

## CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1:2009

Classification no.	2014-Efectis-R000920
Sponsor	Vescom BV P.O. Box 70 5750 AB DEURNE THE NETHERLANDS
Product name	<b>Xorel bio-based wall covering</b>
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	C.C.M. Steinhage B.Sc. A.J. Lock
Project number	2014444
Date of issue	January 2015
Number of pages	5

## 1. INTRODUCTION

---

This classification report defines the classification assigned to **Xorel bio-based wall covering** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

## 2. DETAILS OF CLASSIFIED PRODUCT

---

### 2.1 GENERAL

The product, **Xorel bio-based wall covering**, is defined as a wall covering.

### 2.2 MANUFACTURER

Carnegie Fabrics  
110 North Centre Avenue  
Rockville Centre, NEW YORK 11570  
UNITED STATES OF AMERICA

### 2.3 PRODUCT DESCRIPTION

Product description:

- Fabric on a paper backing
- Fabric: 100% polyethylene, of which 60-80 % bio-based
- Mass fabric: 200 g/m<sup>2</sup>
- Mass total: 340 g/m<sup>2</sup>

The product has a mass per unit area of approx. 340 kg/m<sup>2</sup>.

## 3. REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION

---

### 3.1 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	Vescom BV THE NETHERLANDS	2014-Efectis-R000918 2014-Efectis-R000919	EN ISO 11925-2:2010 EN 13823:2014

### 3.2 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance with parameters
<b>EN ISO 11925-2</b>				
surface flame impingement	$F_s \leq 150$ mm	6	37	-
	Ignition of filter paper		-	Compliant
Edge flame impingement	$F_s \leq 150$ mm	6	25	-
	Ignition of filter paper		-	Compliant
<b>EN 13823</b>				
	FIGRA <sub>0,2MJ</sub> [W/s]	3	116	-
	FIGRA <sub>0,4MJ</sub> [W/s]		108	-
	THR <sub>600s</sub> [MJ]		3.2	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		0.8	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		37	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		Yes Yes	

### 3.3 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products			
Classification criteria			
Class	B	C	D
Test method(s)			
EN ISO 11925-2 Exposure = 30 s	$F_s \leq 150$ mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
EN 13823	FIGRA <sub>0,2 MJ</sub> ≤ 120 W/s LFS < edge of specimen THR <sub>600s</sub> ≤ 7.5 MJ	FIGRA <sub>0,4 MJ</sub> ≤ 250 W/s LFS < edge of specimen THR <sub>600s</sub> ≤ 15 MJ	FIGRA <sub>0,4 MJ</sub> ≤ 750 W/s
Additional classification			
Smoke production	s1 = SMOGRA ≤ 30 m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> ≤ 50 m <sup>2</sup> ; s2 = SMOGRA ≤ 180 m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> ≤ 200 m <sup>2</sup> ; s3 = not s1 or s2		
Flaming Droplets/particles	d0 = no flaming droplets/ particles in EN 13823 within 600 s ; d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s ; d2 = not d0 or d1.		

#### 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

The product, **Xorel bio-based wall covering**, 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:

**d2**

**Reaction to fire classification: B - s1, d2**

##### 4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Surface density

- Fabric 200 kg/m<sup>2</sup>
- Total 340 kg/m<sup>2</sup>

This classification is valid for the following end use applications:

Substrate	Non-combustible (class A1/A2 according to EN 13238:2010)
Air gap	Not applicable
Methods and means of fixing	The wall covering was glued on the substrate according to the manufacturer's instructions, using the special adhesive "Vescom 2000"
Joints	Vertical joints only
Other aspects of end use conditions	Wall covering

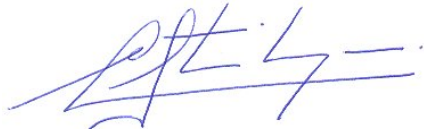
##### 4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

There are no limitations in time on the validity of this report.

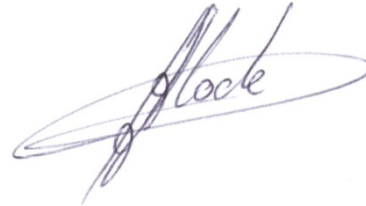
## 5. LIMITATIONS

---

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



C.C.M. Steinhage B.Sc.  
Project leader reaction to fire



A.J. Lock  
Project leader reaction to fire