



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

Date: 22 September 2020

Our Ref: 23/57763-2-2  
Your Ref: -

Page: 1 of 6

PClient: AB Ludvig Svensson  
511 82 Kinna  
Sweden

Job Title: BS EN 1021 Parts 1 & 2

Client's Order No: -

Date of Receipt: 11 September 2020

Date of Test Start: 17 September 2020

Description of Sample(s): One sample of fabric identified as follows was received for testing:

Club 6622

Work Requested: We were asked to make the following test:

BS EN 1021-1:2014 and BS EN 1021-2 2014



1066

Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL.  
A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.  
BTTG™ and Shirley® are trade names of Shirley Technologies Limited  
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.  
Our laboratories are accredited to EN ISO/IEC 17025.

Copyright © 2020 Shirley Technologies Limited. All rights reserved.



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

Date: 22 September 2020

Our Ref: 23/57763-2-2  
Your Ref: -

Page: 2 of 6

AB Ludvig Svensson

Sample was identified as follows:

Club 6622

## **FIRE TESTS ACCORDING TO BS EN 1021-1:2014**

### **Assessment of the ignitability of upholstered furniture. Part I. Ignition Source 0: Smouldering cigarette**

#### **Pre-Treatment**

The sample did not have a flame retardant treatment therefore it was not subjected to a water soak pre-treatment

#### **Conditioning**

The sample was conditioned for at least 16 hours at a temperature of  $23\pm 2^{\circ}\text{C}$  and relative humidity of  $50\pm 5\%$ .

The sample was tested in a room of volume  $25\text{m}^3$  and  $20^{\circ}\text{C}$ .

#### **Procedure**

The test was carried out in accordance with BS EN 1021-1:2014. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

The sample was tested over non-fire retardant polyurethane foam with a density of approximately  $20\text{-}22\text{ kg/m}^3$ .

Tests were made using ignition source 0.

#### **Requirements**

The specimens shall not:-

#### Smouldering Criteria

- a) display escalating combustion requiring active extinction.
- b) smoulder or burn until it is essentially consumed within the test duration.
- c) smoulder or burn to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) smoulder for more than one hour.
- e) on final examination, show evidence of progressive smouldering.



1066

Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL.  
A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.

BTTG™ and Shirley® are trade names of Shirley Technologies Limited  
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.  
Our laboratories are accredited to EN ISO/IEC 17025.

Copyright © 2020 Shirley Technologies Limited. All rights reserved.

Date: 22 September 2020

Our Ref: 23/57763-2-2  
Your Ref: -

Page: 3 of 6

AB Ludvig Svensson

**Requirements (continued)**

Flaming Criteria

- a) show evidence of flaming initiated by a smouldering source.

**Results**

	Cigarette			Comments
	1	2	3 <sup>1</sup>	
<b>Smouldering Criteria (Yes/No)</b>				
Unsafe escalating combustion	No	No	No	
Test assembly consumed	No	No	No	
Smoulders to extremities	No	No	No	
Smoulders through thickness	No	No	No	
Smoulders more than 1 hour	No	No	No	
In final examination, presence of progressive smouldering	No	No	No	
<b>Ignitability Performance (Yes/No)</b>				
Occurrence of flames	No	No	No	
Ignition / Non Ignition ( I/NI )	NI	NI	NI	

<sup>1</sup> Results for cigarette 3, only if applicable.

**Note**

The 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 materials in use.

**Comments**

An NI designation indicates that the sample meets the performance requirements of BS EN 1021-1.

Date: 22 September 2020

Our Ref: 23/57763-2-2  
Your Ref: -

Page: 4 of 6

AB Ludvig Svensson

## FIRE TESTS ACCORDING TO BS EN 1021-2:2014

### Assessment of the ignitability of upholstered furniture. Part 2. Ignition Source 1: Match flame equivalent.

#### Pre-Treatment

The sample did not have a flame retardant treatment therefore it was not subjected to a water soak pre-treatment

#### Conditioning

The sample was conditioned for at least 16 hours at a temperature of  $23\pm 2^{\circ}\text{C}$  and relative humidity of  $50\pm 5\%$ .

The sample was tested in a room of volume  $25\text{m}^3$  and  $20^{\circ}\text{C}$ .

#### Procedure

The test was carried out in accordance with BS EN 1021-2:2014. The sponsor sampled the material and the specimens were cut from the sample received to the dimensions set out in the standard.

The sample was tested over non-fire retardant polyurethane foam with a density of approximately  $20\text{-}22\text{ kg/m}^3$ .

Tests were made using ignition source 1.

#### Requirements

The specimens shall not:-

#### Smouldering Criteria

- display escalating combustion requiring active extinction.
- smoulders until it is essentially consumed within the test duration.
- smoulder to the extremities of the specimen, or through the full thickness, within the duration of the test.
- smoulder for more than one hour.
- show evidence of charring, other than discolouration, for more than 100mm in any direction apart from the nearest part of the original position of the source.

Date: 22 September 2020

Our Ref: 23/57763-2-2  
Your Ref: -

Page: 5 of 6

AB Ludvig Svensson

## Requirements (Continued)

### Flaming Criteria

- a) display escalating combustion requiring active extinction.
- b) burns until it is essentially consumed within the test duration.
- c) burns to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) exhibit any flaming for more than 120 seconds after removal of the burner tube.

## Results

	Match Flame Equivalent		Comments
	1	2	
<b>Smouldering Criteria (Yes/No)</b>			
Unsafe escalating combustion	No	No	
Test assembly consumed	No	No	
Smoulders to extremities	No	No	
Smoulders through thickness	No	No	
Smoulders more than 1 hour	No	No	
In final examination, presence of progressive smouldering	No	No	
<b>Ignitability Performance (Yes/No)</b>			
Unsafe escalating combustion	No	No	
Test assembly consumed	No	No	
Flames to extremities	No	No	
Flames through thickness	No	No	
Flames longer than 120 seconds	No	No	
Ignition / Non Ignition ( I/NI )	NI	NI	

## Note

The 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 materials in use.



TESTING • CERTIFICATION • AUDITING

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

Date: 22 September 2020

Our Ref: 23/57763-2-2  
Your Ref: -

Page: 6 of 6

AB Ludvig Svensson

### Comments

An NI designation indicates that the sample meets the performance requirements of BS EN 1021-2.

This report relates only to the samples submitted and as described in the report.

The overall uncertainty budget for both BS EN 1021: Part 1 and 2:2014 is as follows:-

Timings:  $\pm 2$  seconds.

Reported by:.....  
B Bland  
Laboratory Technician

Countersigned By:.....  
P Doherty  
Manager

Enquiries concerning this report should be addressed to Customer Services.



1066

Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL.  
A company registered in England & Wales with company number 04669651. VAT Number GB 816764800.  
BTTG™ and Shirley® are trade names of Shirley Technologies Limited  
The supply of all goods and services is subject to our standard terms of business, copies of which are available on request.  
Our laboratories are accredited to EN ISO/IEC 17025.

Copyright © 2020 Shirley Technologies Limited. All rights reserved.