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## Classification of reaction to fire performance in accordance with EN 13501-1:2007+A1:2009

Issue number: K48/2018

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**Sponsor:** Retaflame LLC.

Customer's address: Laki 11E, Tallinn 12915, Estonia.

Reg. No. 14407952

**Owner of classification report:** Retaflame LLC.

**Manufacturer:** Retaflame LLC.

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

**Product name:** Flame retardant varnish WP 710 coating.

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 No. 305/2011.

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*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 flame retardant varnish WP 710 coating in accordance with the procedures given in EN 13501-1:2007+A1:2009.

## 2. Details of classified product

### 2.1. General

Flame retardant varnish WP 710 coating is defined as fire retardant surface coating for wood products.

### 2.2. Product description

- Product name: Flame retardant varnish WP 710.
- Manufacturer: Retaflame LLC.
- Materials used for manufacturing:
  - standard substrate - 12 mm particle board;
  - three layers of flame retardant varnish WP 710 coating, consumption 420 g/m<sup>2</sup> using roller or brush application method.

## 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	Retaflame LLC.	3400-1/2018	EN 13823:2010+A1:2014
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Retaflame LLC.	3400-2/2018	EN ISO 11925-2:2010

## 3.2. Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean	Compliance parameters
EN 13823:2010+A1:2014	<i>FIGRA</i> <sub>0,2MJ</sub> (W/s)	3	46.8	Compliant
	<i>FIGRA</i> <sub>0,4MJ</sub> (W/s)		46.8	(-)
	<i>THR</i> <sub>600s</sub> (MJ)		4.8	Compliant
	<i>LFS</i>		<1000 mm	Compliant
	<i>SMOGRA</i> (m <sup>2</sup> /s <sup>2</sup> )		5.2	Compliant
	<i>TSP</i> <sub>600s</sub> (m <sup>2</sup> )		39.1	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

Flame retardant varnish WP 710 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

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 product end use applications:

Product is intended to use as fire retardant coating for wood products.

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

Thickness: valid for wood base product with thickness equal or more than 12 mm.  
Chemical composition of fire retardant: valid only for product composition as tested.  
Application: valid for fire retardant consumption equal or more than 420 g/m<sup>2</sup>.

4.3.3. Classification valid for installation parameters:

Mounting: valid for product mounting without air gap between product and substrate.  
Substrate: valid for any wood base substrate with density equal or more than 510 kg/m<sup>3</sup>.  
Orientation: not applicable.  
Joints: product tested without joints.

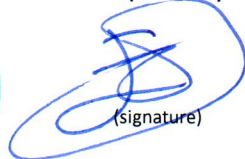
#### 5. Limitations.

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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E. Bukšāns

Reviewed by



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