

**Sponsor:**

Teknos A/S  
Industrivej 19  
DK 6580 Vamdrup  
Denmark

## EN 13501-1 Classification

**CONFIDENTIAL**

**Report:** BMT/RFP/F14090/09

**Product:** Teknos FR lacquer coating

**Issue date:** February 2015

**Notified Body No. 1314**



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## **1 Introduction**

This classification report defines the classification assigned to the product, Teknos FR lacquer coating, 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 lacquer coating , is described briefly below.

Product name	Teknos FR lacquer coating.	
Description	Teknosafe 2467 FR lacquer coating.	
Intended application of the building product	For application on internal panels and walls for buildings where there are fire safety requirements.	
FR lacquer	Product name:	Teknosafe 2467 FR lacquer
	Generic type:	Intumescent lacquer for internal use
	Manufacturer:	Teknos OY
	Description:	Intumescent lacquer coating for interior use. The lacquer consists of materials which provide an enhanced fire rating to substrates than for untreated wood. Chemicals & proportions - <b>See Note 1</b>
	Thickness:	162µm ±10% (wet film thickness)
	Mass per unit area:	200g/m <sup>2</sup> ±10% (wet film weight)
	Colour:	Transparent
	Application method:	Spray
Bulk density including primary substrate	455 kg/m <sup>3</sup> (measured)	
Mass per unit area including primary substrate	4.1 kg/m <sup>2</sup> (measured)	
Thickness including primary substrate	9.01mm (8.95 – 9.06mm 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 <sup>2</sup> (wet film weight) of fire retardant lacquer type Teknosafe 2467. The product is produced according to the rules given in the product standard EN 14915:2013.	

Table 1: Product specification

The sponsor has confirmed that there is a clearly identifiable stage in the production process which results in an improvement in the reaction to fire performance of the substrate to which it is applied.

### 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 A/S	BMT/RFP/ F14090/07	BS EN ISO 11925-2:2010
BM TRADA	Teknos A/S	BMT/RFP/ F14090/08	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
<b>BS EN ISO 11925-2:2010</b>				
30s exposure surface test Clause 7.3.3.1	6 BMT/RFP/ F14090/07	F <sub>s</sub> (flame spread)	F <sub>s</sub> ≤ 150mm within 60s	compliant
		Flaming droplets/ particles	No ignition of filter paper	compliant
<b>BS EN 13823:2010</b>				
BS EN 13823:2010	3 BMT/RFP/ F14090/08	FIGRA 0.2 MJ	58.9	compliant
		LFS (to edge of specimen)	None	compliant
		THR 600s	6.97	compliant
		SMOGRA	0.72	compliant
		TSP 600s	40.0	compliant
		Flaming droplets/ particles	None	compliant

*The legal validity of this report can only be claimed on presentation of the complete report.*

## **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 lacquer coating, 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:

<b>Nominal Thickness</b>	162µm ±10% wet film thickness
<b>Colour</b>	Light Ivory
<b>Mass per unit area</b>	200g/m <sup>2</sup> ±10% wet film weight
<b>Surface classified</b>	The classification has been carried out with the Teknos FR lacquer being deemed as the front face.

This classification is valid for the following end use applications:



<b>Primary Substrate*</b> (to which the FR lacquer is applied)	Any substrate of Class A1 or A2-s1,d0 with a density of at least 338 kg/m <sup>3</sup> 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 <sup>3</sup> and a thickness of at least 8.0mm.
<b>Secondary Substrate*</b>	Any substrate of Class A1 or A2-s1,d0 with a density of at least 510 kg/m <sup>3</sup> 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 <sup>3</sup> and a thickness of at least 10.0mm.
<b>Air gap</b>	No air gap
<b>Means of fixing</b>	The primary and secondary substrates are screw fixed together
<b>Corner joint</b>	Butt joint
<b>Horizontal joint</b>	No
<b>Vertical joint</b>	No
<b>Exposed edges</b>	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**

	<b>Written by:</b>	<b>Checked by:</b>	<b>Authorised by:</b>
<b>Signature:</b>			
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<b>Date of issue:</b>	16th February 2015		



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