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## CLASSIFICATION

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

Classification no. 2018-Efectis-R001121

**Sponsor** Avery Dennison

> Willem Einthovenstraat 11 2342 BH OEGSTGEEST THE NETHERLANDS

Product name Avery Dennison® MPI™ 3040/3041 Transparent

Film

Prepared by Efectis Nederland BV

Notified body no. 1234

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#### INTRODUCTION

This classification report defines the classification assigned to **Avery Dennison® MPI™ 3040/3041 Transparent Film** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

#### DETAILS OF CLASSIFIED PRODUCT

#### 2.1 GENERAL

The product, **Avery Dennison® MPI™ 3040/3041 Transparent Film**, is defined as a multipurpose film product that will be used for all kind of applications.

#### 2.2 MANUFACTURER

Avery Dennison Graphics & Reflective Solutions P.O. Box 28 2300 AA LEIDEN THE NETHERLANDS

#### 2.3 PRODUCT DESCRIPTION

According to the sponsor the product is composed of:

- Film: 100 μm gloss transparent monomeric calendered vinyl
- Adhesive:
  - 3040: permanent, acrylic, 20 μm
  - 3041: removable, acrylic, 20 µm
- Backing: kraft paper, 125 g/m<sup>2</sup>

The product has a total thickness of approx. 120  $\mu$ m and a mass per unit area of approx. 129 g/m<sup>2</sup> (measured on the product).

See also test reports 2018-Efectis-R001119 and 2018-Efectis-R001120 for the product data sheets.

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

#### 3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2010	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2010+A1:2014	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13501-1:2007 +A1:2009	Fire classification of construction products and building elements Part 1: Classification using data from reaction to fire tests



# 3.2 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	Avery Dennison Graphics & Reflective Solutions THE NETHERLANDS	2018-Efectis-R001119 2018-Efectis-R001120	EN ISO 11925-2:2010 EN 13823:2014

#### 3.3 TEST RESULTS

	Parameter	No. tests	Results	
Test method and test number			Continuous parameter – maximum	Compliance with parameters
EN ISO 11925-2				
impingement	Fs ≤150 mm	6	20	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	20	-
	Ignition of filter paper		-	Compliant

				Results	
Test method and test number  Parameter		No. tests	Continuous parameter – mean (m)	Compliance with parameters	
EN 13823					
MPI 3040	FIGRA <sub>0.2MJ</sub>	[W/s]		29	-
	FIGRA <sub>0.4MJ</sub>	[W/s]		0	-
	THR <sub>600s</sub>	[MJ]		0.6	-
	LFS < edge			-	Compliant
	SMOGRA	$[m^2/s^2]$	3	17.2	-
	TSP <sub>600s</sub>	[m <sup>2</sup> ]		29	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s			-	Compliant Compliant
MPI 3041	FIGRA <sub>0.2MJ</sub>	[W/s]		38	-
	FIGRA <sub>0.4MJ</sub>	[W/s]		0	-
	THR <sub>600s</sub>	[MJ]	1	0.7	-
	LFS < edge			-	Compliant
	SMOGRA	$[m^2/s^2]$		17.5	-
	TSP <sub>600s</sub>	[m <sup>2</sup> ]		34	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s			-	Compliant Compliant



#### 3.4 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements  Excluding floorings and linear pipe thermal insulation products					
Classification crit	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	FIGRA <sub>0.2 MJ</sub> $\leq$ 120 W/s LFS $<$ edge of specimen THR <sub>600s</sub> $\leq$ 7.5 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	<ul> <li>d0 = no flaming droplets/ particles in EN 13823 within 600 s;</li> <li>d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;</li> <li>d2 = not d0 or d1.</li> </ul>				

#### 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® MPI™ 3040/3041 Transparent Film**, 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



Efectis Nederland 2018-Efectis-R001121 July 2018 Avery Dennison

# **CLASSIFICATION**

#### 4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness 120 µm

Surface density 129 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 40

Methods and means of fixing Glued using the adhesive of the product

Joints Vertical 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.

E.O. van der Laan M.Sc. Project leader reaction to fire C.C.M Steinhage B.Sc. Project leader reaction to fire