Reaction to fire classification report No. 17410F

Owner of the classification report

PCIM sa
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Introduction

This classification report defines the classification assigned to the product **'i3'** in accordance with the procedures given in the standard EN 13501-1:2007+A1:2009: Fire classification of construction products and building elements - Part 1: classification using data from reaction to fire tests.

This classification report consists of 6 pages

1. DETAILS OF CLASSIFIED PRODUCT

a) Nature and end use application

The product **i3** is defined as a 'cellulose wadding'.
Its classification is valid for the following end use application(s):
Used as loose-fill cellulose insulation for thermal and/or sound insulation of buildings.

b) Description of the tested products

This description is based on information given by the sponsor.

	Nominal values
i3 (*)	
Type of product	Cellulose wadding used as loose-fill cellulose insulation.
Manufacturer	PCIM sa
Supplier	PCIM sa
Density (kg/m³)	44 & 60 (EN ISO 11925-2) 43,72 & 57,66 (EN 13823)
Use of fire retardants	Yes
Amount of fire retardants (%)	Known by the laboratory
Colour	Grey

(*) Also commercially known as **i3 CELLULOSE and CELLULOSE i3.**

2. TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

a) Test reports

Name of the laboratory	Name of the sponsor	Test report ref. No. and test date	Test method
WFRGENT nv Ghent, Belgium	PCIM sa Achêne, Belgium	17410C: 12/10/2015 17410D: 12/10/2015	EN ISO 11925-2 (November 2010/AC:2011)
WFRGENT nv Ghent, Belgium	PCIM sa Achêne, Belgium	17410A: 05/10/2015 17410B: 12/10/2015	EN 13823 (July 2010+A1:2014)
WFRGENT nv Ghent, Belgium	PCIM sa Achêne, Belgium	17410E	EXAP according to CEN/TS 15117 (August 2005)

b) Test samples

Test report ref. No.	Sampling procedure: Assessment and Verification of Constancy of Performance (AVCP)	Conditioning	Number of samples tested
17410A	System 1	To constant mass	2 x 1
17410B	System 1	To constant mass	3
17410C	System 1	To constant mass	2 x 3
17410D	System 1	To constant mass	6

c) Test results

Test method	Parameter	Number of tests	Results		Criteria for Class B-s2,d0	
			Continuous parameters Mean	Compliance parameters	Continuous parameters	Compliance parameters
EN ISO 11925-2 (*) (1) 30 s flame application:						
Surface exposure	$F_s \leq 150$ mm	6	(-)	Yes	(-)	Yes
- front side	Ignition filter paper		(-)	No	(-)	No
Edge exposure (**)	$F_s \leq 150$ mm	(-)	(-)	(-)	(-)	(-)
- front side	Ignition filter paper		(-)	(-)	(-)	(-)
(*) The material didn't melt nor pull away from the pilot burner. *(**) According to EN ISO 11925-2, edge flame attack tests are not necessary. Therefore only surface exposure has been performed.* *1. Based on the results obtained in test report No. 17410D – i3 (44 kg/m³).*						
EN 13823 (2)	FIGRA $_{0,2\ MJ}$ (W/s)	3	83	(-)	≤ 120	(-)
	FIGRA $_{0,4\ MJ}$ (W/s)		73	(-)	(-)	(-)
	$LFS_{<edge}$		(-)	Yes	(-)	Yes
	THR_{600s} (MJ)		5,3	(-)	≤ 7,5	(-)
	SMOGRA (m²/s²)		8	(-)	≤ 180	(-)
	TSP_{600s} (m²)		87	(-)	≤ 200	(-)
	Flaming droplets/particles					
	f < 10 s		(-)	No	(-)	No
	f > 10 s		(-)	No	(-)	No
2. Based on the results obtained in test report No. 17410B – i3 (57,03 kg/m³).						

(-) Not applicable.

Preliminary tests EN ISO 11925-2

	$F_s \leq 150mm$	Ignition filter paper	Average maximal flame spread (mm)
i3 (44 kg/m³)	Yes	No	110,0
i3 (60 kg/m³)	Yes	No	106,7

Based on the results obtained in test report No. 17410C: only 3 tests of surface exposure were performed instead of the standard 6 replicates.

Preliminary tests EN 13823

	FIGRA (W/s)	THR_{600S} (MJ)	SMOGRA (m²/s²)	TSP_{600S} (m²)
i3 (43,72 kg/m³)	63	3,9	8	81
i3 (57,66 kg/m³)	88	5,2	8	82

Based on the results obtained in test report No. 17410A: Only one single test on each product has been carried out instead of the standard three replicates.

3. CLASSIFICATION AND FIELD OF APPLICATION

a) Reference of classification

This classification has been carried out in accordance with EN 13501-1:2007+A1:2009 and is based on the product standard EN 15101-1:2013.

b) Classification

The product **i3** in relation to its reaction to fire behavior is classified as:

Fire behavior	Smoke production	Flaming droplets
B	**s2**	**d0**

c) Field of application

This classification for the product as described in §1b, is valid for the following end use conditions:

- Substrate: Euroclass E or better with a nominal thickness of at least 18 mm and a nominal density of at least 220 kg/m³
- With or without air gap
- Valid for all product sizes
- Fixing: Valid for all product fixings

This classification is valid for the following product parameters:

- Commercial names: **i3, i3 CELLULOSE and CELLULOSE I3**
- Nominal thickness: Valid for all thicknesses
- Nominal density: All densities between or equal to 40 kg/m³ and 57,66 kg/m³
- Use of fire retardants: Yes
- Amount of fire retardants: Known by the laboratory
- Colour: Grey

4. RESTRICTIONS

At the time the standard EN 13501-1:2007+A1:2009 was published, no decision was made concerning the duration of validity of a classification report.

Provisions of Regulation (EU) 305/2011, commonly known as the Construction Products Regulation (CPR), prevail over any conflicting provisions in the harmonised standards and technical specifications.

5. WARNING

This classification report does not represent type approval nor certification of the product.

The classification assigned to the product in this report is appropriate to a Declaration of Performance (DoP) of the essential characteristics of the construction product by the manufacturer within the context of a System 1 Assessment and Verification of Constancy of Performance (AVCP).
Under the Construction Products Regulation (CPR: EU 305/2011), such a Declaration of Performance (DoP) is a requirement for affixing the CE marking.

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