

IFR Molton CS (Chroma Key)

Perfect For: Masking • Decorative/Scenic • Film & TV • Stage • Acoustics

J&C Joel 

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Composition & Care

300 cm 3

Fire Certificate

BS5867 Part 2 Type B 4

M1 8

B1 9

TECHNICAL



NDFR

Non Durably Flame Retardant

chemically treated with a water solution and if wetted in any way should be retreated



DFR

Durably Flame Retardant

chemically treated to withstand a number of cleanings



IFR

Inherently Flame Retardant

woven from fibres with a high flame retardancy



FR

Flame Retardant

chemically treated to an individual specification



NOT FR

Not Flame Retardant no flame retardant treatment



Confirmation that the fabric meets one or more flame retardant standards

BS5867 BS5867 Pt2 B is the British Standard for flame retardant fabrics used for curtains and drapes

BS5852 BS5852 Pt1 is the British Standard for flammability of upholstered composites for seating

BS4790 BS4790: 1987 Determination of the effects of a small source of ignition on textile floor coverings hot metal nut method (method 1, loose laid)

EN13773: 2003 Meets European fire safety standards for vertically hung fabrics. Burning behavior, ignitability testing of curtain fabric for use in the contract market.

TL 1080-0002/8 German Military Specification for horizontally tested materials

EN14041 Details the requirement for CE Marking of textiles, laminate and resilient floor coverings

BS7905-1:2001 Lifting equipment for performance, broadcast and similar applications.

ATTRIBUTES



Approx roll length of material in linear metres (m) & feet (ft)



Approx width of material in centimetres (cm) & inches (")



Approx weight in grams per metre squared (g/m²)



Approx thickness in (mm)

M1, M2, M4 Conforms to French Fire Regulations

B1, B2 Conforms to German Fire Regulations DIN 4102

IMO Conforms to International Maritime Organisation regulations

Classe Uno Meets Italian Fire Regulations

BS EN13501-1 Fire Classification of construction, products and building elements. Classification using test data from reaction to fire tests






CFC EN ISO 9239-1 Reaction to fire test. Horizontal surface spread of flame on floor covering system. Determination of the burning behaviour using a retardant heat source

NFPA 701 NFPA 701: (USA) Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

EN9239-1 Reaction to fire tests – horizontal surface spread of flame on floor covering systems

DIN EN1021 Meets European fire safety standards for exposure to different ignition sources, namely a lit cigarette and butane flame. Assessment of the ignitability of upholstered furniture

To ensure you get the best from the product supplied to you, we advise you follow the care instructions within this datasheet.

Fabric	Flame Retardancy	IFR
	Fire Certification	BS5867, M1, B1, EN13773, EN13501-1
	Brand Name (and Manufacturer)	J&C Joel Ltd.
	Material (Blending Ratio)	100% Polyester
	Construction of Fabric	Dyed
Chemicals	Surface Treatments	N/A
	Brand Name of Flame Retardant Chemicals	N/A
	Chemical name of Flame Retardant Chemicals	N/A
	Process of Flame Retardant Chemicals	N/A
Care	Information	<p>Inherently Flame Retardant to BS5867 Part 2 Type B, M1, B1, EN13773 and EN13501-1. This means that the man-made fibres are flame retardant for life and if wet, would not need to be re-flameproofed. Therefore, the cloth will withstand wet cleaning but we would advise and suggest professional dry cleaning only, using the correct chemical process.</p> <p>Notwithstanding the aforementioned, it would be our advice to only dry clean this material periodically. We would suggest that the curtain be soft-brushed on a regular basis and periodically cleaned using a Vacuum and drapery attachment.</p> <p>This fabric is not pre-shrunk.</p>
	Laundering Treatment	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Dry Clean Only</p> </div> <div style="text-align: center;">  <p>Do Not Wash</p> </div> <div style="text-align: center;">  <p>Do Not Bleach</p> </div> <div style="text-align: center;">  <p>Do Not Iron</p> </div> <div style="text-align: center;">  <p>Do Not Tumble Dry</p> </div> </div>
Notes		



Fire Rating:
IFR



Approx Bale Length:
60m / 197ft



Width:
300cm / 118"



Weight:
320 g/m²



Fire Certification:
BS5867, M1, B1,
EN13773, EN13501-1



Colours
Available

For further information please contact our sales team sales@jcjoel.com

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: BS5867 Part 2 Type B

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Wira House, West Park Ring Road,
Leeds, LS16 6QL, UK.
Telephone: +44 (0)113 259 1999
Email: info@btg.co.uk
Website: www.btg.co.uk

Date: 15 August 2017

Our Ref: 53651-5
Your Ref: -

Page: 1 of 4

Client: J. & C. Joel Limited
Corporation Mill
Corporation Street
Sowerby Bridge
Halifax
HX6 2QQ

Job Title: Surface Ignition Of Curtains & Drapes

Client's Order No: -

Date of Receipt: 16 June 2017
Date of Test Start: 29 June 2017

Description of Sample(s): One sample identified as follows was received for testing:
IFR Molton, stated to be IFR

Work Requested: We were asked to make the following test:
BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds



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Our laboratories are accredited to EN ISO/IEC 17025.

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Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: BS5867 Part 2 Type B

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TESTING • CERTIFICATION • AUDITING

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Sample was identified as follows:

IFR Molton, stated to be IFR

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Page: 2 of 4

BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds

Testing as received.

Three specimens from both length and width were tested in accordance with BS EN ISO 15025: Procedure A (surface ignition): 2002. The sample was tested at 20 °C and 60 % relative humidity (R.H.).

Each specimen was subjected to an applied flame using propane and a 15 second flame application time. The results obtained (shown in the table below) were assessed according to the requirements of BS 5867: Part 2: 2008 (2015).

Pre-treatment

If the fabric is a pass in the 'as received' condition then the fabric is subjected a water soak procedure as specified in BS EN 1021: Annex D: 2006.

Testing after pre-treatment

Three specimens, after pre-treatment, from both length and width were tested following the procedure described above.

Test results relate only to the sample tested.

The results for all tests are given in the table(s) on the following page(s).

Reported by: 
J Coleman
Fire Technician

Countersigned By: 
P Doherty
Operational Head

Enquiries concerning this report should be addressed to Customer Services.



1066

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Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: BS5867 Part 2 Type B

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RESULTS

Sample Ref: IFR Molton, stated to be IFR

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Date: 15 August 2017

Our Ref: 53651-5

Your Ref: -

Page: 3 of 4

BS 5867: Part 2: 2008 (2015): Type B Curtains, Drapes and Blinds

Testing as Received

Specimen No.	Length			Width		
	1	2	3	4	5	6
Flame reached an edge	No	No	No	No	No	No
Hole reached an edge	No	No	No	No	No	No
Flaming debris separated	No	No	No	No	No	No

Requirements

Any "Yes" means fail except if only one specimen fails a further 6 specimens are tested, if the second 6 specimens all pass the result is a pass.

Result in `as received`: Pass

Testing after pre-treatment

Specimen No.	Length			Width		
	1	2	3	4	5	6
Flame reached an edge	No	No	No	No	No	No
Hole reached an edge	No	No	No	No	No	No
Flaming debris separated	No	No	No	No	No	No

Requirements

Any "Yes" means fail except if only one specimen fails a further 6 specimens are tested, if the second 6 specimens all pass the result is a pass.

Result in `after pre-treatment`: Pass



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Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: BS5867 Part 2 Type B

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Conclusion

The fabric meets the Type B performance requirements of BS 5867: Part 2: 2008 (2015).

This material should be identified with the manufacturers name, trademark or other identifying mark, the statement 'Flammability complies with the requirements of BS 5867: Part 2: Type B and instructions of any special precautions to be taken concerning care (including cleansing) of the curtain, drape or window blind to be manufactured from the fabric, preferably using an appropriate care labelling symbol in accordance with BS EN 23758 and taking account of the pre-treatment using in this test and the requirements of Clause 4 of BS 5867: Part 2: 2008 (2015). If the fabric is unsuitable for cleansing, this shall be stated.

Uncertainty Budget

There is no uncertainty budget associated with BS 5867: Part 2: Type B as no measurements are determined, the pass/fail criteria is assessed visually.

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Page: 4 of 4

SPECIMEN



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Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: M1

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This document is the translation of the French certificate n° 16-04305 L on the 16th December, 2016 delivered by IFTH.

MATERIAL REACTION TO FIRE CLASSIFICATION REPORT

prepared in compliance with amended 5 of the French Home Office Regulation dated November 21st, 2002 (Official Gazette dated December 31, 2002)

Valid five years from issue date

CERTIFICATE N° 16-04305 L

And appendices of 6 pages

TRADE NAME : Article 9000 Molton CS

BRIEF DESCRIPTION : Fabric made of 100% inherent flame retardant polyester fibers
Measured surface weight : around 320 ± 20 g/m²
Measured thickness : 0.6 ± 0.1 mm
Colours : various

TEST REPORT : N° 16-04305 E1-V1 on the 16th December, 2016

TESTS : Electrical burner test
Flame persistence test
Dripping test

CLASSIFICATION : **M 1**

CLASSIFICATION DURATION (article 5 of appendix 2): unlimited unless otherwise specified

given the criteria resulting from the tests described in the enclosed test report.
The classification indicated does not mean that materials marketed comply with the test samples and must not be considered as a qualification certificate as defined by French law dated June 3, 1994.

N.B.: Only integral copies of this document may be made by photocopying the classification report and/or the classification report and enclosed test report.

Issued in Lyon, France, on the 16th December, 2016

Head of Quality Management Test and trials
Jean-Marc ORAISON



cofrac
ACCREDITATION
N° 1-0101 et
N° 1-0513
PORTÉE
COMMUNIQUÉE
SUR DEMANDE
ESSAIS

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SIRET 433 430 832 00108 – NAF 729Z – TVA : FR 39 433430832 – CENTRE TECHNIQUE INDUSTRIEL (LOI DU 22 JUILLET 1948 – ARRETE DU 14 AVRIL 2000)

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1

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MPA NRW. 
Materialprüfungsamt Nordrhein-Westfalen
PRÜFEN · ÜBERWACHEN · ZERTIFIZIEREN

Aussenstelle Erwitte • Auf den Thränen 2 • 59597 Erwitte • Telefon (02943) 897-0 • Telefax (02943) 897 33 • E-Mail: erwitte@mpanrw.de

TEST CERTIFICATE

No. 230010972

as proof of the Schwerentflammbarkeit according to DIN 4102-1 (May 1998)

English version

Date of application: 27.03.2017
Date of sampling: Samples were sent in by the sponsor
Samples delivered on: 03.05.2012 and 24.03.2017
Date of testing: 11.06.2012, 12.06.2012, 19.04.2017, 20.04.2017, 24.04.2017,
10.05.2017, 12.05.2017, 22.05.2017 and 23.05.2017

Order

Testing according to DIN 4102-1 (May 1998) class B1

Description / Name of tested product

Decoration fabric „Artikel 9000“ and white decoration fabric „Artikel 9002“

Applied test procedure

DIN 4102 part 1 (May 1998)

Remark: This test certificate is a translation of the original test certificate 230010972 issued 07.06.2017 in German language and is only allowed to be used together with the original test certificate.

This test certificate is valid until 06.06.2022.
The test results only relate to the above named product.
Any change in form or content to a test certificate and the reproduction of a shortened version can only be made by the approval of MPA NRW.
This test certificate consists of 13 pages and 1 enclosure.



Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1

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Test certificate no. 230010972 issued 07.06.2017

page 2 of 13

Name of tested product: „Artikel 9000“ and „Artikel 9002“

Description:

Fabrics made of polyester FR-fibres

"Artikel 9000": one-sided roughened fabric in different colourings

"Artikel 9002": bleached, white, not roughened fabric

(Details given by the sponsor)

The tested fabrics of type "Artikel 9000" had a velvety surface on one side.

Thickness of „Artikel 9000“: on average 0.8 mm, thickness of "Artikel 9002": on average: 0.5 mm,

Weight per unit area of the fabrics: on average 308 g/m²

Colour of the tested fabric of type "Artikel 9000": a) white, b) red, c) black

Special information: none

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
 Type: B1



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Test certificate no. 230010972 issued 07.06.2017

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row-no.		Results of the Brandschacht test (part 1)			
		White fabric "Artikel 9002"		measurements test specimen	
		A1	B1		
1	<u>No. of test specimen arrangement according to DIN 4102, part 15, table 1</u>	1	1		
2	<u>Max. flame height above bottom edge</u>	40	40		
	Time ¹⁾ cm	0:30	0:30		
	min : s				
4	<u>Melt through / burn through</u>				
	Time ¹⁾ min : s	0:03	0:03		
5	<u>Observations on the backside of the specimens</u>				
	Flames/smouldering				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾		
6	Discolouration				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾		
7	<u>Burning droplets</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾		
	<u>Extent</u>				
8	sporadic burning droplets	-- ²⁾	-- ²⁾		
9	continually falling particles	-- ²⁾	-- ²⁾		
10	<u>Falling particles which burns</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾		
11	sporadic falling parts	-- ²⁾	-- ²⁾		
12	continually falling particles	-- ²⁾	-- ²⁾		
13	Duration of the burning on the screen bottom (max.)				
	min : s	-- ²⁾	-- ²⁾		
14	<u>Interference of the burner flame by dripping /falling particles</u>				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾		
15	<u>Early termination of the test</u>				
	End of burning at the specimen ¹⁾ min : s	-- ²⁾	-- ²⁾		
16	Time of early cancellation of the test ¹⁾ min : s	-- ²⁾	-- ²⁾		

¹⁾ Time counting from the start of the test

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1



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Test certificate no. 230010972 issued 07.06.2017

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row-no.		Results of the Brandschachttest (part 2)			
		measurements test specimen			
		A1	B1		
<u>Continuous burning after termination of the test</u>					
17	Duration min : s	-- ²⁾	-- ²⁾		
18	Number of specimens	-- ²⁾	-- ²⁾		
19	Front side of the specimen	-- ²⁾	-- ²⁾		
20	Back side of the specimen	-- ²⁾	-- ²⁾		
21	Flame length cm	-- ²⁾	-- ²⁾		
<u>Smouldering after termination of the test</u>					
22	Duration min : s	-- ²⁾	-- ²⁾		
23	Number of specimens	-- ²⁾	-- ²⁾		
<u>Location</u>					
24	Lower half of the specimens	-- ²⁾	-- ²⁾		
25	Upper half of the specimens	-- ²⁾	-- ²⁾		
26	Front side of the specimen	-- ²⁾	-- ²⁾		
27	Backside of the specimen	-- ²⁾	-- ²⁾		
<u>Smoke development</u>					
28	≤ 400 % x min	16	6		
29	> 400 % x min	-- ²⁾	-- ²⁾		
30	Diagram in appendix	--	--		
<u>Residual lengths</u>					
31	Single values cm	67	54	56	56
		53	63	58	57
32	Average values cm	59 ³⁾	57 ³⁾		
33	Photo of the specimen on page	--	--		
<u>Smoke temperature</u>					
34	Maximum value of the averaged values °C	116	116		
35	Time ¹⁾ min : s	9:30	10:00		
36	Diagram in appendix Nr.	--	--		
37	<u>Remarks:</u> The test occurred on free hanging samples. Test A1: The samples were flamed in production direction. Test B1: The samples were flamed across the production direction. 2) Did not occur 3) Due to the average residual length of > 45 cm further tests on the white fabric were not necessary according to DIN 4102-16 section 5.2 b).				

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1



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Test certificate no. 230010972 issued 07.06.2017

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Results of the Brandschacht test (part 1)					
row-no.	Fabric "Artikel 9000", Colour:	measurements test specimen			
		red A2	red B2	black C2	
1	<u>No. of test specimen arrangement according to DIN 4102, part 15, table 1</u>	1	1	1	
2	<u>Max. flame height above bottom edge</u>	40	40	40	
	Time ¹⁾ min : s	0:30	0:30	0:30	
4	<u>Melt through / burn through</u>				
	Time ¹⁾ min : s	0:04	0:05	0:04	
5	<u>Observations on the backside of the specimens</u>				
	Flames/smouldering Time ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
6	<u>Discolouration</u>				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
7	<u>Burning droplets</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾	0:11	
8	<u>Extent</u>				
	sporadic burning droplets	-- ²⁾	-- ²⁾	x	
9	<u>continually falling particles</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
10	<u>Falling particles which burns</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
11	<u>sporadic falling parts</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
12	<u>continually falling particles</u>				
	Start ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
13	<u>Duration of the burning on the screen bottom (max.)</u>				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾	0:02	
14	<u>Interference of the burner flame by dripping /falling particles</u>				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
15	<u>Early termination of the test</u>				
	End of burning at the specimen ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	
16	<u>Time of early cancellation of the test ¹⁾</u>				
	Time ¹⁾ min : s	-- ²⁾	-- ²⁾	-- ²⁾	

¹⁾ Time counting from the start of the test

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1



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Test certificate no. 230010972 issued 07.06.2017

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row-no.		Results of the Brandschachttest (part 2)					
		measurements test specimen					
		A2		B2		C2	
<u>Continuous burning after termination of the test</u>							
17	Duration min : s	-- ²⁾		-- ²⁾		-- ²⁾	
18	Number of specimens	-- ²⁾		-- ²⁾		-- ²⁾	
19	Front side of the specimen	-- ²⁾		-- ²⁾		-- ²⁾	
20	Back side of the specimen	-- ²⁾		-- ²⁾		-- ²⁾	
21	Flame length cm	-- ²⁾		-- ²⁾		-- ²⁾	
<u>Smouldering after termination of the test</u>							
22	Duration min : s	-- ²⁾		-- ²⁾		-- ²⁾	
23	Number of specimens	-- ²⁾		-- ²⁾		-- ²⁾	
<u>Location</u>							
24	Lower half of the specimens	-- ²⁾		-- ²⁾		-- ²⁾	
25	Upper half of the specimens	-- ²⁾		-- ²⁾		-- ²⁾	
26	Front side of the specimen	-- ²⁾		-- ²⁾		-- ²⁾	
27	Backside of the specimen	-- ²⁾		-- ²⁾		-- ²⁾	
<u>Smoke development</u>							
28	≤ 400 % x min	8		5		3	
29	> 400 % x min	-- ²⁾		-- ²⁾		-- ²⁾	
30	Diagram in appendix	--		--		1	
<u>Residual lengths</u>							
31	Single values cm	52	58	55	53	58	60
		51	52	60	54	61	55
32	Average values cm	53 ³⁾		56 ³⁾		59 ³⁾	
33	Photo of the specimen on page	9		--		--	
<u>Smoke temperature</u>							
34	Maximum value of the averaged values °C	116		114		117	
35	Time ¹⁾ min : s	10:00		9:27		9:40	
36	Diagram in appendix Nr.	--		--		1	
37	<u>Remarks:</u>						
<p>The test occurred on free hanging samples. Tests A2 and C2: The roughened side of the fabric was flamed across the production direction. Test B2: The fabric side was flamed across the production direction.</p> <p>2) Did not occur 3) Due to the average residual length of > 45 cm further tests on the "Artikel 9000" were not necessary according to DIN 4102-16 section 5.2 b).</p>							

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1



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Test certificate no. 230010972 issued 07.06.2017

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row-no.		Results of the Brandschacht test (part 1)			
		measurements test specimen			
Washed fabrics		A3	B3	C3	D3
1	<u>No. of test specimen arrangement according to DIN 4102, part 15, table 1</u>	1	1	1	1
2	<u>Max. flame height above bottom edge</u>	40	50	40	50
	Time ¹⁾ min : s	0:30	0:30	0:30	0:30
4	<u>Melt through / burn through</u>				
	Time ¹⁾ min : s	0:03	0:02	0:03	0:02
5	<u>Observations on the backside of the specimens</u>				
	Flames/smouldering Time ¹⁾ min : s	0:03	--	0:04	0:03
6	<u>Discolouration</u>				
	Time ¹⁾ min : s	--	--	--	--
7	<u>Burning droplets</u>				
	Start ¹⁾ min : s	0:04	0:11	0:05	0:03
8	<u>Extent</u>				
9	sporadic burning droplets	x	x	x	x
9	continually falling particles	--	--	--	--
10	<u>Falling particles which burns</u>				
	Start ¹⁾ min : s	--	--	--	--
11	sporadic falling parts	--	--	--	--
12	continually falling particles	--	--	--	--
13	Duration of the burning on the screen bottom (max.) min : s	--	0:02	0:01	0:01
14	<u>Interference of the burner flame by dripping /falling particles</u>				
	Time ¹⁾ min : s	0:05	--	0:06	0:04
15	<u>Early termination of the test</u>				
	End of burning at the specimen ¹⁾ min : s	--	--	--	--
16	Time of early cancellation of the test ¹⁾ min : s	--	--	--	--

¹⁾ Time counting from the start of the test

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1



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row-no.		Results of the Brandschichttest (part 2)							
		measurements test specimen							
		A3		B3		C3		D3	
<u>Continuous burning after termination of the test</u>									
17	Duration min : s	--	--	--	--	--	--	--	--
18	Number of specimens	--	--	--	--	--	--	--	--
19	Front side of the specimen	--	--	--	--	--	--	--	--
20	Back side of the specimen	--	--	--	--	--	--	--	--
21	Flame length cm	--	--	--	--	--	--	--	--
<u>Smouldering after termination of the test</u>									
22	Duration min : s	--	--	--	--	--	--	--	--
23	Number of specimens	--	--	--	--	--	--	--	--
<u>Location</u>									
24	Lower half of the specimens	--	--	--	--	--	--	--	--
25	Upper half of the specimens	--	--	--	--	--	--	--	--
26	Front side of the specimen	--	--	--	--	--	--	--	--
27	Backside of the specimen	--	--	--	--	--	--	--	--
<u>Smoke development</u>									
28	≤ 400 % x min	3	3	3	3	3	3	4	4
29	> 400 % x min	--	--	--	--	--	--	--	--
30	Diagram in appendix	--	--	--	--	--	--	--	--
<u>Residual lengths</u>									
31	Single values cm	62	67	64	62	54	60	58	64
		58	60	58	65	59	50	65	51
32	Average values cm	62	62	56	60	56	60	60	60
33	Photo of the specimen on page	--	--	--	--	--	--	--	--
<u>Smoke temperature</u>									
34	Maximum value of the averaged values °C	121	119	120	121	120	121	121	121
35	Time ¹⁾ min : s	9:43	9:23	9:39	9:59	9:39	9:59	9:59	9:59
36	Diagram in appendix Nr.	--	--	--	--	--	--	1	1
37	<p><u>Remarks:</u> The test occurred on free hanging samples. For the fire tests the fabrics were washed by the sponsor 10 times according to DIN EN ISO 6330 5A, E and drying afterwards. Test A2: White fabric "9000", cut in production direction, flaming of the velvet side Test B2: Black fabric "9000", cut in production direction, flaming of the velvet side Test C2: White fabric "9002", cut across the production direction Test D2: Black fabric "9000", cut across the production direction, flaming of the fabric side The results of the tests A3 – D3 were taken of the test report no. 230005501-4 of 18.06.2012.</p>								

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1

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MPA NRW 
Materialprüfungsamt Nordrhein-Westfalen
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Picture 1: Appearance of specimen A2 after the test

Fire Test Certificate – Specimen

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Results of the B2-testing according to DIN 4102-01

(Tests with flaming the edge of free hanging samples)

Protection of edges: --

Point of flame attack: lower edge of the front side, flaming of the white fabric "Artikel 9002" in production direction

Specimen No.	1	2	3	4	5
(Times stated from start of test)					
Ignition (s)	1	1	1	1	1
Flame passing the limit mark (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Self extinguishment (s)	12	10	10	9	7
Max. height of the flame (cm)	3	3	3	3	2
Continuous burning after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Continuous smouldering after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Extinguishment of flames / glowing after passing the limit mark	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Smoke development (visual observation)	low				
Falling of burning particles / droplets time (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾

Remark: 1) Did not occur

Point of flame attack: lower edge of the front side, flaming of the white fabric "Artikel 9002" across the production direction

Specimen No.	1	2	3	4	5
(Times stated from start of test)					
Ignition (s)	1	1	1	1	1
Flame passing the limit mark (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Self extinguishment (s)	5	7	5	5	5
Max. height of the flame (cm)	3	3	2	3	3
Continuous burning after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Continuous smouldering after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Extinguishment of flames / glowing after passing the limit mark	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Smoke development (visual observation)	low				
Falling of burning particles / droplets time (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾

Remarks: 1) Did not occur

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1



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Results of the B2-testing according to DIN 4102-01
 (Tests with flaming the edge of free hanging samples)

Protection of edges: --

Point of flame attack: lower edge of the front side, flaming of the roughened side of the red fabric
 "Artikel 9000" in production direction

Specimen No.	1	2	3	4	5
(Times stated from start of test)					
Ignition (s)	1	1	1	1	1
Flame passing the limit mark (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Self extinguishment (s)	6	5	7	5	7
Max. height of the flame (cm)	4	4	6	6	5
Continuous burning after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Continuous smouldering after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Extinguishment of flames / glowing after passing the limit mark	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Smoke development (visual observation)	low				
Falling of burning particles / droplets time (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾

Remark: 1) Did not occur

Point of flame attack: lower edge of the front side, flaming of the fabric side of the red fabric
 "Artikel 9000" in production direction

Specimen No.	1	2	3	4	5
(Times stated from start of test)					
Ignition (s)	1	1	1	1	1
Flame passing the limit mark (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Self extinguishment (s)	4	5	4	4	5
Max. height of the flame (cm)	2	2	2	2	2
Continuous burning after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Continuous smouldering after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Extinguishment of flames / glowing after passing the limit mark	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Smoke development (visual observation)	low				
Falling of burning particles / droplets time (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾

Remarks: 1) Did not occur

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1

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Results of the B2-testing according to DIN 4102-01

(Tests with flaming the surface of free hanging samples)

Point of flame attack: 40 mm above the lower edge of the front side, flaming of the roughened side of the black fabric "Artikel 9000" in production direction

Specimen No.	1	2	3	4	5
(Times stated from start of test)					
Ignition (s)	1	1	1	1	1
Flame passing the limit mark (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Self extinguishment (s)	8	10	8	8	7
Max. height of the flame (cm)	5	5	4	4	4
Continuous burning after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Continuous smouldering after 20 s	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Extinguishment of flames / glowing after passing the limit mark	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾
Smoke development (visual observation)	low				
Falling of burning particles / droplets time (s)	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾	-- ¹⁾

Remark: 1) Did not occur

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1

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Assessment

- The product described on page 2 fulfilled the requirements of building products according to Baustoffklasse B2. According to the results, the product as tested in the described arrangement also fulfils the requirements of building products according to Baustoffklasse B1. In consequence the product can be classified as

Baustoffklasse B1 (schwerentflammbare Baustoffe)

according to DIN 4102 part 1 (Mai 1998). This assessment is only valid, if the distance to equal or other plane building products is > 40 mm. The surface of the fabrics may not be covered with paints, coatings or similar products. The resistance of the fire behaviour against climatic influences in the outside was not proofed. Therefore the product may be used as schwerentflammbar only inside of buildings or in otherwise weather protected areas.

- The material does not produce burning droplets / particles.

Special remark

- The validity of this test certificate ends on 06.06.2022. The period of validity can be extended on application.
- Since the material is used as decoration fabric it is no building product according to §2 chapter 9 no. 1 MBO. An allgemeines bauaufsichtliches Prüfzeugnis of the test institute respectively an allgemeine bauaufsichtliche Zulassung of Deutsches Institut für Bautechnik, Berlin is not necessary.
- This test certificate is not the requested approval, if the tested material is used as building product according to the German building regulations.

Marking

The above mentioned material has to be marked as following:

- "Only schwerentflammbar (class DIN 4102-B1) in a distance of > 40 mm to equal or other products"

The marking shall be done on the material, on an enclosed paper or on the packaging or, if this would be too difficult, on the delivery-note or on an enclosure to the delivery-note.

This test certificate is solely valid in combination with the original test certificate issued in German language and dated of 07.06.2017. In case of doubt, the certificate issued in German language is valid solely.

Erwitte, 07.06.2017
On behalf

Dipl.-Ing. Schreiner
Assistant head of testing body

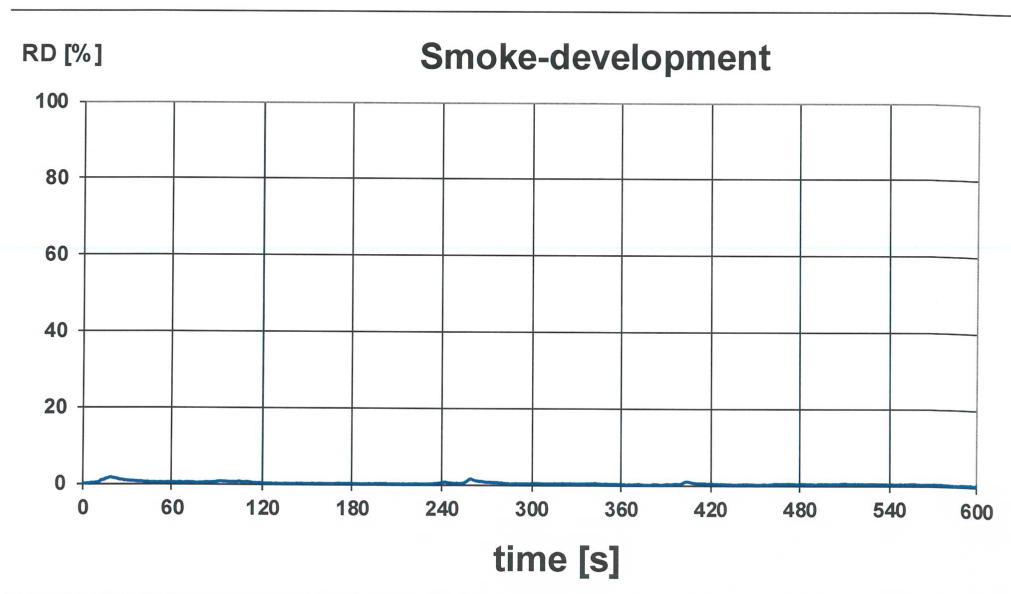
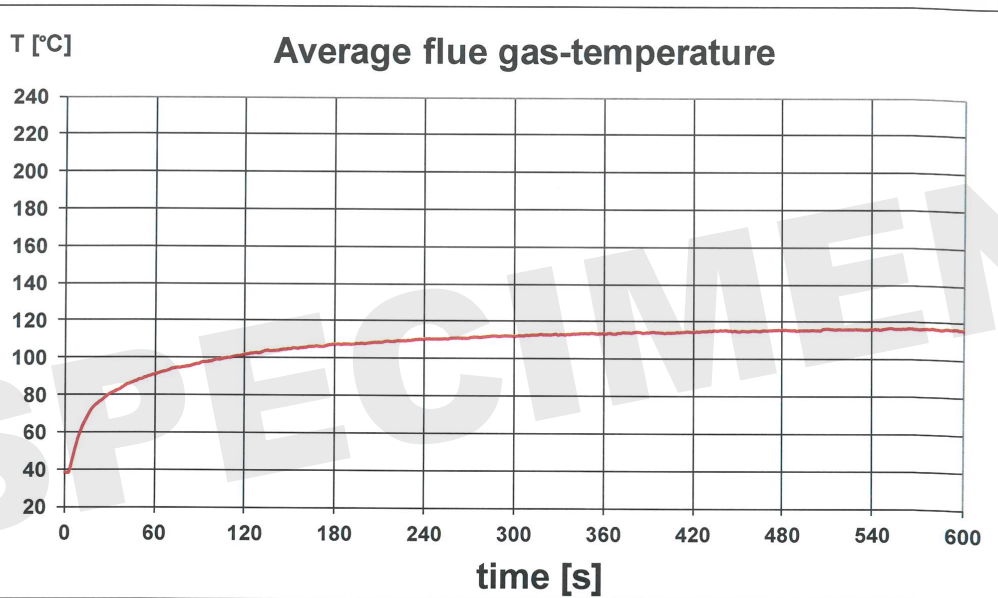


Date of issue of this English version: 13.10.2017

Fire Test Certificate – Specimen

Fabric: IFR Molton CS
Type: B1

Max. flue gas-temperature = 117 °C at [min : s] 09 : 40	Enclosure 1 of test report no. 230010972 of 07.06.2017
Smoke-development [% x min]: 3	



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