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## Test Report VN736 169903.1

### Application

Testing and classification of the burning behaviour according EN 13773.

### Test Material

"Lumo"

The test material used for testing was made anonymous for laboratory purposes.  
A detailed sample list is included in the document.

### Issuing

Original Issuing, 24.06.2020  
Number Of Included Pages: 9

**OETI - Institute for Ecology, Technology and Innovation GmbH**

A handwritten signature in blue ink, appearing to read "Hannes Vittek".

**Ing. Hannes Vittek**

Manager Flooring Technology & Interior Design



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## 1 Application

Date of Order	Scope of Order
03.06.2020	Description Of Specimen - Textile Fabrics - DIN 60000 Washing Procedure For Textile Testing - EN ISO 6330 (OZW12) Ignitability Vertical Orientated Specimen - EN 1101 Flame Spread of Vertical Oriented Specimen - EN 13772 Dropping Behaviour - EN 13772 Classification Of Burning Behaviour Of Curtains And Drapes - EN 13773

## 2 Samples

No.	Receipt	Sample Identification
1	08.06.2020	"Lumo"

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

### 3 Tests Performed / Results

#### \*Description Of Specimen - Textile Fabrics DIN 60000

Tested sample: **#1 "Lumo"**

Type of fibre:	100% Polyester FR (declaration by the applicant)
Technological description:	Woven fabric

According to the current version of the relevant European Directives, fibre materials with a mass percentage of < 2 % are not specified.

#### Washing Procedure For Textile Testing EN ISO 6330 (OZW12)

Tested sample: **#1 "Lumo"**

Standard washing machine	Wascator FOM 71 CLS
Washing procedure	6N - normal washing 60 °C
Total mass of the specimen	540 g
Load	2 kg
Loading fabric	knitted 100% polyester fabric textured yarn
Washing detergent	ECE 2 washing detergent
Water hardness	0° dH
Number of washing processes	1 and 12
Drying procedure	Procedure A - Line drying



**Ignitability Vertical Orientated Specimen EN 1101**

Tested sample: **#1 "Lumo"**

Test climate:

- Temperature [°C]: 23

- rel. Humidity: [%]: 32

Pretreatment: 1 washing cycle (see washing procedure)

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 [s]	>20	Middle ignition time [s]	>20
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Minimum ignition time [s]	> 20
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### Flame Spread of Vertical Oriented Specimen EN 13772

Tested sample: #1 "Lumo"  
 Conditioning climate: 20±2 °C/ 65± 5 % relative humidity  
 Test gas: Propan  
 Pretreatment: None, test was carried out in supplied condition

Sample	exposed surface	1st marker thread severed	3rd marker thread severed	Time from start of inflammation to burning through of the		destroyed length	flaming debris
				1st marker thread	3rd marker thread		
				[s]	[s]		
<b>Longitudinal direction</b>							
1	right	no	no	--	--	11	no
2	left	no	no	--	--	10	no
3	right	no	no	--	--	12	no
4	right	no	no	--	--	11	no
<b>Cross direction</b>							
1	right	no	no	--	--	10	no
2	left	no	no	--	--	9	no
3	right	no	no	--	--	10	no
4	right	no	no	--	--	11	no

Precision: With an interlaboratory 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.



Tested sample: **#1 "Lumo"**  
 Conditioning climate: 20±2 °C/ 65± 5 % relative humidity  
 Test gas: Propan  
 Pretreatment: 12 washing cycles (see washing procedure)

Sample	exposed surface	1st marker thread severed	3rd marker thread severed	Time from start of inflammation to burning through of the		destroyed length	flaming debris
				1st marker thread	3rd marker thread		
				[s]	[s]		
<b>Longitudinal direction</b>							
1	right	no	no	--	--	12	no
2	left	no	no	--	--	11	no
3	right	no	no	--	--	12	no
4	right	no	no	--	--	13	no
<b>Cross direction</b>							
1	right	no	no	--	--	12	no
2	left	no	no	--	--	10	no
3	right	no	no	--	--	11	no
4	right	no	no	--	--	12	no

Precision: With an interlaboratory 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.

## Dropping Behaviour EN 13772

Tested sample: #1 "Lumo"

Pretreatment: None, test was carried out in supplied condition

Comment: The determination of dropping behaviour for curtains classified as Class 1 or 2 is done according to EN 13772.

Longitudinal direction			Cross direction		
Sample	Number of drops	Igniting dropping	Sample	Number of drops	Igniting dropping
1	0	--	1	0	--
2	0	--	2	0	--
3	0	--	3	0	--
4	0	--	4	0	--

Tested sample: #1 "Lumo"

Pretreatment: 12 washing cycles (see washing procedure)

Comment: The determination of dropping behaviour for curtains classified as Class 1 or 2 is done according to EN 13772.

Longitudinal direction			Cross direction		
Sample	Number of drops	Igniting dropping	Sample	Number of drops	Igniting dropping
1	0	--	1	0	--
2	0	--	2	0	--
3	0	--	3	0	--
4	0	--	4	0	--



**Classification Of Burning Behaviour Of Curtains And Drapes EN 13773**

Tested sample: **#1 "Lumo"**

Determination of the ignitability according to EN 1101		<b>no ignition</b>
Determination of the flame spread of vertical orientated specimen according to EN 13772 - supplied condition	1st Markerthread	<b>no break</b>
	3rd Markerthread	<b>no break</b>
	Flaming debris	<b>none</b>
Determination of the flame spread of vertical orientated specimen according to EN 13772 - after cleaning	1st Markerthread	<b>no break</b>
	3rd Markerthread	<b>no break</b>
	Flaming debris	<b>none</b>
max. Number of drops falled down during EN 13772 test		<b>0</b>
Drops caused ignition of filter paper		<b>no</b>

**Classification of burning behaviour**

According to the classification criteria of EN 13773 the tested specimen can be classified as:

**Class 1**

**Classification of dropping behaviour**

The tested specimen can be classified as

**not dropping**

Not dropping behaviour corresponds in accordance with the former standard ÖNORM B 3800 part 1 point 6,1 to the drop class "Tr1- nicht tropfend"



## 4 Remarks

### Period of 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 OETI. 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 is 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.

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### Issuing

The valid first issue is done in paper and has single-handed signatures. Translations will be marked accordingly on the cover sheet.

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End of Report

