

THERMAL CERAMICS

Environmental information module
For the production of BATIBOARD 100

**THICKNESSES 30, 40, 60 (without AD), 60
(with AD) and 80 mm**

(Summary)

N° Sitek : E-FDES 09-008

Edition September 2009 – Version n°1

This Information module is issued by Thermal Ceramics – Sitek Division, it is written in accordance with the methodological requirements of the NF P 01-010 and ISO 14025 standards.

The presentation model used for this environmental information module is the « Fiche de Déclaration Environnementale et Sanitaire » established by the AIMCC – French Construction Products Industry Association (FDE&S version 2005)

INTRODUCTION

The aim of this information module is to provide fire door (or other type of building element) manufacturers with the environmental and health characteristics of BATIBOARD 100 with thicknesses of 30, 40, 60 (without AD), 60 (with AD) and 80 mm, established from cradle to gate.

The BATIBOARD 100 boards mentioned in this declaration are as follows:

Product	Thickness (mm)	Number of layers	Sanding		Dust free treatment (AD)
			Top	Back	
BATIBOARD 100 One layer	30 and 40	1	yes	no	yes
BATIBOARD 100 2 layers	60	2	yes	no	no
BATIBOARD 100 2 layers	60 and 80	2	yes	no	Yes

In order to simplify the presentation and reading, we will use the **60 mm thick product, treated with Anti-Dust, BATIBOARD 100** as a reference.

The model used for the presentation of the following environmental information module is the « Fiche de Déclaration Environnementale et Sanitaire » established by the AIMCC – French Construction Products Industry Association (FDE&S version 2005).

This file is a common framework for all building products. It is adapted to the presentation of environmental and health characteristics of building products in compliance with the requirements of the French standard NF P 01-010 and to the supply of additional comments and information in the spirit of the standard as concerns sincerity as well as transparency (NF P 01-010 § 4.2).

An accompanying report of the information module (Sitek ref.: F-RA 09-002) was established. It can be consulted under a confidentiality agreement at the THERMAL CERAMICS head office, SITEK division.

This environmental information module file is being checked by an independent third party (AFNOR certified reviewer).

Data producer (NF P 01-010 § 4).

The information in this module is provided under the responsibility of the manufacturer of BATIBOARD 100 boards, THERMAL CERAMICS, under the standard *NF P 01-010 § 4.6*.

Use of the environmental information module

Only THERMAL CERAMICS and its clients, with the company's agreement, may claim authorship of this file.

Any use, complete or partial, of the information supplied herein must be accompanied by, at least, the complete reference to the original environmental information module: « Full title, release date, issuer's address », (issuer who may provide an original copy).

Contacts

- **René Da Silva**
THERMAL CERAMICS - Division SITEK
5, boulevard Marcel Pourtout
92563 Rueil-Malmaison Cedex
Tel: +33 (0)1 47 16 22 45

- **Patrick Deghilage**
THERMAL CERAMICS
ZI Les Plantées
42680 Saint-Marcellin en Forez
Tél : +33 (0)4 77 52 73 14

ENVIRONMENTAL AND HEALTH SUMMARY
IN COMPLIANCE WITH NF P 01-010
ENVIRONMENTAL INFORMATION MODULE – EDITION SEPTEMBER 2009

Characterisation of the product

▪ **Definition of the Functional Unit (FU) :**

One (1) m² of BATIBOARD 100 board with thicknesses of 30, 40, 60 (without AD), 60 (with AD) and 80 mm, giving the door (or other type of building element) in which it is incorporated a fire resistance performance of at least half an hour.

Included are:

- The distribution packaging

▪ **Typical Total Lifetime:** at least equal to that of the door

▪ **Technical characteristics not included in the FU:** thermal resistance, acoustic insulation, compressibility, reaction and resistance to fire and light weight

▪ **Content** (according to AIMCC n° 3-07) :

Main constituents:

- *Expanded Perlite:* 52.85 % of the total FU weight (product + packaging)
- *External recycled waste:* 29.77 %
- *Bitumen emulsion:* 4.74 %
- *Starch:* 3.24 %
- *Miscellaneous additives:* 3.34 %
- *Packaging:* 4,11 %

▪ **Product's contribution to the evaluation of health risks and life quality within the buildings**

Contribution of the product		Expression
To the evaluation of health risks	Health quality of indoor spaces	Radioactive emission: Dose excess of gamma radiation < 0.3 mSv/year. COV emission: non relevant Fibres and particles emission: non relevant Micro organisms and mould: non relevant
	Health quality of water	Non relevant
To the life quality	Hygrothermal comfort	Thermal conductivity of the material EPB = 0.050 W/m.K ; Thermal inertia (summer comfort) : Cp > 900 J/kg and high density = 150 kg/m ³
	Acoustic comfort	Acoustic airborne sound reduction index (Rw) = 27 dB for a BATIBOARD board with a surface mass ≥ 11 kg/m ²
	Visual comfort	Non relevant
	Olfactory comfort	Non relevant

▪ **Environmental impact indicators (only production)**

N°	Environnemental impact	Thicknesses					Unit
		30mm	40mm	60mm (without AD)	60mm (with AD)	80mm	
1	Energy resources consumption:						
	Total primary energy	153	200	301	304	398	MJ
	Renewable energy	11.27	14.97	24.08	24.11	31.52	MJ
	Non-renewable energy	141	185	277	280	366	MJ
2	Resources depletion (ADP)	0.04997	0.06530	0.09840	0.09937	0.1300	kg equivalent antimoine (Sb)
3	Total water consumption	61.72	75.94	105.15	108.0	136.4	litre
4	Solid waste:						
	Recovered waste (total)	0.0121	0.0162	0.0242	0.0242	0.0323	kg
	Eliminated waste:						
	Dangerous waste	0.001332	0.001771	0.002672	0.002690	0.003568	kg
	Non-dangerous waste	0.110	0.119	0.133	0.144	0.161	kg
	Inert waste	0.430	0.561	0.912	0.923	1.19	kg
	Radioactive waste	0.000348	0.000454	0.000670	0.000682	0.000892	kg
5	Climate change	6.98	9.11	13.76	13.88	18.14	kg equivalent CO ₂
6	Atmospheric acidification	0.0145	0.0189	0.0292	0.0301	0.0389	kg equivalent SO ₂
7	Air pollution	215	281	448	459	591	m ³
8	Water pollution	14.68	19.14	28.51	28.86	37.80	m ³
9	Stratospheric ozone layer destruction	0	0	0	0	0	kg CFC equivalent R11
10	Photochemical ozone formation	0.000494	0.000637	0.000950	0.001018	0.001304	kg equivalent ethylene

▪ **For further enquiries**

➤ FDES issuer: Thermal Ceramics

