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CLASSIFICATION

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2018

Classification no.	2020-Efectis-R000171
Sponsor	Avery Dennison Graphics & Reflective Solutions P.O. Box 28 2300 AA LEIDEN THE NETHERLANDS
Product name	**Avery Dennison® MPI 2804 EA**
Prepared by	Efectis Nederland BV
Notified body no.	1234
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Project number	ENL-19-000988
Date of issue	January 2020
Number of pages	5

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1. INTRODUCTION

This classification report defines the classification assigned to **Avery Dennison® MPI 2804 EA** in accordance with the procedures given in EN 13501-1:2018.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Avery Dennison® MPI 2804 EA**, is defined as multi-purpose vinyl.

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: 90 µm gloss white calendered vinyl;
- Adhesive: 25 µm permanent, grey acrylic based;
- Backing paper: Staflat liner, 145 g/m^2.

The product has a total thickness of approx. 115 µm, the product has a mass per unit area of approx. 160 g/m^2 (measured on the product).
See also Appendix, 'Product data sheet' in the test reports.

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

3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2010 + C1:2011	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 13501-1:2018	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	2020-Efectis-R000169 2020-Efectis-R000170	EN ISO 11925-2:2010 + C1:2011 EN 13823:2010 + A1:2014

3.3 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – maximum	Compliance with parameters
EN ISO 11925-2				
Surface flame impingement	Fs ≤150 mm	6	25	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	30	-
	Ignition of filter paper		-	Compliant

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
	$FIGRA_{0.2MJ}$ [W/s]	3	46	-
	$FIGRA_{0.4MJ}$ [W/s]		0	-
	THR_{600s} [MJ]		0.9	-
	LFS < edge		-	Compliant
	SMOGRA [m^2/s^2]		14.4	-
	TSP_{600s} [m^2]		58-23=36	-
	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)	**B**	**C**	**D**
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	$FIGRA_{0.2\ MJ} \leq 120$ W/s LFS < edge of specimen $THR_{600s} \leq 7.5$ MJ	$FIGRA_{0.4\ MJ} \leq 250$ W/s LFS < edge of specimen $THR_{600s} \leq 15$ MJ	$FIGRA_{0.4\ MJ} \leq 750$ W/s
Additional classification			
Smoke production	**s1** = SMOGRA ≤ 30 m^2/s^2 and $TSP_{600s} \leq 50$ m^2 ; **s2** = SMOGRA ≤ 180 m^2/s^2 and $TSP_{600s} \leq 200$ m^2; **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 13501-1:2018.

4.2 CLASSIFICATION

The product, **Avery Dennison® MPI 2804 EA**, 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

Reaction to fire classification: B – s1, d0

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness	90 µm
Surface density	160 g/m^2
Other properties	Colour: white

This classification is valid for the following end use applications:

Substrate	Steel sheet, thickness approx. 1.2 mm (class A1/A2 according to EN 13238:2010)
Air gap	Yes
Methods and means of fixing	Glued using the products adhesive
Joints	Vertical only
Other aspects of end use conditions	Used as multi-purpose vinyl

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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