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CLASSIFICATION

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

Classification no. 2017-Efectis-R000934[Rev.1]

Sponsor Avery Dennison

> Willem Einthovenstraat 11 2342 BH OEGSTGEEST THE NETHERLANDS

Product name Avery Dennison® MPI 2000/2001/2004 HOP

Prepared by Efectis Nederland BV

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1. INTRODUCTION

1.1 PRODUCT NAME

This classification report defines the classification assigned to **Avery Dennison® MPI 2000/2001/2004 HOP** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

1.2 REVISION INFORMATION

One additional product type, namely **Avery Dennison® MPI 2004 HOP EA** has been tested in accordance with the procedures given in EN 13501-1:2007+A1:2009. The results are included in this classification report as these product type falls within the original **MPI Avery Dennison® MPI 2000/2001 HOP** series.

The product name has been renamed **Avery Dennison® MPI 2000/2001/2004 HOP** accordingly.

Original date of issue: June 2017

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Avery Dennison® MPI 2000/2001/2004 HOP**, is defined as a multi-purpose 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:

- · Face film:
 - 2000/2001: 80 μm, premium quality clear cast vinyl
 - 2004: 80 µm gloss white polymeric calendered vinyl with high opacity properties
- Adhesive:
 - 2000: 30 µm, permanent, clear acrylic based
 - 2001: 20 µm, removable, clear acrylic based
 - 2004: 20 µm, permanent, clear acrylic based
- Backing paper:
 - 2000/2001: two sides polyethylene coated Kraft paper, 140 g/m²
 - 2004: Easy Apply liner

The product has a total thickness of approx. 110 μ m respectively 100 μ m and a mass per unit area of approx. 150 g/m² (measured on the product). See also Appendix 'Product data sheet' in the test reports.



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 Reaction to fire tests for building products - Building products, EN 13823:2010+A1:2014 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 THE NETHERLANDS	2017-Efectis-R000932 2017-Efectis-R000933 2018-Efectis-R001399	EN ISO 11925-2:2010 EN 13823:2014 EN 13823:2014

3.3 TEST RESULTS

Test method and test number	Parameter		No. tests	Results		
				Continuous parameter – mean (m)	Compliance with parameters	
EN ISO 11925-2						
surface flame impingement	Fs ≤150 mm Ignition of filter paper		6	25	-	
				-	Compliant	
Edge flame Impingement	Fs ≤150 mm		6	25	-	
	Ignition of filter p	aper	О	-	Compliant	
EN 13823						
MPI 2000	FIGRA _{0.2MJ}	[W/s]		26	-	
	FIGRA _{0.4MJ}	[W/s]		0	-	
	THR _{600s}	[MJ]		0.8	-	
	LFS < edge		_	-	Compliant	
	SMOGRA	$[m^2/s^2]$	3	12.5	-	
	TSP _{600s}	[m ²]		41	-	
	Flaming debris - flaming ≤ 10 s - flaming > 10 s			- -	Compliant Compliant	





	+				
MPI 2001	FIGRA _{0.2MJ}	[W/s]	1	0	-
	FIGRA _{0.4MJ} [W/s]		0	-
	THR _{600s} [MJ]			0.6	-
	LFS < edge			-	Compliant
	SMOGRA [m ² /s ²]		12.5	-
	TSP _{600s} [m ²]			39	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s			-	Compliant Compliant
MPI 2004 EA	FIGRA _{0.2MJ}	[W/s]		38	-
	FIGRA _{0.4MJ} [W/s]		0	-
	THR _{600s} [MJ]			0.53	-
	LFS < edge		1	-	Compliant
	SMOGRA [m ² /s ²]		9.8	-
	TSP _{600s} [m ²]			37	-
	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 criteria					
Class Test method(s)		В	С	D	
EN ISO 11925-2 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 _{0.2 MJ} ≤ 120 W/s LFS < edge of specimen THR _{600s} ≤ 7.5 MJ		FIGRA _{0.4 MJ} ≤ 250 W/s LFS < edge of specimen THR _{600s} ≤ 15 MJ	FIGRA _{0.4 MJ} ≤ 750 W/s	
Additional classification					
Smoke production	s1 = s2 = s3 =	= SMOGRA ≤ 180 m^2/s^2 and TSP _{600s} ≤ 200 m^2 ;			
Flaming Droplets/particles	d0 = d1 = d2 =	I = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s;			

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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 2000/2001/2004 HOP**, in relation to its reaction to fire behaviour is classified:

Е

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:

Thickness

• Film 80 μm

Adhesive 30 μm respectively 20 μm

Surface density 150 g/m²

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 the products adhesive

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.



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5. LIMITATIONS

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

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