THERMAL CERAMICS

Environmental information module

For the production of BATIBOARD 200

THICKNESSES 30, 32, 40, 48, 50, 60 and 80 mm

(Summary)

N° Sitek : E-FDES 09-010

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 200 with thicknesses of 30, 32, 40, 48, 50, 60 and 80 mm, established from cradle to gate.
The BATIBOARD 200 boards mentioned in this information module are as follows:

Product	Thickness (mm)	Number of layers	Sanding		Dust free treatment (AD)
			Top	*Back*	
BATIBOARD 200 One layer	30, 32, 40 and 50	1	yes	no	yes
BATIBOARD 200 One layer	48	1	yes	yes	yes
BATIBOARD 200 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 200** 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 09-004) 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 200 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) m^2 of BATIBOARD 200 board with thicknesses of 30, 32, 40, 48, 50, 60, and 80 mm, giving the door (or other type of building element) in which it is incorporated a fire resistance performance of at least one 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 :* *21.00% of the total FU weight (product + packaging)*
- *External recycled wastes:* *22.06%*
- *Miscellaneous additives :* *3.75%*
- *Kaolin :* *22.96%*
- *Stone wool :* *21.55%*
- *Binders :* *3.21%*
- *Packaging :* *2.75%*

- **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 = 0.060 W/m.K ; Thermal inertia (summer comfort) : Cp > 900 J/kg and high density = 260 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°	Environmental impact	Thicknesses							Unit
1	Energy resources consumption:	30mm	32mm	40mm	48mm	50mm	60mm	80mm	
	Total primary energy	263	279	345	411	428	515	680	MJ
	Renewable energy	21.00	22.38	27.93	33.48	34.86	42.16	56.02	MJ
	Non-renewable energy	242	257	317	378	393	473	624	MJ
2	Resources depletion (ADP)	0.08377	0.08902	0.1100	0.1310	0.1363	0.1641	0.2168	kg equivalent antimoine (Sb)
3	Total water consumption	179.99	191.59	237.95	284.32	295.92	359.83	475.75	litre
4	Solid waste:								
	Recovered waste (total)	0.0192	0.0205	0.0256	0.0307	0.0320	0.0384	0.0512	kg
	Eliminated waste:								
	Dangerous waste	0.006042	0.006443	0.008047	0.009650	0.01005	0.0121	0.01607	kg
	Non-dangerous waste	0.271	0.284	0.333	0.383	0.395	0.459	0.582	kg
	Inert waste	2.05	2.19	2.72	3.26	3.39	4.07	5.41	kg
	Radioactive waste	0.000736	0.000781	0.000963	0.001144	0.001190	0.001422	0.001876	kg
5	Climate change	12.64	13.43	16.60	19.77	20.56	24.66	32.59	kg equivalent CO_2
6	Atmospheric acidification	0.0380	0.0405	0.0502	0.0598	0.0623	0.0749	0.0991	kg equivalent SO_2
7	Air pollution	1051	1119	1392	1666	1734	2085	2769	m^3
8	Water pollution	30.28	32.19	39.80	47.42	49.32	59.00	78.04	m^3
9	Stratospheric ozone layer destruction	0	0	0	0	0	0	0	kg CFC equivalent R11
10	Photochemical ozone formation	0.001035	0.001095	0.001334	0.001572	0.001632	0.001942	0.002539	kg equivalent ethylene

- **For further enquiries**

  - FDES issuer: Thermal Ceramics