

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

Classification no.	2019-Efectis-R000562
Sponsor	Avery Dennison Willem Einthovenstraat 11 2342 BH OEGSTGEEST THE NETHERLANDS
Product name	Avery Dennison® MPI™ 3020 Matt High Opacity Series
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	C.C.M. Steinhage B.Sc. A.J. Lock
Project number	ENL-18-001256
Date of issue	April 2019
Number of pages	6

1. INTRODUCTION

This classification report defines the classification assigned to **Avery Dennison® MPI™ 3020 Matt High Opacity Series** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Avery Dennison® MPI™ 3020 Matt High Opacity Series**, is defined as a multi-purpose vinyl, suitable for a variety of wide format inkjet printers.

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: 95 µm, white matt PVC film;
- Adhesive
MPI 3020: Permanent, clear, acrylic based;
MPI 3021: Removable, clear, acrylic based;
- Backing paper: Clay coated kraft paper, 125 g/m².

The face film of the product has a thickness of approx. 95 µm, the product has a mass per unit area of approx. 150 g/m² (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	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	2019-Efectis-R000560 2019-Efectis-R000561	EN ISO 11925-2:2010 EN 13823:2014

3.3 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – maximum	Compliance with parameters
EN ISO 11925-2				
MPI 3021 HOP				
surface flame impingement	Fs ≤150 mm	6	30	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	30	-
	Ignition of filter paper		-	Compliant
MPI 3020 HOP				
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				
MPI 3020 HOP	FIGRA _{0.2MJ} [W/s]	3	50	-
	FIGRA _{0.4MJ} [W/s]		0	-
	THR _{600s} [MJ]		0.7	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		18.8	-
	TSP _{600s} [m ²]		33	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

EN 13823					
MPI 3021 HOP	FIGRA _{0.2MJ}	[W/s]	3	13	-
	FIGRA _{0.4MJ}	[W/s]		0	-
	THR _{600s}	[MJ]		0.4	-
	LFS < edge			-	Compliant
	SMOGRA	[m ² /s ²]		18.3	-
	TSP _{600s}	[m ²]		28	-
	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 ≤ 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 = SMOGRA ≤ 30 m ² /s ² and TSP _{600s} ≤ 50 m ² ; s2 = SMOGRA ≤ 180 m ² /s ² and TSP _{600s} ≤ 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 13501-1:2007+A1:2009.

4.2 CLASSIFICATION

The product, **Avery Dennison® MPI™ 3020 Matt High Opacity Series**, 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

- Face film 95 µm

Surface density Approx. 150 g/m² (measured on the product)

Other properties Colour: White

This classification is valid for the following end use applications:

Substrate Non-combustible
(class A1/A2 according to EN 13238:2010)

Air gap Including air gap

Methods and means of fixing Glued, using the products adhesive

Joints Vertical only

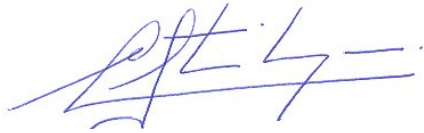
Other aspects of end use conditions Multi-purpose vinyl

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.



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



A.J. Lock
Project leader reaction to fire