

EN 13501-1 Classification

CONFIDENTIAL

Report: BMT/RFP/F15037/03

Product: Teknos FR Panels

Issue date: May 2015

Notified Body No. 1314



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1 Introduction

This classification report defines the classification assigned to the product, Teknos FR Panels, in accordance with the procedures given in BS EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests.

1.1 Membership of EGOLF and GNB-FSG SH02

BM TRADA is a member of EGOLF and GNB-FSG (Fire Sector Group for the Group of Notified Bodies) and any agreements and recommendations that have been drawn up by these bodies to harmonise the approach of Laboratories has, where relevant, been incorporated within this classification report.

1.2 Sampling

BM TRADA did not conduct any sampling of this product and the Sponsor did not provide evidence that any sampling had taken place.

2 Details of classified product

2.1 Product description

The product, Teknos FR Panels, is described briefly below.

Product name	Teknos FR Panels	
Description	Two part coating system with Teknosafe 2467 (200g/m ²) base coat lacquer with Teknoclear Aqua 1331 (100g/m ²) top coat lacquer.	
Intended application of the building product	For application on panels and walls for buildings where there are fire safety requirements.	
Base coat	Product name:	Teknosafe 2467
	Generic type:	Water based intumescent lacquer
	Manufacturer:	Teknos OY
	Description:	Intumescent lacquer coating consisting of materials which provide an enhanced fire rating to substrates than for untreated wood. Chemicals & proportions - See Note 2
	Thickness:	162µm ±10% (wet film thickness)
	Mass per unit area:	200g/m ² ±10% (wet film weight)
	Colour:	Transparent
	Application method:	Spray
	Fire retardant:	See Note 3

Note 2: The sponsor was unwilling/unable to provide this information.

Note 3: The sponsor has confirmed that there is a clearly identifiable stage in the production process of this component which results in an improvement in the reaction to fire performance (for example addition of a fire retardant, limiting organic content or addition of fillers).

Top coat	Product name:	Teknoclear Aqua 1331
	Generic type:	Interior top coat lacquer
	Manufacturer:	Teknos A/S
	Description:	Clear lacquer coating for interior use. Chemicals & proportions - See Note 2
	Thickness:	95µm ±10% (wet film thickness)
	Mass per unit area:	100g/m ² ±10% (wet film weight)
	Colour:	Transparent
	Application method:	Spray
	Fire retardant:	See Note 1
Bulk density including primary substrate	460 kg/m ³ at 10% moisture (487 kg/m ³ measured)	
Mass per unit area including primary substrate	4.3 kg/m ² (measured)	
Thickness including primary substrate	9.0mm +0.5/-0.7mm (8.8 – 8.9mm measured)	
Colour including primary substrate	Light Ivory To verify colour of the product BM TRADA use the RAL system. BM TRADA identified the colour of the product as being closest to RAL colour code: 1015	
Manufacture of coated boards	9mm plywood samples are coated industrially with approximately 200g/m ² (wet film weight) of fire retardant lacquer type Teknosafe 2467 and with 100g/m ² (wet film weight) of Teknoclear Aqua 1331. The product is produced according to the rules given in the product standard EN 14915 and EN 13986.	

Table 1: Product specification

Note 1: The sponsor has confirmed that there is no clearly identifiable stage in the production process of this component which results in an improvement in the reaction to fire performance (for example addition of a fire retardant, limiting organic content or addition of fillers).

Note 2: The sponsor was unwilling/unable to provide this information.

3 Test reports/extended application reports and test results in support of classification

3.1 Test reports/extended application reports

Name of Laboratory	Name of Sponsor	Test Reports / Extended application results	Test Method
BM TRADA	Teknos Norge AS	BMT/RFP/ F15037/01	BS EN ISO 11925-2:2010
BM TRADA	Teknos Norge AS	BMT/RFP/ F15037/02	BS EN 13823:2010

3.2 Test results

Test Method	Number of tests and report number	Parameter	Results	
			Parameter - mean	Compliance with parameters for classification
BS EN ISO 11925-2:2010				
30s exposure surface test Clause 7.3.3.1	6 BMT/RFP/ F15037/01	F _s (flame spread)	F _s ≤ 150mm within 60s	compliant
		Flaming droplets/ particles	No ignition of filter paper	compliant
BS EN 13823:2010				
BS EN 13823:2010	3 BMT/RFP/ F15037/02	FIGRA 0.2 MJ	108.4	compliant
		LFS (to edge of specimen)	None	compliant
		THR 600s	6.98	compliant
		SMOGRA	0.37	compliant
		TSP 600s	36.0	compliant
		Flaming droplets/ particles	None	compliant

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4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of BS EN 13501-1:2007+A1:2009 Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests.

4.2 Classification

The product, Teknos FR Panels, 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

Reaction to fire classification: B-s1, d0

4.3 Field of application

This classification is valid for the following product parameters:

Thickness	257µm ±10% combined wet film thickness: Teknosafe 2467 base coat 162µm ±10% (wet film thickness) Teknoclear Aqua 1331 top coat 95µm ±10% (wet film thickness)
Colour	Transparent
Mass per unit area	Teknosafe 2467 base coat 200 g/m ² ±10% (wet film weight) Teknoclear Aqua 1331 top coat 100 g/m ² ±10% (wet film weight)
Surface classified	The classification has been carried out with the Teknoclear Aqua 1331 top coat face of the product being deemed as the front face.

This classification is valid for the following end use applications:



Primary Substrate* (to which the two part coating system is applied)	Any substrate of Class A1 or A2-s1,d0 with a density of at least 338 kg/m ³ and a thickness of at least 8.0mm. Any wood based substrate of Class D-s2,d0 with a density equal to or greater than 338 kg/m ³ and a thickness of at least 8.0mm.
Secondary Substrate*	Any substrate of Class A1 or A2-s1,d0 with a density of at least 510 kg/m ³ and a thickness of at least 10.0mm. Any wood based substrate of Class D-s2,d0 with a density equal to or greater than 510 kg/m ³ and a thickness of at least 10.0mm.
Air gap	No air gap
Means of fixing	The primary and secondary substrates are screw fixed together
Corner joint	Butt joint
Horizontal joint	No
Vertical joint	No
Exposed edges	No

* Reference EGOLF recommendation EGR 57:2011 (substrate thickness)

5 Limitations

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

6 Authorisation

	Written by:	Checked and Authorised by:
Signature:		
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Issue Date:		19 May 2015

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