



Report 68947 Test Report

Applicant

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Reference

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Application

Testing and classification of the burning behaviour in accordance with the classification criteria for class 1 according OENORM EN 13773 as well as testing and evaluation of the smoke emission and the dropping behaviour.

Test Material

"Bühnenmolton"

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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Translation

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1 Order

1.1 Chronology

<i>Date</i>	<i>Received</i>	<i>Order</i>
2012-06-13	2012-06-13	Testing and classification of the burning behaviour in accordance with the classification criteria for class 1 according OENORM EN 13773 as well as testing and evaluation of the smoke emission and the dropping behaviour.

1.2 Samples

<i>No.</i>	<i>Received</i>	<i>Sample Identification</i>
1	2012-05-29 (1)	"Bühnenmolton"
2	2012-06-25 (1)	"Bühnenmolton (subsequent delivery of sample 1)"

(1) Samples provided by the customer. (2) Sample drawn by ÖTI.

2 Findings / Tests performed

2.1 Description of the specimen

Description of the specimen according to DIN 60 000

Tested sample: 1

Type of fibre according to DIN 60 001 part 1	100% cotton (declaration by the applicant)
Technological description	woven fabric

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

Test Conditions

According to EN 1101

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

Test climate: temperature: 29 °C, relative humidity: 24 %

Specimen size: 200 mm x 80 mm

Test gas: Propan

Mode of ignition: Bottom Edge ignition

Cleaning procedure: The submitted article will not be cleaned in use according to the applicant. Therefore the testing was carried out in as-received condition.

Test Results

Tested sample: 1

Longitudinal direction			Cross direction		
Ignition within 20 s:		no	Ignition within 20 s:		no
Ignition time	Number of		Ignition time	Number of	
	Ignitions	not ignitions		Ignitions	not ignition
20 s	0	5	20 s	0	5
Middle ignition time:		≥ 20 s	Middle ignition time:		≥ 20 s
Minimum ignition time:		≥ 20 s	Minimum ignition time:		≥ 20 s

Note: The calculation of "middle ignition time" (according ISO 6940 annex B) referred to the ascertained "not ignitions".

2.3 Determination of the flame spread of vertically oriented specimen with large ignition source

Test conditions

According to EN 13 772

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

Gas: Propan

Cleaning procedure: The submitted article will not be cleaned in use according to the applicant. Therefore the testing was carried out in as-received condition.

Test results

Tested sample: 2

	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	none	none	19 cm	no
Sample 2	back side	no	no	none	none	18 cm	no
Sample 3	right side	no	no	none	none	17 cm	no
Sample 4	right side	no	no	none	none	19 cm	no
Cross direction							
Sample 1	right side	no	no	none	none	19 cm	no
Sample 2	back side	no	no	none	none	15 cm	no
Sample 3	right side	no	no	none	none	20 cm	no
Sample 4	right side	no	no	none	none	19 cm	no

Precision

With an interlaboratory test with 16 textilen 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.

2.4 Determination of smoke emission

Test conditions

Standard: ÖNORM A 3800 part 1/4.2
 Specimen: woven fabric
 Arrangement of the specimen: loose

Test results

Tested sample: 1

smoke emission [%]					
Test 1	Test 2	Test 3	Test 4	Test 5	Mean Value
3	4	3	3	5	4

2.5 Determination of dropping behaviour – curtains and drapes

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: The submitted article will not be cleaned in use according to the applicant. Therefore the testing was carried out in as-received 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	--



3 Evaluation / Classification

3.1 Classification of burning behaviour of curtains and drapes

Evaluation conditions

In the following the testing methods and test results are aforementioned, after which the classification of the burning behaviour takes place:

- Determination of the ignitability of vertically oriented specimen (small flame) according EN 1101 (see 2.2) non ignition
- Determination of the flame spread of vertically oriented specimen with large ignition source according EN 13 772 (see 2.3) 1st marker thread not severed
3rd marker thread not severed
no flaming debris

Classification

According the conditions of classification of the EN 13 773 the tested specimen "**Bühnenmolton**" can be classified in the

Class 1

Note: The submitted article will not be cleaned in use according to the applicant. Therefore the testing was carried out in as-received condition.

3.2 Classification of smoke emission

Evaluation conditions

According ÖNORM A 3800-1 section 4.2.1 "Classification of smoke emission" provides the following requirements.

- Qualmbildungsklasse Q1 : schwachqualmend The mean value of the smoke emission may not more than maximum 50%.
- Qualmbildungsklasse Q2 : normalqualmend The mean value of the smoke emission may not more than maximum 90%.
- Qualmbildungsklasse Q3 : starkqualmend The mean value of the smoke emission exceeds 90%

Classification

According the classification guidelines of the ÖENORM A 3800 1 section 4.2.1 the tested specimen "**Bühnenmolton**" can be classified as follows

Qualmbildungsklasse Q1: schwachqualmend

3.3 Classification of dropping behaviour

Evaluation conditions

According to EN 13772

Explanation: For curtains of the class 1 or 2 the determination of dropping behaviour will be performed in accordance with EN 13772. The classification takes place in corresponding interpretation of the former test and classification guideline as follows

- ♦ Tropfenbildungsklasse: nicht tropfend no sample dripped on the filter paper
- ♦ Tropfenbildungsklasse: tropfend At least one of the flamed samples dripping off on the filter paper. But the dripped material did not burn further
- ♦ Tropfenbildungsklasse: zündendtropfend At least one of the flamed samples dripping off on the filter paper and the dripped material burns further.

Classification

According the former test and classification guideline the tested specimen "**Bühnenmolton**" can be classified as follows

nicht tropfend

Note: Not dropping behaviour corresponds in accordance with the former standard ÖENORM B 3800 part 1 point 6.1 to the drop education class Tr1- nicht tropfend

4 Äquivalenzbeurteilung für das Brennverhalten von Vorhängen und Gardinen zur Verwendung in Österreich

Da zwischen dem Klassifizierungssystem der ÖNORM EN 13 773 und der ÖNORM B 3820 eine Harmonisierung notwendig ist, wurde der ÖNORM EN 13 773 folgendes nationale Vorwort vorangestellt, welches als Hilfestellung zu verstehen ist und zeigen soll, in welche europäische Klasse ein Vorhang oder eine Gardine fallen kann, die gemäß österreichischen Normen eingestuft wurde und umgekehrt.

Nationales Vorwort

Unter Zugrundelegung der bisherigen Einstufungsrichtlinien für das Brandverhalten von Vorhängen gemäß VORNORM ÖNORM B 3820 "Brandverhalten von Vorhängen" wird, um einen Vergleich zwischen dem bisherigen ÖNORM-System und dem neuen System der vorliegenden Europäischen Norm zu haben, zur Harmonisierung der Klassifizierung des Brennverhaltens von Vorhängen folgender Vergleich vorgeschlagen:

VORNORM ÖNORM B 3820 Brennbarkeitsklasse	ÖNORM EN 13 773 Klasse
B1 - schwer brennbar	1/2
B2 - normal brennbar	3/4
B3 - leicht brennbar	5

Dadurch besteht die Möglichkeit, von beiden Systemen gegenseitig eine Klassifizierungsübersetzung durchzuführen, welche in der vorliegenden Norm festgelegt ist.



5 Remarks

Validity

There are no regulations concerning duration of validity in the individual test standards. As the results of the examinations refer only to the submitted and examined samples, the report is valid for these for an unlimited period. A period of validity specified as part of an expert evaluation is in the discretion of the consultant or the ÖTI.

The applicability of results and expert evaluations for materials not tested is in the responsibility of the applicant. Whereby an apportionment of results as well as any specified period of validity can only be done for identically constructed products and only as long as the product produced unchanged.

Possible national or international restrictions concerning the terms of usability of test and classification reports have to be considered; this is not the responsibility of the test laboratory.

Sample Material

Results of performed tests only refer to the sample material provided.

Without explicit written other agreement testing is destructive and the sample material is transferred to the property of ÖTI, which is entitled to freely decide on storage and disposal.

Issuance

The valid first issue is done in paper and has single-handed signatures. For reference purposes and filing an unsigned electronic duplicate can be delivered in pdf format. Duplicates and translations will be marked accordingly on the cover sheet.

Quality management and accreditations

All tests and services are performed under a quality management system according to EN/IEC ISO 17025.

ÖTI is accredited by several organisations for various tests offered. It also is a Notified Body for several directives with the registration number 0534 (see <http://ec.europa.eu/enterprise/newapproach/nando/>).

The accreditation by the Federal Ministry of Economy, Family and Youth as testing laboratory was repeated under reference BMWFJ-97.714/0198-I/12/2012 (Individual accredited test procedures are marked with the federal laboratory logo): The accreditation for testing and inspection of construction products was given by the OIB (Austrian Institute of Construction Engineering). Details and other accreditations are given on request and can be found on www.oeti.biz.

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