

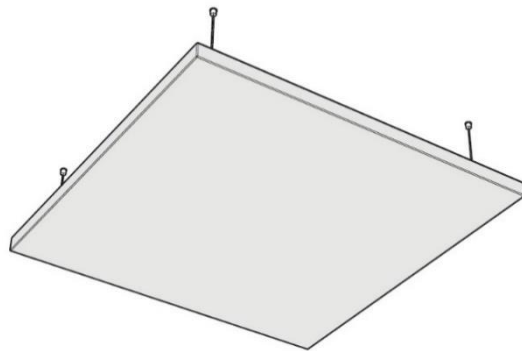
# Texaa®

## Environmental Product Declaration

### Acoustic Panel Stereo

*In conformance with the standards NF EN ISO 14025, NF EN 15804+A1 and the French national complement NF EN 15804/CN*

July 2021  
Update: July 2022



EPD Version: 2.0  
INIES Registration number: 3-446:2021



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## Attention

The information contained in this declaration is provided under the responsibility of TEXAA owner of this EPD) according to the NF EN 15804+A1 and the French national complement NF EN 15804/CN.

Any exploitation, total or partial, of the information provided in this document should at least be accompanied by a reference to the complete original EPD as well as to the owner of the declaration who can provide a copy of the full EPD.

It is reminded that the results of this study are based purely on facts, scenarios and hypotheses which have been provided for this study. If any of these facts, scenarios or hypotheses should change, the results of this study are also liable to change.

Additionally, the results of this study should be considered in their entirety, with the appropriate hypotheses, and not taken individually.

The norm EN 15804+A1 of the CEN serves as the Product Category Rules (PCR) for this study.

## Reading Guide

The inventory data respects the requirements of the norm EN 15804+A1.

In the following tables, 2.53E-06 should be read as  $2.53 \times 10^{-6}$  (scientific notation).

The units used are specified for each flow, and are as follows:

- kilogram « kg »,
- gram « g »,
- liter « l »,
- kilowatt-hour « kWh »,
- mega joule « MJ ».

Abbreviations:

- LCA: Life Cycle Analysis
- RSL: Reference Service Life
- FU: Functional Unit
- LHV: Lower Heating Value

## Precautions for the use of EPDs as a method of comparing products

EPDs for construction products created in conformance with the norm EN 15804+A1 should only be compared with EPDs likewise created in conformance with the same norm.

The norm EN 15804+A1 specifies in chapter 5.3, "Comparability of EPD for construction products", the conditions under which construction products may be compared, based on information provided in the EPD:

*"In principle the comparison of products on the basis of their EPD is defined by the contribution they make to the environmental performance of the building. Consequently, comparison of the environmental performance of construction products using the EPD information shall be based on the product's use in and its impacts on the building, and shall consider the complete life cycle (all information modules)."*

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# 1 INTRODUCTION

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The format used to present this environmental product declaration is based on the French national complement NF EN 15804/CN and the INIES program.

An accompanying report for this declaration has been produced and is available for consultation, under confidentiality clauses, at the Texaa headquarters.



The information contained in this document has been provided under the responsibility of Texaa.

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## 2 GENERAL INFORMATION

1. Manufacturer name and address: Texaa - 43, allée de Mégevie - 33174 Gradignan
2. Manufacturing site for which the EPD is representative: Texaa - 43, allée de Mégevie - 33174 Gradignan
3. Type of EPD: "cradle to grave".
4. Type of EPD: individual.
5. Publication date: July 2021
6. Update date: July 2022
7. Valid until: July 2026
8. Commercial reference/product: Acoustic Panel Stereo
9. Verification:

<b>The norm EN 15804 of the CEN serves as PCR a).</b>	
Independent verification of the declaration, in conformity with EN ISO 14025:2010 b) <input type="checkbox"/> interne <input checked="" type="checkbox"/> externe	
<p><b>Verification program: FDES-INIES</b>  <a href="http://www.inies.fr/">http://www.inies.fr/</a></p>  <p style="text-align: center;">Association HQE          4, avenue du Recteur Poincaré          75016 PARIS          FRANCE</p>	<p><b>Reviewer:</b>          Estelle VIAL (<a href="mailto:estelle.vial@fcba.fr">estelle.vial@fcba.fr</a>)</p>  <p style="text-align: center;">INSTITUT          TECHNOLOGIQUE</p> <p style="text-align: center;">FCBA          10 rue Galilée          77420 Champs sur Marne          FRANCE</p>
<p>a) Product Category Rules          b) Facultative for communication between companies, obligatory for communication between companies and their clients (see EN ISO 14025:2010, 9.4).</p>	

10. Production site: FRANCE
10. Distribution channel: BtoB and BtoC

### 3 PRODUCT DESCRIPTION AND FUNCTIONAL UNIT

11. Description of the functional unit:

« 1 m<sup>2</sup> of acoustic textile, installed according to the manufacturer's guidelines, and designed to ensure acoustic comfort and contribute to the decoration of a space, based on a Reference Service Life of 50 years»

12. Product description: Metal frame in which an acoustic absorbent is inserted and covered by an open-weave sound-permeable fabric (Aeria).

13. Description of the product use (area of application): The product conforms to the norm ISO 354\* which concerns the acoustic characteristics and should be installed according to the manufacturer's recommendations.

(\*) ISO 354:2003: Acoustics – Measurement of sound absorption in a reverberation room.

14. Main performance of the functional unit: 1m<sup>2</sup>

15. Other technical characteristics not included in the functional unit: For further information please consult the Technical Data Sheet of the product available from the manufacturer's website (<http://www.texaa.fr>).

16. Description of the principal components and materials of the product:

Parameter	Unit	Value
Product quantity	kg/m <sup>2</sup>	5.41E+00
Main components	kg/m <sup>2</sup>	Knitted mesh: 4.25E-01 Microporous cloth: 9.40E-02 100% recycled absorbent: 1.93E+00 Metal frame: 2.21E+00 Fixtures: 7.55E-01
Complementary products quantity	kg/m <sup>2</sup>	-
Distribution packaging	kg/m <sup>2</sup>	Wood: 5.10E-01 Cardboard: 7.11E-01 Plastic: 4.10E-02
Installation waste rate	%	0%
Maintenance waste rate	%	Not concerned
Justification for the information provided	-	All information is provided by Texaa

17. Specify if the product contains substances featured on the Candidate List from the REACH regulations (if greater than 0.1% by mass of the total product):

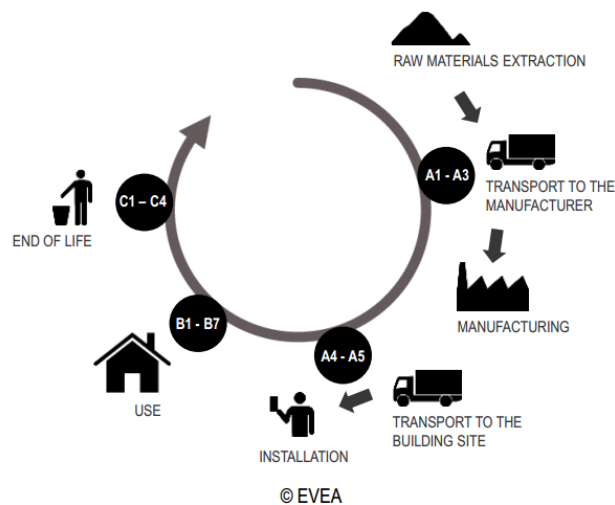
The product contains no substances featured on the Candidate List from the REACH regulations greater than 0.1% by mass of the total product.

18. Description of the Reference Service Life (if applicable and in conformance with §7.2.2 of the NF EN 15804+A1)

Parameter	Unit	Value
Reference Service Life	Years	50
Declared properties of the product at the factory gate	-	-
Theoretical parameters	-	-
Assumed quality of work	-	The quality of work is assumed to be in accordance with the recommendations of the manufacturer.
Exterior environment	-	Not concerned
Interior environment	-	Relative humidity: 30% - 75% Temperature: 10° – 30°C
Conditions of use	-	The use of this product is assumed to be in accordance with the recommendations of the manufacturer.
Maintenance	-	Details about the maintenance of the product are given in paragraph 4.3.

## 4 LIFE CYCLE STAGES

Diagram of the product life-cycle:



### 4.1 Production stages, A1-A3

The modules A1 to A3 include all of the processes from the extraction of raw materials up to their transformation into the finished product.

The product is produced by assembling all its components. Acoustic absorbent is inserted in a metallic frame. It is then covered with a microporous cloth and knitted acoustic textile.

### 4.2 Construction stages, A4-A5

**Transport to installation site:**

Parameter	Unit	Value
Scenario description	-	The product is delivered by truck from Texaa's factory directly to their customers.
Type of fuel and vehicle consumption or type of vehicle	-	The vehicles considered are Euro 5 trucks with a useful load of 16-32 tons.
Distance to installation site	km	662
Capacity used	%	36 (empty returns included)
Volumetric mass of transported product	kg/m <sup>3</sup>	-
Volumetric capacity utilization coefficient	-	<1

**Installation in the building:**

Parameter	Unit	Value
Scenario description	-	The packaging waste is recycled.
Installation auxiliary inputs	kg	Dowels : 4.00E-03 Screws : 2.00E-02
Water consumption	m <sup>3</sup>	-
Use of other resources	kg	-
Energy consumption	kWh	5.00E-03
Waste	kg	Wood: 5.10E-01 Cardboard: 7.11E-01 Plastic: 4.10E-02
Direct emissions to air, soil and water	kg	-

### 4.3 Use stages, B1-B7

#### B1 Use:

Parameter	Unit	Value/Description
Scenario description		Further information about the emission of volatile pollutants by the product in question is given in paragraph 7.

#### B2 Maintenance:

Parameter	Unit	Value/Description
Scenario description		The product is cleaned once per year using a vacuum cleaner, modelled by an electricity consumption and a quantity of vacuum bag and dust, considered 50% incinerated and 50% landfilled. The machine itself is considered as being used a sufficient number of times for the impacts to be negligible, and as such it is not included in this study.
Maintenance frequency	year	Once per year (one cycle)
Auxiliary flows for normal maintenance	kg/cycle	Vacuum bag: 1.00E-03
Waste produced	kg/cycle	Vacuum bag and dust: 1.00E-03
Water consumption	m <sup>3</sup>	-
Energy flows for normal maintenance	kWh	4.16E-03

#### B3 Repair:

No repair planned on the reference service life.

#### B4 Replacement:

No replacement planned on the reference service life

#### B5 Refurbishment:

No rehabilitation planned on the reference service life.

#### B6 – B7 Use of energy and water:

The products do not consume energy or water on the reference service life.

### 4.4 End of Life stages, C1-C4

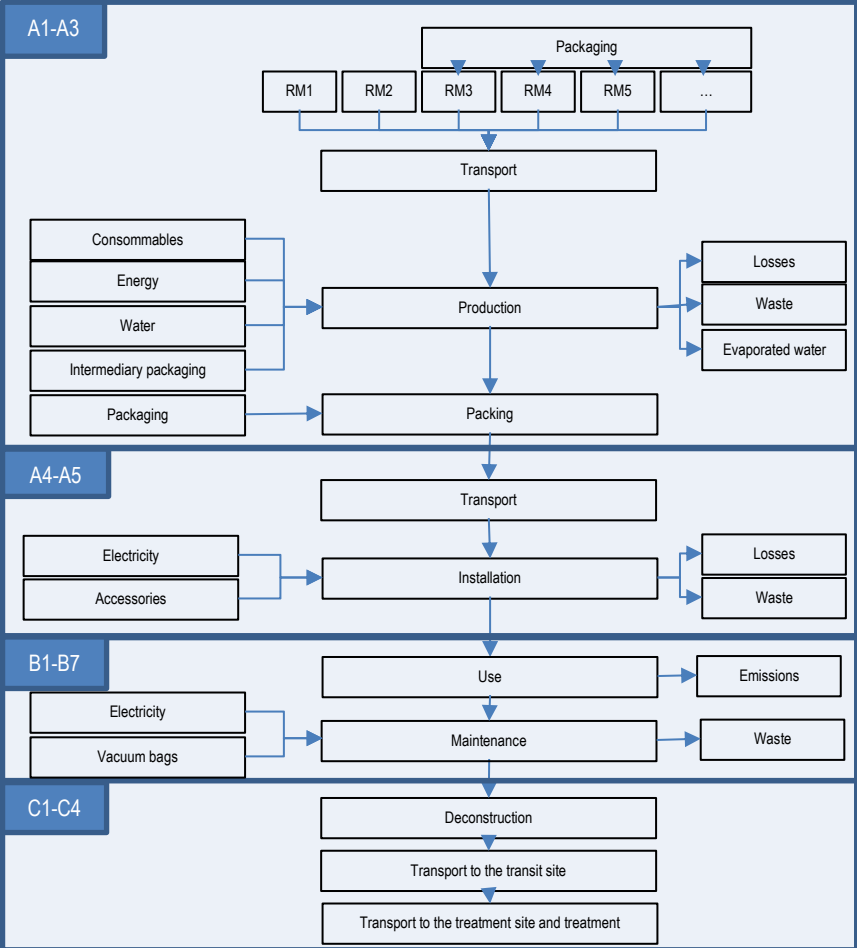

Parameter	Unit	Value/Description
Scenario description		The product is considered as being removed by hand. 90% of the metallic components (frame, fixtures) are transported 375km to be recycled. 130km is assumed between the deconstruction site and the landfill site for the other components that are considered 100% landfilled.
Quantity collected separately	kg	2.60E+00
Quantity collected with mixed construction waste	kg	2.83E+00
Quantity destined for reuse	kg	-
Quantity for recycling	kg	2.60E+00
Quantity for energy recovery	kg	-
Quantity of disposed product	kg	2.83E+00

### 4.5 Potential for recycling/re-use/recovery, D

The module D has not been taken into account for this study.



## 5 INFORMATION FOR THE LIFE CYCLE ANALYSIS CALCULATION

PCR used	NF EN 15804+A1:2014 and NF EN 15804/CN:2016.
System limits	<p>The limits of the system respect the requirements of the norm NF EN 15804+A1 and the French national complement NF EN 15804/CN.</p> 
Cut-off criteria	The entire product and its life cycle are taken into account.
Allocations	Surface
Geographical and temporal representation of the primary data	<p>Manufacturer data is based on a collect performed for the year 2019. Generic data is provided by the ecoinvent 3.8 database (2021)</p> <p>Software used:</p> <p><b>SimaPro</b> SimaPro, Life Cycle Analysis software (version 9).</p> <p> - Ev-DEC, (<a href="http://www.ev-dec.com">www.ev-dec.com</a>), developed by the consultancy company EVEA (<a href="http://www.evea-conseil.com">www.evea-conseil.com</a>), which aids in the creation of EPDs.</p>
Variability of the results	Not concerned

## 6 LIFE CYCLE ANALYSIS RESULTS

Impacts environnementaux	Etape de production			Etape de mise en œuvre		Etape de vie en œuvre							Etape de fin de vie				D Bénéfices et charges au-delà des frontières du système
	A1 Approvisionnement en matières premières	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Usage	B2 Maintenance	B3 Réparation	B4 Remplacement	B5 Réhabilitation	B6 Utilisation de l'énergie	B7 Utilisation de l'eau	C1 Déconstruction /Démolition	C2 Transport	C3 Traitement des déchets	C4 Elimination	
Réchauffement climatique kg CO <sub>2</sub> eq/UF	1,48E+01	3,46E-01	6,27E+00	6,47E-01	1,79E-01	0,00E+00	3,55E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,68E-02	1,47E-01	2,40E-01	N.C.
Appauvrissement de la couche d'ozone kg CFC 11 eq/UF	2,34E-05	6,42E-08	4,70E-07	1,20E-07	1,71E-08	0,00E+00	7,37E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,97E-09	2,73E-08	1,53E-08	N.C.
Acidification des sols et de l'eau kg SO <sub>2</sub> eq/UF	5,53E-02	1,10E-03	2,33E-02	1,52E-03	6,06E-04	0,00E+00	1,13E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,53E-05	4,68E-04	2,96E-04	N.C.
Eutrophisation kg (PO <sub>4</sub> ) <sup>3-</sup> eq/UF	8,09E-03	1,79E-04	4,64E-03	1,94E-04	9,64E-05	0,00E+00	2,76E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,39E-05	7,62E-05	1,96E-04	N.C.
Formation d'ozone photochimique kg Ethene eq/UF	1,20E-02	1,79E-04	2,75E-03	2,97E-04	1,20E-04	4,02E-06	1,42E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,38E-05	7,59E-05	8,02E-05	N.C.
Epuisement des ressources abiotiques (éléments) kg Sb eq/UF	1,85E-04	1,39E-06	2,34E-05	2,64E-06	1,66E-06	0,00E+00	9,17E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,07E-07	5,90E-07	2,82E-07	N.C.
Épuisement des ressources abiotiques (fossiles) MJ PCI/UF	1,92E+02	5,18E+00	7,99E+01	9,70E+00	2,24E+00	0,00E+00	2,82E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,01E-01	2,20E+00	1,28E+00	N.C.
Pollution de l'eau m <sup>3</sup> /UF	9,75E+00	1,27E-01	2,70E+00	2,38E-01	6,41E-02	0,00E+00	1,10E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,84E-03	5,40E-02	4,94E-02	N.C.
Pollution de l'air m <sup>3</sup> /UF	2,97E+03	3,65E+01	5,07E+02	6,38E+01	2,75E+01	6,95E-02	2,61E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,83E+00	1,55E+01	7,73E+00	N.C.

\*N.C: Not calculated

Resource use	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Use of renewable primary energy excluding the renewable primary energy resources used as raw materials MJ PCI/FU	2,24E+01	7,46E-02	1,42E+01	1,42E-01	1,42E-01	0,00E+00	2,06E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,77E-03	3,18E-02	4,07E-02	N.C.
Use of renewable primary energy resources used as raw materials MJ PCI/FU	6,67E+00	0,00E+00	6,04E+00	0,00E+00	-9,56E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) MJ PCI/FU	2,90E+01	7,46E-02	2,02E+01	1,42E-01	-9,41E+00	0,00E+00	2,06E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,77E-03	3,18E-02	4,07E-02	N.C.
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials MJ PCI/FU	1,59E+02	5,29E+00	1,05E+02	9,91E+00	2,61E+00	0,00E+00	2,56E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,10E-01	2,25E+00	1,32E+00	N.C.
Use of non-renewable primary energy resources used as raw materials MJ PCI/FU	6,60E+01	0,00E+00	6,88E-01	0,00E+00	-1,71E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) MJ PCI/FU	2,25E+02	5,29E+00	1,06E+02	9,91E+00	8,97E-01	0,00E+00	2,56E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,10E-01	2,25E+00	1,32E+00	N.C.
Use of secondary materials kg/FU	3,11E+00	0,00E+00	5,41E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Use of renewable secondary fuels MJ PCI/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Use of non-renewable secondary fuels MJ PCI/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Net use of fresh water resources m3/FU	1,57E-01	5,41E-04	1,33E-01	1,03E-03	1,08E-03	0,00E+00	7,97E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,19E-05	2,30E-04	8,51E-04	N.C.

\*N.C: Not calculated

Waste categories	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
<b>Hazardous waste disposed</b> kg/FU	2,97E+00	3,83E-03	1,48E-01	7,26E-03	2,16E-02	0,00E+00	7,85E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,96E-04	1,63E-03	1,25E-03	N.C.
<b>Non-hazardous waste disposed</b> kg/FU	9,81E+00	3,03E-01	2,44E+00	5,76E-01	1,15E-01	0,00E+00	4,50E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,34E-02	1,29E-01	2,88E+00	N.C.
<b>Radioactive waste disposed</b> kg/FU	7,16E-04	3,58E-05	5,81E-04	6,69E-05	1,27E-05	0,00E+00	3,31E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,77E-06	1,52E-05	8,82E-06	N.C.

\*N.C: Not calculated

Output flows		Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits	
		A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination		
Components for re-use kg/FU		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Materials for recycling kg/FU		0,00E+00	0,00E+00	9,01E-01	0,00E+00	6,52E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,60E+00	0,00E+00	0,00E+00	N.C.
Materials for energy recovery kg/FU		0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
Exported energy MJ/FU	Electricity	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
	Vapor	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.
	Gas	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	N.C.

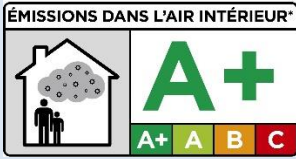
\*N.C: Not calculated

Impact category/flow	Unit	Total Fabrication	Total Installation	Total Use	Total End of Life	Total Life Cycle
Global Warming Potential	kg CO2 eq/FU	2,14E+01	8,26E-01	3,55E-02	4,14E-01	2,27E+01
Depletion potential of the stratospheric ozone layer	kg CFC 11 eq/FU	2,39E-05	1,37E-07	7,37E-09	4,76E-08	2,41E-05
Acidification Potential of soil and water	kg SO2 eq/FU	7,97E-02	2,13E-03	1,13E-04	8,50E-04	8,28E-02
Eutrophication Potential	kg (PO4)3- eq/FU	1,29E-02	2,90E-04	2,76E-05	2,86E-04	1,35E-02
Formation potential of tropospheric ozone	kg Ethene eq/FU	1,49E-02	4,17E-04	1,83E-05	1,70E-04	1,55E-02
Abiotic depletion potential – non-fossil (ADP-elements)	kg Sb eq/FU	2,10E-04	4,30E-06	9,17E-07	9,79E-07	2,16E-04
Abiotic depletion potential – fossil (ADP-fossil fuels)	MJ PCI/FU	2,78E+02	1,19E+01	2,82E-01	3,88E+00	2,94E+02
Water Pollution	m3/FU	1,26E+01	3,02E-01	1,10E-02	1,13E-01	1,30E+01
Air Pollution	m3/FU	3,52E+03	9,13E+01	2,68E+00	2,61E+01	3,64E+03
Use of renewable primary energy excluding the renewable primary energy resources used as raw materials	MJ PCI/FU	3,66E+01	2,84E-01	2,06E-01	7,84E-02	3,72E+01
Use of renewable primary energy resources used as raw materials	MJ PCI/FU	1,27E+01	-9,56E+00	0,00E+00	0,00E+00	3,16E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ PCI/FU	4,94E+01	-9,27E+00	2,06E-01	7,84E-02	4,04E+01
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ PCI/FU	2,70E+02	1,25E+01	2,56E+00	3,98E+00	2,89E+02
Use of non-renewable primary energy resources used as raw materials	MJ PCI/FU	6,66E+01	-1,71E+00	0,00E+00	0,00E+00	6,49E+01
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ PCI/FU	3,36E+02	1,08E+01	2,56E+00	3,98E+00	3,54E+02
Use of secondary materials	kg/FU	3,16E+00	0,00E+00	0,00E+00	0,00E+00	3,16E+00
Use of renewable secondary fuels	MJ PCI/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of non-renewable secondary fuels	MJ PCI/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Net use of fresh water resources	m3/FU	2,91E-01	2,11E-03	7,97E-04	1,12E-03	2,95E-01
Hazardous waste disposed	kg/FU	3,12E+00	2,88E-02	7,85E-03	3,17E-03	3,16E+00
Non-hazardous waste disposed	kg/FU	1,25E+01	6,91E-01	4,50E-02	3,03E+00	1,63E+01
Radioactive waste disposed	kg/FU	1,33E-03	7,96E-05	3,31E-05	2,68E-05	1,47E-03
Components for re-use	kg/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg/FU	9,01E-01	6,52E-01	0,00E+00	2,60E+00	4,15E+00
Materials for energy recovery	kg/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy (electricity)	MJ/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy (vapor)	MJ/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy (gas)	MJ/FU	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Table of life cycle assessment results posted in accordance with Decree No. 2013-1264 of December 23, 2013<sup>1</sup>

<sup>1</sup> Decree No. 2013-1264 of 23 December 2013 on the environmental declaration of certain construction products intended for use in building works

## 7 ADDITIONAL INFORMATION ON THE RELEASE OF HAZARDOUS SUBSTANCES INTO INDOOR AIR, SOIL AND WATER DURING THE PERIOD OF USE

		Results	Report																																				
Emission to indoor air <sup>1 2</sup>	VOC and formaldehyde emissions	 <table border="1" data-bbox="679 539 1235 1037"> <thead> <tr> <th>Substance</th> <th>Unit</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>Formaldehyde (CAS number : 50-00-0)</td> <td>µg/m3</td> <td>&lt; 3</td> </tr> <tr> <td>Acetaldehyde (CAS number: 75-07-0)</td> <td>µg/m3</td> <td>&lt; 3</td> </tr> <tr> <td>Toluene (CAS number: 108-88-3)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>Tetrachloroethylene (CAS number: 127-18-4)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>Xylene (CAS number: 1330-20-7)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>1,2,4-trimethylbenzene (CAS number: 95-63-6)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>1,4-dichlorobenzene (CAS number: 106-46-7)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>Ethylbenzene (CAS number: 100-41-4)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>2-Butoxyethanol (CAS number: 111-76-2)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>Styrene (CAS number: 100-42-5)</td> <td>µg/m3</td> <td>&lt; 2</td> </tr> <tr> <td>Total Volatile Organic Compounds (TVOC)</td> <td>µg/m3</td> <td>&lt; 5</td> </tr> </tbody> </table>	Substance	Unit	Quantity	Formaldehyde (CAS number : 50-00-0)	µg/m3	< 3	Acetaldehyde (CAS number: 75-07-0)	µg/m3	< 3	Toluene (CAS number: 108-88-3)	µg/m3	< 2	Tetrachloroethylene (CAS number: 127-18-4)	µg/m3	< 2	Xylene (CAS number: 1330-20-7)	µg/m3	< 2	1,2,4-trimethylbenzene (CAS number: 95-63-6)	µg/m3	< 2	1,4-dichlorobenzene (CAS number: 106-46-7)	µg/m3	< 2	Ethylbenzene (CAS number: 100-41-4)	µg/m3	< 2	2-Butoxyethanol (CAS number: 111-76-2)	µg/m3	< 2	Styrene (CAS number: 100-42-5)	µg/m3	< 2	Total Volatile Organic Compounds (TVOC)	µg/m3	< 5	Report n°392-2019- 00163101_B_FR
	Substance	Unit	Quantity																																				
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Total Volatile Organic Compounds (TVOC)	µg/m3	< 5																																					
	Behaviour against fungal and bacterial growth	No available data	-																																				
	Natural radioactive emissions from construction products	No available data	-																																				
	Fibre and particle emissions	No emission of fibers of particles Friction test > 18 000 according to the norm NF EN ISO 12947-2	PV n° MA 19-0128-1468																																				
Emission to soil and water <sup>1 2</sup>	Emissions into water	No available data	-																																				
	Emissions into the soil	No available data	-																																				

1) Emissions to indoor air, soil and water according to horizontal norms for the measurement of emissions of regulated hazardous substances from construction products using harmonised test methods in accordance with the provisions of the respective Technical Committees of the European Product Standards. where available.

For more information. refer to the EeB Guide: <http://www.eebguide.eu/?p=1991>

2) In France. the INIES Base Technical Committee (CTIB) gives recommendations on the declaration of health and comfort characteristics - Guide to writing health and comfort summaries (CTIB N94, June 2018)

## 8 PRODUCT CONTRIBUTION TO THE QUALITY OF LIFE IN AN INDOOR ENVIRONMENT

### Product characteristics contributing to the hygro-thermic comfort of the building:

The product does not contribute to the hygro-thermic comfort of the building.

### Product characteristics contributing to the acoustic comfort of the building:

The product is an acoustic absorbent with the characteristics listed in the following table, according to the norm ISO 354:2003:

Frequency (Hz)	125	250	500	1000	2000	4000
<b>Panel 1 199 x 1 199 x 55 mm suspended, separated</b>						
<b>Equivalent absorption area A(m<sup>2</sup>)   Distance : 2 000mm</b>						
<b>Suspended from the roof separated at 300mm from the end (report : PV 1043)</b>	0,30	1,37	1,76	2,19	2,03	2,04
<b>Panel 1 199 x 1 199 x 55 mm attached to the support</b>						
<b>Equivalent absorption area A(m<sup>2</sup>)   Distance : 2 000mm</b>						
<b>Attached to the support, on the wall or at the roof (report : PV 1044)</b>	0,20	0,88	1,87	1,78	1,43	1,50

\*the indicated values are for the equivalent absorption areas mentioned in m<sup>2</sup>

Texaa's acoustic laboratory has undergone circular comparative testing with other laboratories, in particular those of the FCBA.

### Product characteristics contributing to the visual comfort of the building:

- The product contributes to the decoration of a space, providing architects a wide range of colors to help the visual comfort of users, and is adaptable depending on the desired use.
- Light reflection: 81% for the color Nacre MR640, colorimetry Datacolor V3.13
- Light fastness: the light fastness of the product is  $\geq 5$  according to the norm NF EN ISO 105-B02.

### Product characteristics involved in creating olfactory comfort conditions in the building:

The product does not claim any olfactory performance.

### Product characteristics contributing to the health aspects of the building:

The antistatic and waterproof surface of the Aeria textile limits the accumulation of dust and dirt. The recommended maintenance schemes are available from the manufacturer.