



Report VN736 127962.1 Test Report



Applicant

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Reference

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Application

Testing and classification of the burning behaviour according to EN 13773.

Test material

"Outline embroidery blue"

Material used in testing was anonymized for laboratory purposes. A detailed sample list is contained in the report.

Issuing and Signatures

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1 Order

1.1 Chronology

Date	Received	Order
20.03.2017	22.03.2017	Testing and classification of the burning behaviour according to EN 13773.

1.2 Samples

Nr.	Received	Sample Identification
1	22.03.2017	"Outline embroidery blue"

(Unless otherwise stated samples are provided by the customer.)

2 Findings / Tests performed

2.1 Description of the specimen

Description of the specimen according to DIN 60 000*

Tested sample: 1

Type of material (according to the applicant)	100% Polyester FR with FR embroidery
Technological description	embroidered woven fabric

2.2 Washing procedure for textile testing

Test conditions

Tested sample: 1

According to EN ISO 6330

Standard washing machine: Wascator FOM 71 MP-LAB

Washing procedure: 3M - mild washing 30 °C

Total mass of the specimen: 1992 g

Load: 2 kg

Loading fabric: knitted 100 % polyester FR

Washing detergent: ECE 2 washing detergent

Water hardness: 0 ° dH

Number of washing processes: 1 and 12 washing process

Drying procedure: Procedure A - Line drying

2.3 Determination of the ignitability of vertically oriented specimen (small flame)

Test conditions

According to EN 1101 and EN 13773

Conditioning climate: 20 ± 2 °C / 65 ± 2 % relative humidity

Test climate: temperature: 24,3 °C, relative humidity: 23,3 %

Specimen size: 200 mm x 80 mm

Test gas: Propan

Mode of ignition: Edge ignition

Cleaning procedure: 1 washing process (see 2.2)

Test results

Tested sample: 1

Longitudinal direction			Cross direction		
Ignition time	Number of		Ignition time	Number of	
	Ignitions	no ignitions		Ignitions	no ignitions
1 s	0	1	1 s	0	1
2 s	0	1	2 s	0	1
3 s	0	1	3 s	0	1
4 s	0	1	4 s	0	1
5 s	0	1	5 s	0	1
10 s	0	1	10 s	0	1
15 s	0	1	15 s	0	1
20 s	0	5	20 s	0	5
Middle ignition time:		> 20 s	Middle ignition time:		> 20 s
Minimum ignition time:			> 20 s		

2.4 Determination of the flame spread of vertically oriented specimen with large ignition source – delivered condition

Test conditions

According to EN 13 772

Conditioning climate: 20 ± 2 °C/ 65 ± 2 % relative humidity

Gas: Propan

Cleaning procedure: none, tested in supplied condition

Test results

Tested sample: 1

	exposed surface	1 st marker thread severed	3 rd marker thread severed	Time from start of inflammation to burning through of the		destroyed length	flaming debris
				1 st marker thread	3 rd marker thread		
Longitudinal direction							
Sample 1	back side	no	no	--	--	12 cm	no
Sample 2	right side	no	no	--	--	13 cm	no
Sample 3	right side	no	no	--	--	13 cm	no
Sample 4	right side	no	no	--	--	12 cm	no
Cross direction							
Sample 1	right side	no	no	--	--	13 cm	no
Sample 2	back side	no	no	--	--	10 cm	no
Sample 3	right side	no	no	--	--	11 cm	no
Sample 4	right side	no	no	--	--	12 cm	no

Precision

With an intern laboratory test with 16 textile samples in 11 European laboratories it showed up that the determined results are reproducible and repeatable.

Between all laboratories agreeing results showed up. The uncertainty of the measurement [u] corresponds therefore to the dispersion of the individual values of the respective examination.

2.5 Determination of the flame spread of vertically oriented specimen with large ignition source – after cleaning

Test conditions

According to EN 13 772

Conditioning climate: 20 ± 2 °C/ 65 ± 2 % relative humidity

Gas: Propan

Cleaning procedure: 12 washing processes (see 2.2)

Test results

Tested sample: 1

	exposed surface	1 st marker thread severed	3 rd marker thread severed	Time from start of inflammation to burning through of the		destroyed length	flaming debris
				1 st marker thread	3 rd marker thread		
Longitudinal direction							
Sample 1	right side	no	no	--	--	15 cm	no
Sample 2	back side	no	no	--	--	13 cm	no
Sample 3	back side	no	no	--	--	15 cm	no
Sample 4	back side	no	no	--	--	14 cm	no
Cross direction							
Sample 1	right side	no	no	--	--	12 cm	no
Sample 2	back side	no	no	--	--	9 cm	no
Sample 3	back side	no	no	--	--	13 cm	no
Sample 4	back side	no	no	--	--	15 cm	no

Precision

With an intern laboratory test with 16 textile samples in 11 European laboratories it showed up that the determined results are reproducible and repeatable.

Between all laboratories agreeing results showed up. The uncertainty of the measurement [u] corresponds therefore to the dispersion of the individual values of the respective examination.

2.6 Determination of dropping behaviour – curtains and drapes – delivered condition

Test conditions

According to EN 13772

Comment: The determination of dropping behaviour for curtains classified as class 1 or 2 ensures according EN 13 772.

Cleaning procedure: none, tested in supplied condition

Test results

Tested sample: 1

Longitudinal direction				Cross direction			
Sample	Dropping	Number of drops	Igniting dropping	Sample	Dropping	Number of drops	Igniting dropping
1	no	0	--	1	no	0	--
2	no	0	--	2	no	0	--
3	no	0	--	3	no	0	--
4	no	0	--	4	no	0	--

2.7 Determination of dropping behaviour – curtains and drapes – after cleaning

Test conditions

According to EN 13772

Type of specimen: curtain

Comment: The determination of dropping behaviour for curtains classified as class 1 or 2 ensures according EN 13 772.

Cleaning procedure: 12 washing processes (see 2.2)

Test results

Tested sample: 1

Longitudinal direction				Cross direction			
Sample	Dropping	Number of drops	Igniting dropping	Sample	Dropping	Number of drops	Igniting dropping
1	no	0	--	1	no	0	--
2	no	0	--	2	no	0	--
3	no	0	--	3	no	0	--
4	no	0	--	4	no	0	--

3 Classification

The tested sample "**Outline embroidery blue**" can be classified in as:

Class 1 according to EN 13773
"nicht tropfend" according to EN 13773 ^{*)}

*) Not dropping behaviour corresponds in accordance with the former standard ÖNORM B 3800 part 1 point 6.1 to the drop education class Tr1- nicht tropfend. The determination of the dropping behaviour is done by the "5 drop-rule" according to agreement. In the case of falling down of less than 5 drops there is no risk involved. Therefore the sample is classified as Tropfenbildungsklasse Tr1 – nicht tropfend.

4 Remarks

Validity

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