

**REPORT**

Report nr.: **1508270-001**
 Report date: **10-dic-15**
 Acceptance code: **1508270**
 Acceptance date: **02-dic-15**
 Start test date: **02-dic-15**
 End test date: **10-dic-15**
 References: ---

Customer code: 5485

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To the attention of:
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Article description: **SOLE**
 Declared composition: **100% Trevira**
 End use: **Furnishing**
 Typology: **Fabric**
 Return: **No requested**
 Sampling by customer

The results reported herein refer to the tested samples only and do not involve any product approval by Centro Tessile Serico.
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| TEST | M.U. | RESULTS |
|--|------|--|
| 15566 UPHOLSTERY FURNITURE: assessment of the ignitability by SMOULDERING CIGARETTE | | |
| Method: UNI EN 1021-1:2014 | | |
| Instrument: Small Test Rig for Flammability test | | |
| Sample pretreatment: sample wasn't submitted to any pretreatment | | |
| Ignition source applied: source 0 (SMOULDERING CIGARETTE) | | |
| Materials of test assembly: Upholstery filling: fire retardant polyurethane foam with a density of 30 kg/m ³ Inner cover: - Outer cover: SEE ARTICLE DESCRIPTION | | |
| TEST RESULT: | | SAMPLE PASSES THE TEST - NON IGNITION |
| Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m ³ as filling of the upholstered seating. The test result could be different using another type of filling material. | | |
| Annex n.: | | 1F |



Report nr. **1508270-001**

15576 UPHOLSTERY FURNITURE: assessment of the ignitability by MATCH FLAME EQUIVALENT

Method: UNI EN 1021-2:2014

Instrument: Small Test Rig and burner for Flammability test

Sample pretreatment:

sample wasn't submitted to any pretreatment

Ignition source applied:

source 1 (MATCH FLAME EQUIVALENT)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST - NON IGNITION

Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m³ as filling of the upholstered seating. The test result could be different using another type of filling material.

Annex n.:

2F

15066 UPHOLSTERY FURNITURE: assessment of the ignitability by SMOULDERING CIGARETTE

Method: BS 5852:2006

Instrument: Test rig

Test executed on:

upholstery composites (Clause 11)

Sample pretreatment:

sample wasn't submitted to any pretreatment

Ignition source applied:

source 0 (SMOULDERING CIGARETTE)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST - NON IGNITION

Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m³ as filling of the upholstered seating. The test result could be different using another type of filling material.

Annex n.:

3F

The test measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporating these materials. They give an indication of, but cannot guarantee, the ignition behavior of the finished item of furniture.

Details of the results can be seen in the annex of this test report.



Report nr. **1508270-001**

15076 UPHOLSTERY FURNITURE: assessment of the ignitability by MATCH FLAME EQUIVALENT

Method: BS 5852:2006

Instrument: Test rig

Test executed on:

upholstery composites (Clause 11)

Sample pretreatment:

sample wasn't submitted to any pretreatment

Ignition source applied:

source 1 (MATCH FLAME EQUIVALENT)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST - NON IGNITION

Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m³ as filling of the upholstered seating. The test result could be different using another type of filling material.

Annex n.:

4F

The test measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporating these materials. They give an indication of, but cannot guarantee, the ignition behaviour of the finished item of furniture.

Details of the results can be seen in the annex of this test report.

END OF REPORT

Supervisor Head
G. Giovanna Baglio

Technical Head
Prof. Mario Frigerio



Annex n. 3F to test report n. 1508270-001

DETAILS OF TEST RESULTS

Test executed according to BS 5852:2006 – Clause 11 (composites):

Method of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources.

Ignition source type 0: CIGARETTE

Article description: **SOLE**

Declared composition: **100% Trevira**

Materials of test assembly:

Upholstery filling: **fire-retardant polyurethane foam with a density of 30 kg/m³**

Inner cover: -

Outer cover: **see article description**

Conditioning of test specimen and ignition source: **23±2°C, 50±5% r.h.**

Testing temperature and r.h.: **18 °C, 43% r.h.**

Sample pre-treatment: **sample wasn't subjected to any pretreatment**

Date of test: **09.12.2015**

| ignition source | | 1.st cigarette | 2.nd cigarette |
|--|---------------------------|----------------|----------------|
| duration of ignition source (min) | | 32 | 31 |
| duration flame (min) | | - | - |
| duration smoke (min) | | 32 | 31 |
| (*) extent of damage of horizontal component | length (mm) | 64 | 66 |
| | width (mm) | 12 | 13 |
| | depth (mm) | 5 | 5 |
| (*) extent of damage of vertical component | height (mm) | 13 | 13 |
| | depth (mm) | 5 | 6 |
| TEST RESULT | Ignition/ Non Ignition | NI | NI |

(*) = total extent of sample's damage without subtracting the cigarette dimensions

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test result relate only to the ignitability of the combination of upholstery composites (Clause 11) under the particular conditions of test.

They are not intended as a means of assessing the full potential fire hazard of the materials or products in use.



Annex n. 4F to test report n. 1508270-001

DETAILS OF TEST RESULTS

Test executed according to BS 5852:2006 – Clause 11 (composites):
Method of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources.
Ignition source type 1: MATCH FLAME EQUIVALENT

Article description: **SOLE**
 Declared composition: **100% Trevira**
 Materials of test assembly:
 Upholstery filling: **fire-retardant polyurethane foam with a density of 30 kg/m³**
 Inner cover: -
 Outer cover: **see article description**
 Conditioning of test specimen: **23±2°C, 50±5% r.h.**
 Testing temperature and r.h.: **20 °C e 43% r.h.**
 Sample pre-treatment: **sample wasn't subjected to any pretreatment**
 Date of test: **09.12.2015**

| ignition source | | 1.st test | 2.nd test |
|--|------------------------|-----------|-----------|
| duration flames (s) | | 2 | 0 |
| duration smoke (s) | | 9 | 13 |
| extent of damage of horizontal component | Length (mm) | 18 | 16 |
| | Width (mm) | 15 | 16 |
| | Depth (mm) | 7 | 9 |
| extent of damage of vertical component | Width (mm) | 24 | 23 |
| | Depth (mm) | 9 | 11 |
| TEST RESULT | Ignition/ Non Ignition | NI | NI |

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test result relate only to the ignitability of the combination of upholstery composites (Clause 11) under the particular conditions of test.
They are not intended as a means of assessing the full potential fire hazard of the materials or products in use.



Annex n. 1F to test report n. 1508270-001

DETAILS OF TEST RESULTS

Test executed according to UNI EN 1021-1:2014 (EN 1021-1:2014)

Furniture

Assessment of the ignitability of upholstered furniture

Part 1: Ignition source: smouldering cigarette

Article description: **SOLE**

Declared composition: **100% Trevira**

Materials of test assembly:

Upholstery filling: **fire-retardant polyurethane foam with a density of 30 kg/m³**

Inner cover: -

Outer cover: **see article description**

Conditioning of test specimen: **23 ± 2 °C, 50 ± 5 % r.h.**

Testing temperature and r.h.: **18 °C e 43% r.h.**

Sample pre-treatment: **sample wasn't submitted to any pretreatment**

Date of test: **09.12.2015**

| SMOULDERING CRITERIA: | first cigarette | second cigarette | Third cigarette | Comments |
|--|------------------------|-------------------------|------------------------|--|
| Smouldering criteria: | | | | |
| Unsafe escalating combustion | NO | NO | - | |
| Test assembly consumed | NO | NO | - | |
| Smoulders to extremities | NO | NO | - | |
| Smoulders through thickness | NO | NO | - | |
| Smoulders more than 1 h | NO | NO | - | Time elapsed between placing the cigarette and extinguishing 1° cigarette 32 min 2° cigarette 31 min |
| In final examination, presence of active smouldering | NO | NO | - | |
| Flaming criteria: | | | | |
| Evidence of flames | NO | NO | - | |

YES = criteria observed NO = criteria not observed

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test results relate only to the ignitability of the combination of materials under the particular conditions of test. They are not intended as a means of assessing the full potential fire hazard of the material in use.

The probability that the observation criteria mentioned represent the true is equal to 95%. The expanded uncertainty is calculated by multiplying the combined standard uncertainty for a coverage factor K = 2, which for a normal distribution leads to a confidence level of approximately 95%.



Annex n. 2F to test report n. 1508270-001

DETAILS OF TEST RESULTS

**Test executed according to UNI EN 1021-2:2014 (EN 1021-2:2014)
 Furniture - Assessment of the ignitability of upholstered furniture
 Part 2: Ignition source: match flame equivalent**

Article description: **SOLE**

Declared composition: **100% Trevira**

Materials of test assembly:

Upholstery filling: **fire-retardant polyurethane foam with a density of 30 kg/m³**

Inner cover: -

Outer cover: **see article description**

Conditioning of test specimen: **23 ± 2 °C, 50 ± 5 % r.h.**

Testing temperature and r.h.: **20 °C e 43% r.h.**

Sample pre-treatment: **sample wasn't submitted to any pretreatment**

Date of test: **09.12.2015**

| SMOULDERING CRITERIA: | 1st test | 2nd test | 3rd test | Comments |
|--|-----------------|-----------------|-----------------|--|
| Smouldering criteria: | | | | |
| Unsafe escalating combustion | NO | NO | - | |
| Test assembly consumed | NO | NO | - | |
| Smoulders to extremities | NO | NO | - | |
| Smoulders through thickness | NO | NO | - | |
| Smoulders more than 120 s | NO | NO | - | Time smouldering: 1st test: 9 s 2nd test: 13 s |
| In final examination, presence of active smouldering | NO | NO | - | |
| Flaming criteria: | | | | |
| Unsafe escalating combustion | NO | NO | - | |
| Test assembly consumed | NO | NO | - | |
| Flames to extremities | NO | NO | - | |
| Flames through thickness | NO | NO | - | |
| Flames more than 120 s | NO | NO | - | Time flaming: 1st test: 2 s 2nd test: 0 s |

YES = criteria observed NO = criteria not observed

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test results relate only to the ignitability of the combination of materials under the particular conditions of test. They are not intended as a means of assessing the full potential fire hazard of the material in use.

The probability that the observation criteria mentioned represent the true is equal to 95%. The expanded uncertainty is calculated by multiplying the combined standard uncertainty for a coverage factor K = 2, which for a normal distribution leads to a confidence level of approximately 95%.