E+00	8,02E-01	6,63E-01	0,00E+00	0,00E+00
PENRM	[MJ]	-1,03E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	3,05E+02	0,00E+00	8,02E-01	6,63E-01	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	4,70E-06	5,67E-06	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	9,97E+00	0,00E+00	1,11E-04	1,42E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,92E-01	0,00E+00	1,17E-03	1,50E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,89E+01	0,00E+00	2,47E-02	3,21E+00	0,00E+00	0,00E+00
RWD	[kg]	1,33E-04	0,00E+00	2,58E-07	3,55E-07	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,24E-02	0,00E+00	6,09E-06	6,79E-06	0,00E+00	0,00E+00
MER	[kg]	9,87E-06	0,00E+00	5,16E-08	3,86E-08	0,00E+00	0,00E+00
EEE	[MJ]	8,59E-02	0,00E+00	0,00E+00	2,21E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	5,52E-04	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

**Fire retardant impregnation 25-35 kg/m<sup>3</sup>**

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	2,71E+01	0,00E+00	7,98E-02	1,01E+01	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	2,76E+01	0,00E+00	7,98E-02	1,01E+01	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	5,07E-02	0,00E+00	0,00E+00	4,54E-04	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	7,06E-02	0,00E+00	2,65E-05	2,27E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	3,53E-06	0,00E+00	1,59E-09	1,69E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	3,28E-01	0,00E+00	1,66E-04	8,60E-04	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	7,70E-03	0,00E+00	5,40E-06	1,42E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	6,89E-02	0,00E+00	3,99E-05	3,96E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	9,92E-01	0,00E+00	4,31E-04	4,34E-03	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	2,15E-01	0,00E+00	2,76E-04	1,11E-03	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	7,14E-04	0,00E+00	2,59E-07	1,94E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	3,71E+02	0,00E+00	1,12E+00	9,28E-01	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	1,67E+01	0,00E+00	6,32E-03	8,48E-02	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	3,70E-06	0,00E+00	5,88E-09	7,43E-09	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	1,84E+00	0,00E+00	1,46E-03	1,95E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	5,34E+02	0,00E+00	2,45E-01	3,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,62E+01	0,00E+00	6,04E-02	6,94E-02	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	5,98E+01	0,00E+00	1,68E-01	3,32E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	3,10E+02	0,00E+00	1,33E-01	2,44E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,62E+02	0,00E+00	1,93E-02	2,84E-02	0,00E+00	0,00E+00
PERM	[MJ]	1,75E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,62E+02	0,00E+00	1,93E-02	2,84E-02	0,00E+00	0,00E+00
PENRE	[MJ]	3,88E+02	0,00E+00	1,12E+00	9,28E-01	0,00E+00	0,00E+00
PENRM	[MJ]	7,14E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	3,89E+02	0,00E+00	1,12E+00	9,28E-01	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	6,59E-06	7,94E-06	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	1,39E+01	0,00E+00	1,56E-04	1,99E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,92E-01	0,00E+00	1,64E-03	2,09E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,89E+01	0,00E+00	3,46E-02	4,49E+00	0,00E+00	0,00E+00
RWD	[kg]	1,33E-04	0,00E+00	3,62E-07	4,96E-07	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,24E-02	0,00E+00	8,53E-06	9,50E-06	0,00E+00	0,00E+00
MER	[kg]	9,89E-06	0,00E+00	7,23E-08	5,41E-08	0,00E+00	0,00E+00
EEE	[MJ]	8,60E-02	0,00E+00	0,00E+00	3,10E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	7,73E-04	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

**Fire retardant impregnation 35-45 kg/m<sup>3</sup>**

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	3,28E+01	0,00E+00	1,03E-01	1,29E+01	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	3,35E+01	0,00E+00	1,03E-01	1,29E+01	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	1,20E-02	0,00E+00	0,00E+00	5,84E-04	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	8,00E-02	0,00E+00	3,41E-05	2,92E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	4,34E-06	0,00E+00	2,04E-09	2,18E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	3,76E-01	0,00E+00	2,14E-04	1,11E-03	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	9,11E-03	0,00E+00	6,95E-06	1,82E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	7,60E-02	0,00E+00	5,13E-05	5,09E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	1,07E+00	0,00E+00	5,54E-04	5,58E-03	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	2,38E-01	0,00E+00	3,55E-04	1,43E-03	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	8,79E-04	0,00E+00	3,33E-07	2,49E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	4,50E+02	0,00E+00	1,44E+00	1,19E+00	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	2,10E+01	0,00E+00	8,12E-03	1,09E-01	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	4,14E-06	0,00E+00	7,56E-09	9,55E-09	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	2,21E+00	0,00E+00	1,87E-03	2,50E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	6,71E+02	0,00E+00	3,15E-01	4,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,62E+01	0,00E+00	7,77E-02	8,93E-02	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	5,99E+01	0,00E+00	2,16E-01	4,27E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	3,93E+02	0,00E+00	1,71E-01	3,13E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,68E+02	0,00E+00	2,48E-02	3,65E-02	0,00E+00	0,00E+00
PERM	[MJ]	2,25E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,68E+02	0,00E+00	2,48E-02	3,65E-02	0,00E+00	0,00E+00
PENRE	[MJ]	4,72E+02	0,00E+00	1,44E+00	1,19E+00	0,00E+00	0,00E+00
PENRM	[MJ]	9,18E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,72E+02	0,00E+00	1,44E+00	1,19E+00	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	8,47E-06	1,02E-05	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	1,79E+01	0,00E+00	2,00E-04	2,56E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,93E-01	0,00E+00	2,11E-03	2,69E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,89E+01	0,00E+00	4,45E-02	5,77E+00	0,00E+00	0,00E+00
RWD	[kg]	1,33E-04	0,00E+00	4,65E-07	6,38E-07	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,24E-02	0,00E+00	1,10E-05	1,22E-05	0,00E+00	0,00E+00
MER	[kg]	9,91E-06	0,00E+00	9,29E-08	6,95E-08	0,00E+00	0,00E+00
EEE	[MJ]	8,61E-02	0,00E+00	0,00E+00	3,98E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	9,93E-04	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

**Fire retardant impregnation 45-55 kg/m<sup>3</sup>**

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	3,85E+01	0,00E+00	1,25E-01	1,58E+01	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	3,94E+01	0,00E+00	1,25E-01	1,58E+01	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	-2,67E-02	0,00E+00	0,00E+00	7,14E-04	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	8,95E-02	0,00E+00	4,17E-05	3,56E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	5,14E-06	0,00E+00	2,49E-09	2,66E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	4,23E-01	0,00E+00	2,61E-04	1,35E-03	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	1,05E-02	0,00E+00	8,49E-06	2,22E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	8,30E-02	0,00E+00	6,27E-05	6,22E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	1,15E+00	0,00E+00	6,77E-04	6,83E-03	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	2,62E-01	0,00E+00	4,34E-04	1,75E-03	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	1,05E-03	0,00E+00	4,07E-07	3,04E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	5,28E+02	0,00E+00	1,76E+00	1,46E+00	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	2,54E+01	0,00E+00	9,93E-03	1,33E-01	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	4,57E-06	0,00E+00	9,23E-09	1,17E-08	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	2,59E+00	0,00E+00	2,29E-03	3,06E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	8,08E+02	0,00E+00	3,85E-01	5,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,63E+01	0,00E+00	9,50E-02	1,09E-01	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	6,00E+01	0,00E+00	2,64E-01	5,22E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	4,75E+02	0,00E+00	2,08E-01	3,83E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,73E+02	0,00E+00	3,03E-02	4,46E-02	0,00E+00	0,00E+00
PERM	[MJ]	2,75E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,73E+02	0,00E+00	3,03E-02	4,46E-02	0,00E+00	0,00E+00
PENRE	[MJ]	5,55E+02	0,00E+00	1,76E+00	1,46E+00	0,00E+00	0,00E+00
PENRM	[MJ]	1,12E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	5,56E+02	0,00E+00	1,76E+00	1,46E+00	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	1,03E-05	1,25E-05	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	2,18E+01	0,00E+00	2,45E-04	3,12E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,94E-01	0,00E+00	2,57E-03	3,29E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,89E+01	0,00E+00	5,44E-02	7,06E+00	0,00E+00	0,00E+00
RWD	[kg]	1,33E-04	0,00E+00	5,69E-07	7,80E-07	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,25E-02	0,00E+00	1,34E-05	1,49E-05	0,00E+00	0,00E+00
MER	[kg]	9,93E-06	0,00E+00	1,14E-07	8,50E-08	0,00E+00	0,00E+00
EEE	[MJ]	8,63E-02	0,00E+00	0,00E+00	4,87E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	1,21E-03	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

**Fire retardant impregnation 55-65 kg/m<sup>3</sup>**

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	4,42E+01	0,00E+00	1,48E-01	1,87E+01	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	4,54E+01	0,00E+00	1,48E-01	1,87E+01	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	-6,54E-02	0,00E+00	0,00E+00	8,43E-04	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	9,89E-02	0,00E+00	4,93E-05	4,21E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	5,95E-06	0,00E+00	2,95E-09	3,14E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	4,71E-01	0,00E+00	3,09E-04	1,60E-03	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	1,19E-02	0,00E+00	1,00E-05	2,63E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	9,00E-02	0,00E+00	7,41E-05	7,35E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	1,23E+00	0,00E+00	8,00E-04	8,07E-03	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	2,85E-01	0,00E+00	5,13E-04	2,07E-03	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	1,21E-03	0,00E+00	4,81E-07	3,60E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	6,07E+02	0,00E+00	2,08E+00	1,72E+00	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	2,98E+01	0,00E+00	1,17E-02	1,57E-01	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	5,01E-06	0,00E+00	1,09E-08	1,38E-08	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	2,97E+00	0,00E+00	2,70E-03	3,62E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	9,45E+02	0,00E+00	4,56E-01	6,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,63E+01	0,00E+00	1,12E-01	1,29E-01	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	6,01E+01	0,00E+00	3,12E-01	6,16E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	5,58E+02	0,00E+00	2,46E-01	4,53E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,79E+02	0,00E+00	3,58E-02	5,27E-02	0,00E+00	0,00E+00
PERM	[MJ]	3,24E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,79E+02	0,00E+00	3,58E-02	5,27E-02	0,00E+00	0,00E+00
PENRE	[MJ]	6,39E+02	0,00E+00	2,08E+00	1,72E+00	0,00E+00	0,00E+00
PENRM	[MJ]	1,33E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	6,39E+02	0,00E+00	2,08E+00	1,72E+00	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	1,22E-05	1,48E-05	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	2,58E+01	0,00E+00	2,89E-04	3,69E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,95E-01	0,00E+00	3,04E-03	3,89E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,90E+01	0,00E+00	6,42E-02	8,34E+00	0,00E+00	0,00E+00
RWD	[kg]	1,34E-04	0,00E+00	6,72E-07	9,22E-07	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,25E-02	0,00E+00	1,58E-05	1,76E-05	0,00E+00	0,00E+00
MER	[kg]	9,95E-06	0,00E+00	1,34E-07	1,00E-07	0,00E+00	0,00E+00
EEE	[MJ]	8,64E-02	0,00E+00	0,00E+00	5,75E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	1,43E-03	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

**Fire retardant impregnation 65-75 kg/m<sup>3</sup>**

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	5,00E+01	0,00E+00	1,71E-01	2,16E+01	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	5,13E+01	0,00E+00	1,71E-01	2,15E+01	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	-1,04E-01	0,00E+00	0,00E+00	9,73E-04	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	1,08E-01	0,00E+00	5,69E-05	4,86E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	6,76E-06	0,00E+00	3,40E-09	3,63E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	5,19E-01	0,00E+00	3,56E-04	1,84E-03	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	1,33E-02	0,00E+00	1,16E-05	3,03E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	9,70E-02	0,00E+00	8,55E-05	8,48E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	1,31E+00	0,00E+00	9,23E-04	9,31E-03	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	3,08E-01	0,00E+00	5,92E-04	2,39E-03	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	1,38E-03	0,00E+00	5,56E-07	4,15E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	6,85E+02	0,00E+00	2,41E+00	1,99E+00	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	3,41E+01	0,00E+00	1,35E-02	1,82E-01	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	5,45E-06	0,00E+00	1,26E-08	1,59E-08	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	3,34E+00	0,00E+00	3,12E-03	4,17E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	1,08E+03	0,00E+00	5,26E-01	7,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,63E+01	0,00E+00	1,29E-01	1,49E-01	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	6,02E+01	0,00E+00	3,60E-01	7,11E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	6,41E+02	0,00E+00	2,84E-01	5,22E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,84E+02	0,00E+00	4,13E-02	6,08E-02	0,00E+00	0,00E+00
PERM	[MJ]	3,74E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,85E+02	0,00E+00	4,13E-02	6,08E-02	0,00E+00	0,00E+00
PENRE	[MJ]	7,22E+02	0,00E+00	2,41E+00	1,99E+00	0,00E+00	0,00E+00
PENRM	[MJ]	1,53E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	7,23E+02	0,00E+00	2,41E+00	1,99E+00	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	1,41E-05	1,70E-05	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	2,98E+01	0,00E+00	3,34E-04	4,26E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,96E-01	0,00E+00	3,51E-03	4,49E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,90E+01	0,00E+00	7,41E-02	9,62E+00	0,00E+00	0,00E+00
RWD	[kg]	1,34E-04	0,00E+00	7,75E-07	1,06E-06	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,25E-02	0,00E+00	1,83E-05	2,04E-05	0,00E+00	0,00E+00
MER	[kg]	9,98E-06	0,00E+00	1,55E-07	1,16E-07	0,00E+00	0,00E+00
EEE	[MJ]	8,65E-02	0,00E+00	0,00E+00	6,64E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	1,66E-03	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

**Fire retardant impregnation 75-85 kg/m<sup>3</sup>**

ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP-total	[kg CO <sub>2</sub> eq.]	5,57E+01	0,00E+00	1,94E-01	2,44E+01	0,00E+00	0,00E+00
GWP-fossil	[kg CO <sub>2</sub> eq.]	5,72E+01	0,00E+00	1,94E-01	2,44E+01	0,00E+00	0,00E+00
GWP-biogenic	[kg CO <sub>2</sub> eq.]	-1,43E-01	0,00E+00	0,00E+00	1,10E-03	0,00E+00	0,00E+00
GWP-luluc	[kg CO <sub>2</sub> eq.]	1,18E-01	0,00E+00	6,45E-05	5,51E-05	0,00E+00	0,00E+00
ODP	[kg CFC 11 eq.]	7,56E-06	0,00E+00	3,85E-09	4,11E-09	0,00E+00	0,00E+00
AP	[mol H <sup>+</sup> eq.]	5,67E-01	0,00E+00	4,04E-04	2,09E-03	0,00E+00	0,00E+00
EP-freshwater	[kg P eq.]	1,47E-02	0,00E+00	1,31E-05	3,44E-05	0,00E+00	0,00E+00
EP-marine	[kg N eq.]	1,04E-01	0,00E+00	9,69E-05	9,61E-04	0,00E+00	0,00E+00
EP-terrestrial	[mol N eq.]	1,38E+00	0,00E+00	1,05E-03	1,05E-02	0,00E+00	0,00E+00
POCP	[kg NMVOC eq.]	3,31E-01	0,00E+00	6,71E-04	2,71E-03	0,00E+00	0,00E+00
ADPm <sup>1</sup>	[kg Sb eq.]	1,54E-03	0,00E+00	6,30E-07	4,70E-07	0,00E+00	0,00E+00
ADPf <sup>1</sup>	[MJ]	7,64E+02	0,00E+00	2,73E+00	2,25E+00	0,00E+00	0,00E+00
WDP <sup>1</sup>	[m <sup>3</sup> world eq. deprived]	3,85E+01	0,00E+00	1,53E-02	2,06E-01	0,00E+00	0,00E+00
Caption	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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimer	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						

ADDITIONAL ENVIRONMENTAL IMPACTS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PM	[Disease incidence]	5,89E-06	0,00E+00	1,43E-08	1,80E-08	0,00E+00	0,00E+00
IRP <sup>2</sup>	[kBq U235 eq.]	3,72E+00	0,00E+00	3,54E-03	4,73E-03	0,00E+00	0,00E+00
ETP-fw <sup>1</sup>	[CTUe]	1,22E+03	0,00E+00	5,96E-01	8,50E+00	0,00E+00	0,00E+00
HTP-c <sup>1</sup>	[CTUh]	2,63E+01	0,00E+00	1,47E-01	1,69E-01	0,00E+00	0,00E+00
HTP-nc <sup>1</sup>	[CTUh]	6,03E+01	0,00E+00	4,08E-01	8,06E+00	0,00E+00	0,00E+00
SQP <sup>1</sup>	-	7,24E+02	0,00E+00	3,22E-01	5,92E-01	0,00E+00	0,00E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless)						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,0000000000112.						
Disclaimers	<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.						
	<sup>2</sup> 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 disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.						



RESOURCE USE PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	9,90E+02	0,00E+00	4,68E-02	6,89E-02	0,00E+00	0,00E+00
PERM	[MJ]	4,24E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	9,90E+02	0,00E+00	4,68E-02	6,89E-02	0,00E+00	0,00E+00
PENRE	[MJ]	8,05E+02	0,00E+00	2,73E+00	2,25E+00	0,00E+00	0,00E+00
PENRM	[MJ]	1,73E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	8,07E+02	0,00E+00	2,73E+00	2,25E+00	0,00E+00	0,00E+00
SM	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	[MJ]	1,11E-02	0,00E+00	1,60E-05	1,93E-05	0,00E+00	0,00E+00
NRSF	[MJ]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	[m <sup>3</sup> ]	3,37E+01	0,00E+00	3,78E-04	4,83E-03	0,00E+00	0,00E+00
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary 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 material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Net use of fresh water						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	5,96E-01	0,00E+00	3,98E-03	5,09E-01	0,00E+00	0,00E+00
NHWD	[kg]	1,90E+01	0,00E+00	8,40E-02	1,09E+01	0,00E+00	0,00E+00
RWD	[kg]	1,34E-04	0,00E+00	8,79E-07	1,21E-06	0,00E+00	0,00E+00
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	3,26E-02	0,00E+00	2,07E-05	2,31E-05	0,00E+00	0,00E+00
MER	[kg]	1,00E-05	0,00E+00	1,76E-07	1,31E-07	0,00E+00	0,00E+00
EEE	[MJ]	8,66E-02	0,00E+00	0,00E+00	7,52E-04	0,00E+00	0,00E+00
EET	[MJ]	4,15E-02	0,00E+00	0,00E+00	1,88E-03	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy						
	The numbers are declared in scientific notation, e.g. 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1,12*10 <sup>-11</sup> or 0,000000000112.						

BIOGENIC CARBON CONTENT PER 1 m <sup>3</sup> OF FIRE IMPREGNATION							
Parameter	Unit	At the factory gate					
Biogenic carbon content in product	[kg C]	0					
Biogenic carbon content in accompanying packaging	[kg C]	0,46					
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO <sub>2</sub>						

# Additional information

## Technical information

### End-of-Life (C1-C4)

Scenario information	Value	Unit
Collected with mixed waste & For energy recovery	3,41 4,77 6,14 7,50 8,87 10,23 11,59	kg
Assumptions for scenario development		As appropriate

Stated in the following order: 15-25 kg/m<sup>3</sup>, 25-35 kg/m<sup>3</sup>, 35-45 kg/m<sup>3</sup>, 45-55 kg/m<sup>3</sup>, 55-65 kg/m<sup>3</sup>, 65-75 kg/m<sup>3</sup> and 75-85 kg/m<sup>3</sup>.

### Re-use, recovery and recycling potential (D)

Scenario information	Value	Unit
Energy recovery from waste incineration ( <b>Electricity</b> )	0	MJ
Energy recovery from waste incineration ( <b>Heat</b> )	0	MJ

Since no credits can be made no potential energy can be recovered.

### Indoor air

The EPD does not give information on the release of dangerous substances into indoor air because the horizontal standards of the relevant measurements are not available.

Read more in EN15804+A1, Chapter 7.4.1.

### Soil and water

The EPD does not give information on the release of dangerous substances to soil and water because the horizontal standards of the relevant measurements are not available.

Read more in EN15804+A1, Chapter 7.4.2.

# References

<b>Publisher</b>	 <p>epddanmark www.epddanmark.dk Template version 2024.1</p>
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<b>LCA software/background data</b>	<p>SimaPro 9.6.0.1 Ecoinvent v.3.10 (15804 system model)</p>
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## General program instructions

General Program Instructions, version 2.0, spring 2020

[www.epddanmark.dk](http://www.epddanmark.dk)

## EN 15804

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

## EN 15942

DS/EN 15942:2011 - "Sustainability of construction works - Environmental product declarations - Communication format business-to-business".

## ISO 14025

DS/EN ISO 14025:2010 - "Environmental labels and declarations - Type III environmental declarations - Principles and procedures".

## ISO 14040

DS/EN ISO 14040:2008 - "Environmental management - Life cycle assessment - Principles and framework".

## ISO 14044

DS/EN ISO 14044:2008 - "Environmental management - Life cycle assessment - Requirements and guidelines".

## SimaPro v.9.6.0.1

Ecoinvent v3.10.0, EN15804 system model