

Laboratory for Fire Safety

Classification of reaction to fire in accordance with EN_13501-1:2018 of Compostboard hemp and flax

Classification report



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Client Compostboard

Boutenselaan 83 5644 TS Liessel The Netherlands

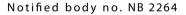
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Product name Compostboard of hemp and flax

Report number Y 3079-4E-RA-001
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Reference HL/DDe//Y 3079-4E-RA-001
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1 Introduction

On behalf of Compostboard an investigation was performed with respect to the reaction to fire properties of Compostboard hemp and flax.

This classification report defines the reaction to fire classification of the product in accordance with the procedures described in EN 13501-1: 2018.



For performing measurements, the Laboratory for Fire Safety of Peutz by is recognized by the Dutch Accreditation Body RvA..

The RvA is member of the **EA MLA** (European Accreditation Organisation MultiLateral Agreement). www.european-accreditation.org



2 Product description

2.1 General

The information in this report is based on information provided by the client.

The product investigated is Compostboard hemp and flax, hereinafter also called 'the product'. The intended application is interior wall decoration.

2.2 Harmonised product standard

According to the client there was no harmonised European product standard published at the time the tests were conducted and this report was drawn up.

2.3 Product identification

The most important parameters for identifying the product are summarized in Tables 2.1 and 2.2 below.

t2.1 General information of product to be tested

Product		
Date of delivery	04/06/2024	
Commercial name	Compostboard Hemp flax	
Produced by	name	Rik Makes BV
	address	Boutenslaan 83
		5644 TS Liessel
Identification	batchnr.	N/A
	date of manufacture	15/04/2023
	photo	
Sampling	date	15/04/2023
	by	Mr R. Maarsen
		Compostboard

Peutz was not involved in the selection of the test specimen (or of its materials). The laboratory cannot make any declaration about the representativeness of the provided specimen and the samples made available. The results apply to the sample as received.



t2.2 Additional information of product to be tested

Compostboard Hemp flax

Description Hemp fiber and flax fiber with sugar glue

Composition Hemp fiber, flax fiber and sugar glue

Thickness 18 mm
Volumic mass 365 kg/m³ MV
Surface weight 7 kg/m² MV

Fire retardant additive None

Colour Natural, brown

Photo



The values mentioned are the nominal values as given by the client, unless otherwise stated



3 Reports and results in support of this classification

3.1 Reports

The client has confirmed that the reports provided (see Table 3.1) may be used for this classification.

t3.1 Reports in support of classification

Name of	Name of client	Number and date of report	Test method
laboratory			Field of application rules
Peutz bv, NB 2264	Compostboard	Y 3079-2E-RA-001; 10/10/2024	EN 13823:2020+A1:2022
Peutz bv, NB 2264	Compostboard	Y 3079-3E-RA-001; 10/10/2024	EN-ISO 11925-2:2020

3.2 Results

The results obtained are summarised in Tables 3.2, 3.3.

t3.2 Summary of test results EN-ISO 11925-2

Flame application time 30 s			Results		
	Parameter	Number of tests	Continuous parameters (average)	Compliance parameters	
Surface exposure	Fs ≤ 150 mm		-	Υ	
	Ignition of filter paper	6	-	N	
Edge exposure	Fs ≤ 150 mm		-	Υ	
	Ignition of filter paper	6	-	N	

t3.3 Summary of test results EN 13823

			Res	sults	
Parameter		Number of tests	Continuous parameters (average)	Compliance parameters	
FIGRA _{0,2MJ}	[W/s]	3	599	-	
FIGRA _{0,4MJ}	[W/s]		599	-	
THR _{600s}	[MJ]		15.9	-	
SMOGRA	$[m^2/s^2]$		3	-	
TSP _{600s}	[m ²]		19	-	
LFS reaching edge			-	N	
Flaming droplets/particles					
– FDP ≤ 10 s			-	N	
– FDP > 10 s			-	N	



3.3 Classification criteria

The classification to be obtained is based on the classification criteria given in EN 13501-1. In Tables 3.4 and 3.5 these criteria are summarised.

t3.4 Classification criteria

Test	Parameter		Class				
	Continuous (average) or compliance		В	C	D		
EN-ISO 11925-2	Flame spread ≤ 150 mm		Υ	Υ	Υ		
EN 13823	FIGRA _{0,2MJ}	[W/s]	≤ 120	-	-		
	FIGRA _{0,4MJ}	[W/s]	-	≤ 250	≤ 750		
	THR _{600s}	[MJ]	≤ 7,5	≤ 15	-		
	LFS reaching edge		N	N	-		

t3.5 Criteria additional classifications

Test	Parameter Continuous (average) or compliance		Class			Class		
			s1 s2 s3		s3	d0 d1 d		
EN-ISO 11925-2	Ignition of filter paper		-	-	-	N	N	Υ
	Note: ignition of filter paper leads to	classification d	2, irrespecti	ve of the resul	ts for FDP in El	l 13823		
EN 13823	SMOGRA	$[m^2/s^2]$	≤ 30	≤ 180	not s1	-	-	-
	TSP _{600s}	$[m^2]$	≤ 50	≤ 200	or s2	-	-	-
EN 13823	Flaming droplets/particles							
	(FDP) within 600 s							
	− $FDP \le 10 s$		-	-	-	N	Υ	-
	- FDP > 10 s		-	-	-	N	N	not d0
								or d1



4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

4.2 Classification

The product, Compostboard hemp and flax, has been classified to its reaction to fire behaviour as: D. The additional classification for the smoke production is: s1, the additional classification for flaming droplets is: d0.

Reaction to fire classification: D-s1, d0

4.3 Field of application

The classification is valid for the product parameters and end use applications as stated in Tables 4.1 and 4.2.

t4.1 Product parameters

Parameter		
Thickness	20 mm	
Surface weight	7 kg/m²	
Density	365 kg/m³	

t4.2 End use parameters

Parameter	
Substrate	Fire class A2-s1,d0 or better, except gypsum board, with a thickness of at least 9 mm and a density of at least 653kg/m3
Cavity	No cavity can be present, the product needs to be directly mounted against the substrate
Method of attachment	The product is fixed using screws
Joints	Joints in horizontal and vertical direction of 0 mm can be used
Product orientation	The product can be used horizontal and vertical.



5 Limitations

There are no limits in time on the validity of this classification document.

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

Mook,

H.H.A. Leenders, BSc.

Head of Laboratory for For Fire Testing

D.J. den Boer, BSc. Management

This report contains 10 pages