



le futur en construction

SAFETY, STRUCTURES AND FIRE DEPARTMENT

Reaction to fire

REACTION TO FIRE CLASSIFICATION REPORT

No. RA09-0372

ACCORDING TO THE EUROPEAN STANDARD

NF EN 13501-1

Provided the Ordinance from the Ministry of the interior, November 21, 2002.
Pilot laboratory approved by the Ministry of the Interior (Ordinance of February 5, 1959, amended)
Seule la version française fait foi.
Only the French version is legally acceptable.

Valid 5 years as from October 16th, 2009

Owner: EDILTECO GROUP
Via dell'Industria, 710
41038 SAN FELICE s/P (MO)
ITALY

Commercial brand(s): POLITERM®

Brief description: Lightweight mortar
(see detailed description in paragraph 2)

Date of issue: October 16th, 2009

The indicated classification does not prejudice the conformity of marketed materials with the samples submitted to the tests and under no circumstances, this document should not be considered as type approval or certification of the product in the sense of the L 115-27 article of the consumption's code and of the law dated June 3rd, 1994.
If this report is being issued by e-mail and/or on an electronic medium, only the hard copy of the report signed by CSTB shall prevail in the event of a dispute.
The reproduction of this classification report is only authorised in its integral form.
It comprises 4 pages.

CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT

SIEGE SOCIAL > 84 AVENUE JEAN JAURÈS | CHAMPS-SUR-MARNE | 77447 MARNE-LA-VALLÉE CEDEX 2

TÉL. (33) 01 64 68 84 12 | FAX. (33) 01 64 68 84 79 | www.cstb.fr

MARNE LA VALLÉE | PARIS | GRENOBLE | NANTES | SUPPLÉMENT

1. Introduction

This classification report defines the classification assigned to the above-mentioned product(s) in accordance with the procedures given in the NF EN 13501-1 standard.

2. Product description

Lightweight mortar made of cement, water, polystyrene beads and possibly sand.
 Nominal densities: from 200 to 1500 kg/m³.
 Composition of the different versions (according to the owner):

Density (kg/m ³)	Cement (kg)	Politerm PSE beads (litres)	Sand (kg)	Water (litres)
200	200	850	0	80
300	300	850	0	140
500	300	850	190	140
800	300	680	500	140
1000	300	600	650	140
1200	300	510	850	140
1500	300	420	1050	140

3. Tests reports and tests results in support of this classification

3.1 Tests reports

Name of laboratory	Name of sponsor	Test identification	Test report Nos.	Test method
SP Vasterasen Brinellgatan 4 SE-504 62 BORAS SWEDEN	EDILTECO SPA Via dell'Industria, 710 41038 SAN FELICE s/P (MO) ITALY	-	P805640B	EN 13823
		-	P805640-01A	EN ISO 1716

3.2 Tests results

Test method	Product	Number of tests	Parameters	Results	
				Continuous parameters : mean value	Compliance parameters
EN 13823	POLITERM® (worst case, density of 200 kg/m³, maximum rate of polystyrene of 4.8 %)	3	FIGRA _{0,2MJ} (W/s)	0.0	-
			FIGRA _{0,4MJ} (W/s)	0.0	-
			LFS	-	-
			THR _{600s} (MJ)	0.5	-
			SMOGRA(m²/s²)	0.0	-
			TSP _{600s} (m²)	16	-
			Flaming droplets or debris	-	None
EN ISO 1716	Cement	3 (per component)	PCS (MJ/kg)	0,0	-
	Polystyrene beads		PCS (MJ/kg)	1.9 ⁽¹⁾	-
	Whole product (worst case, density of 200 kg/m³, maximum rate of polystyrene of 4.8 %)	-	PCS (MJ/kg)	1,9	-

(-) means: not applicable

⁽¹⁾ The Gross Heat of Combustion (PCS) of the polystyrene beads has been measured at 40.2 MJ/kg (test report P805640-01A from SP laboratory) and these polystyrene beads are distributed in a homogeneous way in the finished product with a maximum rate of 4.8 % (in weight). The PCS of the polystyrene beads must therefore be weighted and reduced to 4.8 % of 40.2 MJ/kg that is to say 1.9 MJ/kg.
 The overall PCS of the product is therefore the sum « PCS_{cement} + PCS_{weighted polystyrene beads} ».

4. Classification and direct field of application

4.1 Reference of the classification

This classification has been carried out in accordance with clauses 11.7.2, 11.9.2 and 11.10.1 of the NF EN 13501-1 standard.

4.2 Classification

Fire behaviour		Smoke production		Flaming droplets or debris
A2	-	s1	,	d0

Classification: A2 - s1, d0

4.3 Field of application

This classification is valid for the following product parameters:

- The versions described in paragraph 2.
- A range of nominal densities from 200 to 1500 kg/m³.

This classification is valid for the following end use conditions:

- On any wood based substrate with a density ≥ 630 kg/m³ and on any A1 or A2-s1,d0 class substrate with a density ≥ 700 kg/m³.

Champs-sur-Marne, October 16th, 2009

The Head of Reaction to Fire laboratory



Gildas CREACH

.....END OF THE CLASSIFICATION REPORT