

CLASSIFICATION MINUTES
OF REACTION TO FIRE OF A MATERIAL provided for in article 5 of the decree of

November 21, 2002

VALID FOR 5 YEARS from September 26, 2022

No. P224882 - DEC/1

and 6-page annex

Material presented by: EXTRUFLEX sas 25
rue Greffulhe 92300
Levallois Perret France
REF 690

Trademark :

Brief description :

Overall composition: Fire-retardant flexible PVC film in the mass

Use : Partitions, windows, awnings and flexible PVC membranes

Mass: from (357 ± 36) g/m² to (1280 ± 130) g/m² (determined by the LNE)

Thickness: 0.3 mm to 1 mm

Colors: Transparent (determined by the LNE)

Test report : No. P224882 - DEC/1 of September 26, 2022

Nature of the tests: Determination of classification according to NF P 92-507 (February 2004)
Electric burner test according to NF P 92-503 (December 1995), Test applicable to hot-melt materials according to NF P 92-505 (December 1995)

Classification: M2

M2

VALID FOR ANY APPLICATION FOR WHICH THE PRODUCT IS NOT SUBJECT TO CE MARKING

Durability of classification (NF P 92-512: 1986): NOT LIMITED A PRIORI

taking into account the criteria resulting from the tests described in the test report No. P224882 - DEC/1 attached.
To determine the ranking, the uncertainty associated with the result was not taken into account.

This report only certifies the characteristics of the sample submitted to the tests and does not prejudice the characteristics of similar products. It does not constitute product certification within the meaning of article L.115-27 of the Consumer Code and the law of June 3, 1994.

Only the complete reproduction of either the present Classification Minutes, which comprises 1 page, or the entire Minutes and attached report, which comprises 7 pages, is authorized.

Trappes, September 26, 2022



The Head of the Department
Fire Behavior and Fire Safety

Thibaut CORNILLON

TEST REPORT

OF REACTION TO FIRE OF A MATERIAL provided for in article 5 of
the decree of November 21, 2002

VALID FOR 5 YEARS from September 26, 2022

No. P224882 - DEC/1

1. PURPOSE OF TESTING

The tests to which this test report relates are intended to determine the classification of the materials, in accordance with the requirements of the Order of the Ministry of the Interior dated November 21, 2002 relating to their reaction to fire.

2. ORIGIN AND CHARACTERISTICS OF THE SAMPLES

Characteristics attested by the applicant:

The validity of the results may be affected by this information. For these results, the LNE's responsibility is limited to its contribution to their development.

Test requester : EXTRUFLEX sas

Date and reference of the order: Good for agreement on quote no. DEV2209275-V1 of 08/23/2022

Producer : EXTRUFLEX sas
FRANCE

Trademark and reference: REF 690

Overall composition : Flame-retardant flexible PVC film in the mass

Mass : 640 g/m²:

Thickness from 0.3 mm to 1 mm

Colors : Transparent blueish

Characteristics determined by the
LNE :

Mass : from (357 ± 36) g/m² to (1280 ± 130) g/m²:

Thickness from (0.290 ± 0.029) mm to (1.00 ± 0.10) mm

Colors : Transparent

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Accreditation/Accreditation
N° 1-0606

Scope available/ Scope available
On www.cofrac.fr



3. TERMS OF TESTING

Date of receipt of test pieces: 5/09/2022

Conditioning of test specimens prior to testing:

The test pieces, possibly placed on their substrates, are conditioned before testing in an atmosphere at (23 ± 2) °C and $(50 \pm 5)\%$ relative humidity for seven days or until the constant mass is obtained (case of materials delivered damp, or very thick).

The mass is considered constant when two successive weighings 24 hours apart do not differ by more than 0.1% or 0.1 g (the largest mass value will be taken).

Date of testing: 09/22/2022

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4. RESULTS

4.1. ELECTRIC BURNER TEST ACCORDING TO NF P 92-503 (DECEMBER 1995)

4.1.1. Determination of the most unfavorable mode

	Test tube 1				Test tube 2				Test tube 3				Test tube 4			
Sense	Calendering Place				Calendering Towards				Cross Place				Cross Towards			
Colours	Clear 0.3 mm				Clear 0.3 mm				Clear 0.3 mm				Clear 0.3 mm			
Mass (g)	39.02				38.94				40.48				40.00			
Piercing	Yes				Yes				Yes				Yes			
Moment inflammation(s)	20				20				20				20			
Duration of inflammation after removal of pilot flame(s)	14				8				19				16			
Propagation of ignited points outside the area already charred	-				-				-				-			
Distance > 250 mm after 5 mins	-				-				-				-			
Falling drops or debris inflamed	No				No				No				No			
Creep, falling of non-ignited drops	No				No				No				No			
Length destroyed/burned (mm)	160				165				195				200			
Width destroyed or burned in the area beyond 450mm (mm)	-				-				-				-			

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	Test tube 5				Test tube 6				Test tube 7				Test tube 8			
Sense	Calendering Place				Calendering Towards				Cross Place				Cross Towards			
Colors	Clear 1.0 mm				Clear 1.0 mm				Clear 1.0 mm				Clear 1.0 mm			
Mass (g)	137.82				137.88				137.50				138.06			
Piercing	Yes				Yes				Yes				Yes			
Moment inflammation(s)	20				20				20	45			20	38		
Duration of inflammation after removal of pilot flame(s)	65				103				4	95			1	97		
Propagation of ignited points outside the area already charred	-				-				-				-			
Distance > 250 mm after 5 mins	-				-				-				-			
Falling drops or debris inflamed	No				No				No				No			
Creep, falling of non-ignited drops	Yes				Yes				Yes				Yes			
Length destroyed/burned (mm)	250				305				340				340			
Width destroyed or burned in the area beyond 450mm (mm)	-				-				-				-			

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4.1.2. Continuation of tests according to the most unfavorable mode

	Test tube 9				Test tube 10				Test tube 11				Test tube 12				
Sense	Cross Towards				Cross Towards				Cross Towards				Cross Towards				
Colors	Clear 1.0 mm				Clear 1.0 mm				Clear 1.0 mm				Clear 1.0 mm				
Mass (g)	138.06				138.99				138.04				137.18				
Piercing	Yes				Yes				Yes				Yes				
Moment inflammation(s)	20	38			20				20	45			20				
Duration ignition after removal of the pilot flame(s)	1	97			97				1	84			72				
Propagation of ignited points outside the area already charred	-				-				-				-				
Distance > 250 mm after 5 mins	-				-				-				-				
Falling drops or debris inflamed	No				No				No				No				
Creep, falling of non-ignited drops	Yes				Yes				Yes				Yes				
Length destroyed/burned (mm)	250				305				340				340				Length average 309
Width destroyed or burned in the area beyond 450mm (mm)	-				-				-				-				Average width -

Ignition duration < 5 s	No
Average length < 350 mm	Yes
Average width < 90 mm	Yes
Falling fiery drops	No

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4.2. FUSIBILITY TEST ACCORDING TO NF P 92-505 (DECEMBER 1995)

	Test tube 1	Test tube 2	Test tube 3	Test tube 4
Colors	Transparent	Transparent	Transparent	Transparent
Mass (g)	6.73	6.63	6.78	6.78
Number of test pieces to reach 2 g	1	1	1	1
Falling non-ignited drops	No	No	No	No
Falling fiery drops	No	No	No	No
Inflammation of the cotton wool	No	No	No	No

5. OBSERVATIONS REGARDING THE TESTS

At the end of the electric burner tests, creep or falling drops were observed. Additional fusibility tests were therefore carried out.

Trappes, September 26, 2022



The Manager of
Behavior Department at
Fire and Fire Safety

Thibaut CORNILLON

The results mentioned are only applicable to samples, products or materials submitted to the LNE and as defined in this document.