

TEST CERTIFICATE ON FLAME RESISTANCE TESTING

No 237 / BP / 16

Test method:

- 1) PN-EN 1625:2002 Textiles and textiles products. Burning behaviour of industrial and technical textiles. Procedure to determine the ignitability of vertically oriented specimens.
- 2) PN-EN 1624:2002 Textiles and textiles products. Burning behaviour of industrial and technical textiles. Procedure to determine the flame spread of vertically oriented specimens.

Subject of testing:

Fabric named **J-3 AMSTERDAM 1A FR**, intended for use as lampshades,  
Composition: 100% polyester FR  
Weight: 215 g/m<sup>2</sup>  
Testing sample with the correct size, in appropriate state for testing,  
supplied by the Orderer with its characteristic and without the Sampling Protocol.

Results of testing:

- 1) Determination of ease of ignition according to PN-EN 1625:2002:  
**Samples didn't burn during of 20 s flame acting.**
- 2) Determination of flame propagation according to PN-EN 1624:2002:  
**Samples tested according to surface ignition (method A) and according to edge ignition (method B) didn't severance the first marker thread.  
Flaming debris didn't occur.**

The above results refer to testing conditions specified by the standard, they must not be used to conclude on the fabric behaviour tested under different conditions, for instance, when affected by heat radiation during fire.

Tests performed by:

*Andrzej Kubacki*  
Andrzej Kubacki, technician

Test Certificate authorized by:

Laboratorium Badań Palności Wyrobów  
**KIEROWNIK**

*M. Szejna*  
mgr Inż. Małgorzata Szejna  
01.08.2016

Sample received on: 29.06.2016

Test performed on: 29.07.2016

NOTES:

1. The Testing results refer only to the tested sample.
2. Test Certificate consists of 4 pages.
3. Test Certificate must not be reproduced in another way, than as a whole without a prior written consent of the Testing Laboratory.
4. The Orderer using this Test Certificate is responsible for the conformity between the product and sample submitted for testing.

The Testing Laboratory accredited by the Polish Centre for Accreditation (PCA), No AB 029.

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PVC-Hart-Folie: Ref. PVC3015201  
Farbe: 01/750 – weiß transluzent

Diese kalandrierten Hart-PVC-Folie werden ohne Weichmacher produziert. Sie entsprechen bezüglich des Gehaltes an Schwermetallen den Anforderungen der EG-Richtlinie 94/82/EC, sowie deren Ergänzungen 99/42/EC und 99/177/EC.

- Besondere Merkmale:
- Lampenschirmfolie
  - Reduzierte elektrostatische Aufladung
  - Verbessert UV-stabilisiert
  - Nur für opake und transluzente Farben

Eigenschaften	Norm	Wert	Einheit	Bemerkungen
Dicke	DIN 533370 ISO 4593	150-700	µm	Toleranzen: ± 10% ( ≤ 200 µm) ± 7% (201...400 µm) ± 5% ( > 400 µm)
Dichte	DIN EN ISO 1183-2	1,41± 0,02	g/cm <sup>3</sup>	In Farbe 01/750
Schlagzugzähigkeit	DIN EN ISO 8256	≥ 450	kJ/m <sup>2</sup>	Gemessen in Längsrichtung
VICAT-Erweichungspunkt	DIN EN ISO 306	74 ± 2	°C	Gemessen in Öl, Verfahren B/50
Maßänderung nach Wärmelagerung	DIN 53377		%	Lagerung im Wärmeschrank bei 140°C/10 Min.
- längs - quer		max. -8 max. ± 2		
Temperaturbelastung ohne bleibende Maßänderung.		+55	°C	
Kältebruchtemperatur	DIN 53372	-15	°C	Fallhammermethode
Oberflächenreflexion		20-30	GE	Meßwinkel 85°, geprägte Seite
Oberflächenrauigkeit - RZ	DIN 4768	6-12	µm	geprägte Seite, Meßgerät Perihometer M4p Lt 2,5 = Meßstrecke 15 mm
Brandklassifizierung	DIN 4102	B1		300 µm

Verteiler

B.V. Verenigde Passementenfabrieken "Amsterdam"  
Jarmuiden 9-11, 1048 AC Amsterdam  
Niederlande

Unterschriften

Prüfer:

*Scheinköni*  
Scheinköni

Genehmigt:

*Kh. Schenk*  
Kh. Schenk  
stellv. Leiter der Prüfstelle

**DETAILED TESTING RESULTS**

**1) Determination of ease of ignition according to PN-EN 1625:2002**

Climate conditions: temperature (20 ± 2)°C; humidity (65 ± 5)%; time 24h  
 Testing conditions: temperature 23 °C; humidity 71 %

Samples tested in delivered state by the Orderer - without washing.

Specimen size: (200 x 80) mm  
 Gas: propane

Method A - surface ignition

Longways direction

Sample number	1	2	3	4	5	6	7	8	9	10	11	12	13	Max. range of the damage [mm]
Flame application time [s]	1	2	3	4	5	6	7	8	9	10	11	12	13	-
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	
Test result	O	O	O	O	O	O	O	O	O	O	O	O	O	

continued

Sample number	14	15	16	17	18	19	20	21	22	23	24	-	-	Max. range of the damage [mm]
Flame application time [s]	14	15	16	17	18	19	20	20	20	20	20	-	-	61
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	-	-	
Test result	O	O	O	O	O	O	O	O	O	O	O	-	-	

Crosswise direction

Sample number	1	2	3	4	5	6	7	8	9	10	11	12	13	Max. range of the damage [mm]
Flame application time [s]	1	2	3	4	5	6	7	8	9	10	11	12	13	-
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	
Test result	O	O	O	O	O	O	O	O	O	O	O	O	O	

continued

Sample number	14	15	16	17	18	19	20	21	22	23	24	-	-	Max. range of the damage [mm]
Flame application time [s]	14	15	16	17	18	19	20	20	20	20	20	-	-	46
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	-	-	
Test result	O	O	O	O	O	O	O	O	O	O	O	-	-	

O - sample didn't burn

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Method B - edge ignition

Longways direction

Sample number	1	2	3	4	5	6	7	8	9	10	11	12	13	Max. range of the damage [mm]
Flame application time [s]	1	2	3	4	5	6	7	8	9	10	11	12	13	-
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	
Test result	O	O	O	O	O	O	O	O	O	O	O	O	O	

continued

Sample number	14	15	16	17	18	19	20	21	22	23	24	-	-	Max. range of the damage [mm]
Flame application time [s]	14	15	16	17	18	19	20	20	20	20	20	-	-	80
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	-	-	
Test result	O	O	O	O	O	O	O	O	O	O	O	-	-	

Crosswise direction

Sample number	1	2	3	4	5	6	7	8	9	10	11	12	13	Max. range of the damage [mm]
Flame application time [s]	1	2	3	4	5	6	7	8	9	10	11	12	13	-
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	0	0	
Test result	O	O	O	O	O	O	O	O	O	O	O	O	O	

continued

Sample number	14	15	16	17	18	19	20	21	22	23	24	-	-	Max. range of the damage [mm]
Flame application time [s]	14	15	16	17	18	19	20	20	20	20	20	-	-	77
Afterflame time [s]	0	0	0	0	0	0	0	0	0	0	0	-	-	
Test result	O	O	O	O	O	O	O	O	O	O	O	-	-	

O - sample didn't burn

Result of the test according to PN-EN 1625:2002:

Samples didn't burn during of 20 s flame acting.

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2) Measurement of flame spread properties according to PN-EN 1624:2002:

Climate conditions: temperature (20 ± 2)°C; humidity (65 ± 5)%  
 Testing conditions: temperature 23 °C ; humidity 71 %

Samples tested in delivered state by the Orderer - without washing.

Specimen size: (560 x 170) mm  
 Gas: propane

Method A - surface ignition

Direction	Flame application time [s]	Sample number	Afterflame time [s]	Length of the damage [mm]	Time measured from the start of the application of the test flame until the severance of the marker threads			Did burning of the debris fall?
					I [s]	II [s]	III [s]	
Longways	10	1	0	44	-	-	-	NO
		2	0	44	-	-	-	NO
		3	0	45	-	-	-	NO
		Average value	0	44	-	-	-	-
Crosswise	10	1	0	34	-	-	-	NO
		2	0	34	-	-	-	NO
		3	0	34	-	-	-	NO
		Average value	0	34	-	-	-	-

Method B - edge ignition

Direction	Flame application time [s]	Sample number	Afterflame time [s]	Length of the damage [mm]	Time measured from the start of the application of the test flame until the severance of the marker threads			Did burning of the debris fall?
					I [s]	II [s]	III [s]	
Longways	10	1	0	65	-	-	-	NO
		2	0	66	-	-	-	NO
		3	0	65	-	-	-	NO
		Average value	0	65	-	-	-	-
Crosswise	10	1	0	63	-	-	-	NO
		2	0	58	-	-	-	NO
		3	0	60	-	-	-	NO
		Average value	0	60	-	-	-	-

Result of the test according to PN-EN 1624:2002:

Samples tested according to surface ignition (method A) and according to edge ignition (method B) didn't severance the first marker thread. Flaming debris didn't occur.

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END OF THE TEST CERTIFICATE