

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

Classification no.	2021-Efectis-R000110[Rev.1]
Sponsor	Cirqlar B.V. Gedeputeerde Laanweg 47 hal 8 1619 PB ANDIJK THE NETHERLANDS
Product name	Cirqlar made of Resysta CHP2070
Prepared by	Efectis Nederland BV
Notified body no.	1234
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Project number	ENL-20-001155
Original date of issue	March 2021
Date of issue	March 2021
Number of pages	6

1. INTRODUCTION

1.1 PRODUCT NAME

This classification report defines the classification assigned to **Cirqlar made of Resysta CHP2070** in accordance with the procedures given in EN 13501-1:2018.

1.2 REVISION INFORMATION

Corrections related to the product name and added precisions in the field of applications paragraph
Original date of issue: March 2021

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **Cirqlar made of Resysta CHP2070**, is defined as a wall covering.

2.2 MANUFACTURER

Cirqlar B.V.
Gedeputeerde Laanweg 47 hal 8
1619 PB ANDIJK
THE NETHERLANDS

2.3 THE NETHERLANDS PRODUCT DESCRIPTION

According to the sponsor the product is from inside out composed of slats with a Fibre polymer based composite combined with rice fleece using PTRH technology. The product is coated with a non-substantial layer of FVG colour coating and a non-substantial layer of RFS UV coating.

The product has a total thickness on the lateral side of 4 mm, on the inside wall side 4 mm and at the top and bottom of 4 mm; a density of approx. 1460 kg/m³. The product is shaped into façade profile with a width of 70 mm and a total thickness of 20 mm and in a façade profile with a width of 90 mm (Cf. appendix of the test reports for the technical drawing) and a total thickness of 15 mm.

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

3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2020	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2020	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13238:2010	Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates
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	Cirqlar B.V. THE NETHERLANDS	2021-Efectis-R000109[Rev.1] 2021-Efectis-R000108[Rev.1]	EN ISO 11925-2:2020 EN 13823:2020

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	40	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	40	-
	Ignition of filter paper		-	Compliant
Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
70 mm width façade profile	FIGRA _{0.2MJ} [W/s]	3	49	-
	FIGRA _{0.4MJ} [W/s]		49	-
	THR _{600s} [MJ]		4.3	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		68.4	-
	TSP _{600s} [m ²]		1033	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant
EN 13823				
90 mm width façade profile	FIGRA _{0.2MJ} [W/s]	1	29	-
	FIGRA _{0.4MJ} [W/s]		29	-
	THR _{600s} [MJ]		2.4	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		35.9	-
	TSP _{600s} [m ²]		527	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

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 13501-1:2018.

4.2 CLASSIFICATION

The product, **Cirqlar made of Resysta CHP2070**, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s3

The additional classification in relation to flaming droplets / particles is:

d0

Reaction to fire classification: B – s3, d0

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness	3 to 4 mm
Density	1.46 g/cm ³
Other properties	Valid for Cirqlar made of Resysta CHP2070 and Cirqlar made of Resysta CHP1590: the 70 mm and 90 mm working width façade profile.
Substrate	Non-combustible (class A1/A2 according to EN 13238:2010)
Air gap	No
Orientation	Only vertical with a width gap of 6 mm between the slats.
Methods and means of fixing	Screwed
Other aspects of end use conditions	The product has been tested without an air gap screwed on a non-combustible substrate.

4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

Consult classification standard and national laws and regulations for limitations on the period of validity of the classification.

5. LIMITATIONS

This classification document does not represent type approval or certification of the product. The classification is only valid for slats mounted directly against a non-combustible surface.



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