

„MEŽA UN KOKSNES PRODUKTU PĒTNIECĪBAS UN ATTĪSTĪBAS INSTITŪTS” SIA
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Classification of reaction to fire performance in accordance with EN 13501-1:2007+A1:2009

Issue number: K19/2014

Date of issue: 26.09.2014.

Sponsor: „HEMPECO SYSTEMS LATVIA” SIA, Reg. No. 40103733379.

Customer's address: „Vakari”, Tīnūžu pag. Ikšķiles nov. LV-5015

Manufacturer: „HEMPECO SYSTEMS LATVIA” SIA

Prepared by: SIA “Meža un koksnes produktu pētniecības un attīstības institūts” (*Forest and Wood Products Research and Development Institute Ltd*).

Product name: Bio-composite HES-mix.

Laboratory involved in testing is accredited by the Latvian National Accreditation Bureau (LATAK) according to the standard LVS EN ISO/IEC 17025 under the terms of Latvian legislation with reg. No. T-316. Laboratory is a notified body with reg. No. NB 2040 under construction product regulation Nr. 305/2011.

Classification report refers only to these test objects. This classification report may not be reproduced otherwise than in full text, excepted with the prior written approval of the Forest and Wood Products Research and Development Institute

1. Introduction

This classification report defines the reaction to fire classification assigned to Bio-composite HES-mix in accordance with the procedures given in EN 13501-1:2007+A1:2009.

2. Details of classified product

2.1. General

Bio-composite HES-mix is defined as heat insulation system for buildings. Product is not defined by harmonised European product standard.

2.2. Product description

- Product name: Bio-composite HES-mix.
- Tested construction thickness: 150 mm.
- Product density: 340 kg/m³.
- Composition: hemp shives, hydrated lime, HES+ additive, water.

3. Test reports and test results in support of classification

3.1. Test reports

Name of laboratory	Name of sponsor	Test reports	Test method
SIA „Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	„HEMPECO SYSTEMS LATVIA” SIA	1272-1/2014	EN 13823:2010
SIA „Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	„HEMPECO SYSTEMS LATVIA” SIA	1272-2/2014	EN ISO 11925-2:2010

3.2. Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean	Compliance parameters
EN 13823:2010	$FIGRA_{0,2MJ}(W/s)$	3	41.6	Compliant
	$FIGRA_{0,4MJ}(W/s)$		25.7	(-)
	$THR_{600s}(MJ)$ <i>LFS</i>		2.5 <1000 mm	Compliant Compliant
	$SMOGRA(m^2/s^2)$		Threshold not reached	Compliant
	$TSP_{600s}(m^2)$		24.6	Compliant
	Flaming droplets <10s Flaming droplets >10s		no no	Compliant Compliant
EN ISO 11925-2:2010 Exposure time 30 s. Test duration 60 s.	Flame spread (Fs)	12	Less than 150 mm	Compliant
	Ignition of filter paper		no	(-)
	Flaming droplets/particles		no	(-)
(-) not applicable				

4. Classification and field of application

4.1. Reference of classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007+A1:2009.

4.2. Classification

Bio-composite HES-mix in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets/particles is:

d0

The format of the reaction to fire classification for construction product excluding floorings and linings is:

Fire behaviour		Smoke production			Flaming droplets	
B	-	s	1	,	d	0

Reaction to fire classification: B-s1-d0

4.3. Field of application

4.3.1 This classification is valid for the following end use applications:

Product primary end use application is heat insulation product for buildings.

4.3.2. This classification is also valid for following product variations:

Thickness: valid for thickness 150 mm and larger thicknesses.
Density: valid for density variation within 15% limits.
Composition: valid only for product composition as tested.

4.3.3. Classification valid for following substrates and air gaps:

Mounting: -
Substrates: -
Joints: product tested without joints.
Joint specification: -
Joint Protection: -
Coatings: valid without additional coatings.

5. Limitations.

5.1. No restrictions on the duration of validity of this classification report as long as the product specifications remain unchanged.

5.2. This document does not represent type approval or certification of the product.



Prepared by

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Reviewed by

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