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# **CLASSIFICATION**

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

Classification no. 2015-Efectis-R000405 [Rev.1]

Sponsor Avery Dennison

Willem Einthovenstraat 11 2342 BH OEGSTGEEST THE NETHERLANDS

Product name Avery Dennison® 5100 Diffuser Films

Prepared by Efectis Nederland BV

Notified body no. 1234

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#### 1. INTRODUCTION

## 1.1 PRODUCT NAME

This classification report defines the classification assigned to Avery Dennison® 5100 Diffuser Films in accordance with the procedures given in EN 13501-1:2007+A1:2009.

## 1.2 REVISION INFORMATION

Sponsor address corrected.

Full reference to Avery Dennison® included in the product name.

Original date of issue: April 2015

#### 2. DETAILS OF CLASSIFIED PRODUCT

## 2.1 GENERAL

The product, Avery Dennison® 5100 Diffuser Films, is defined as a wall covering.

## 2.2 MANUFACTURER

Avery Dennison Willem Einthovenstraat 11 2342 BH OEGSTGEEST THE NETHERLANDS

# 2.3 PRODUCT DESCRIPTION

According to the sponsor the product is composed of:

Face film: 50 μm premium, cast vinyl film

Adhesive: 25 µm permanent, clear, acrylic based
 Backing paper: white bleached kraft paper, 125 g/m²

Two types:

- Type 5130: diffuses 30% of light and blocks out the remaining 70%
- Type 5160: diffuses 40% of light and blocks out the remaining 60%

The product has a total thickness of approx. 75  $\mu$ m and a mass per unit area of approx. 125 g/m<sup>2</sup> (measured on the product).

See the 'Product data sheet' in the test reports.



# 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	Avery Dennison Graphics & Reflective Solutions THE NETHERLANDS	2015-Efectis-R000403 2015-Efectis-R000404	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
EN ISO 11925-2					
surface flame	Fs ≤150 mm		6	28	-
impingement	Ignition of filter paper			-	Compliant
Edge flame	Fs ≤150 mm		6	16	-
impingement	Ignition of filter	paper		-	Compliant
EN 13823					
5160	FIGRA <sub>0.2MJ</sub>	[W/s]		57	-
	FIGRA <sub>0.4MJ</sub>	[W/s]		0	-
	THR <sub>600s</sub>	[MJ]		0.6	-
	LFS < edge		_	-	Compliant
	SMOGRA	$[m^2/s^2]$	3	26	-
	TSP <sub>600s</sub>	[m <sup>2</sup> ]		46	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s			-	Compliant Compliant
5130	FIGRA <sub>0.2MJ</sub>	[W/s]		56	-
	FIGRA <sub>0.4MJ</sub>	[W/s]		0	-
	THR <sub>600s</sub>	[MJ]		0.7	-
	LFS < edge		_	-	Compliant
	SMOGRA	$[m^2/s^2]$	1	11	-
	TSP <sub>600s</sub>	[m <sup>2</sup> ]		44	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s			-	Compliant Compliant



## 3.3 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products						
Classification criteria						
Class Test method(s)	В	С	D			
<b>EN ISO 11925-2</b> Exposure = 30 s	$F_s \le 150$ mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.					
EN 13823	$\begin{array}{l} FIGRA_{0.2~MJ} \leq 120~W/s \\ LFS < edge~of~specimen \\ THR_{600s} \leq 7.5~MJ \end{array}$	FIGRA <sub>0.4 MJ</sub> $\leq$ 250 W/s LFS $<$ edge of specimen THR <sub>600s</sub> $\leq$ 15 MJ	FIGRA <sub>0.4 MJ</sub> ≤ 750 W/s			
Additional classification						
Smoke production	$51 = SMOGRA \le 30 \text{ m}^2/\text{s}^2 \text{ and } TSP_{600s} \le 50 \text{ m}^2;$ $52 = SMOGRA \le 180 \text{ m}^2/\text{s}^2 \text{ and } TSP_{600s} \le 200 \text{ m}^2;$ 63 = not s1 or s2					
Flaming Droplets/particles	d1 = no flaming drople	no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;				

# 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, **Avery Dennison® 5100 Diffuser Films**, in relation to its reaction to fire behaviour is classified:

В

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

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# **CLASSIFICATION**

## 4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

**Thickness** 

Face filmAdhesive50 μm25 μm

Surface density Approx. 125 g/m<sup>2</sup>

This classification is valid for the following end use applications:

Substrate Non-combustible

(class A1 according to EN 13238:2010)

Air gap Including air gap

Methods and means of fixing Glued, using products adhesive

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.

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