



Confidential Report

Our Ref: 23/58122-12-2



1066

Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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

Date: 20 January 2021

Our Ref: 23/58122-12-2
Your Ref: 0011512406

Page: 1 of 7

Client: Gabriel A/S
Hjulgagervej 55
DK-9000 Aalborg
Denmark

Job Title: Fire Test on One Sample of Fabric

Client's Order No: 0011512406

Date of Receipt: 4 January 2021

Description of Sample(s): One sample identified as follows was received for testing:
Go Uni 66135 / Light Blue

Work Requested: We were asked to make the following test(s):
BS 7176: 2007

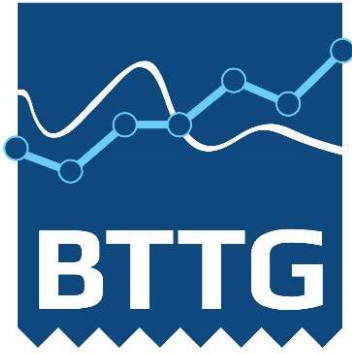
- * subcontracted test, UKAS accredited
- ** subcontracted test, EN ISO/IEC 17025 accredited
- *** not UKAS accredited



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 © 2021 Shirley Technologies Limited. All rights reserved..



TESTING • CERTIFICATION • AUDITING

Client: Gabriel A/S

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

Date: 20 January 2021

Our Ref: 23/58122-12-2
Your Ref: 0011512406

Page: 2 of 7

Specification BS 7176: 2007 + A1:2011 Resistance to Ignition of Upholstered Furniture for non-domestic seating by testing composites using BS EN 1021:2006 Furniture – Assessment of the ignitability of upholstered furniture Parts 1 and 2 and BS 5852:Clause 11:2006

Pre-Treatment

The samples received no pretreatment as the fabric is stated to be inherently flame retardant.

Conditioning

The materials for testing to Source 0 and 1 were conditioned and tested in the environments specified in Clause 7 of BS EN 1021:2006.

Foam Used

The sample was tested over combustion modified polyurethane foam with a density of approximately 35kg/m³.



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 © 2021 Shirley Technologies Limited. All rights reserved..



TESTING • CERTIFICATION • AUDITING

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

Date: 20 January 2021

Our Ref: 23/58122-12-2
 Your Ref: 0011512406

Page: 3 of 7

Client: Gabriel A/S

Testing to BS EN 1021-1:2006 – Source 0 – Cigarette

The sample was tested in accordance with BS EN ISO 1021-1:2006. The sample was tested over combustion modified polyurethane foam with a density of approximately 35kg/m³.

The test results relate only to the ignitability of the combustion of upholstery composites under the particular conditions of test stated, they are not intended as a means of assessing the full potential fire hazard of the materials of products in use.

Results

	Cigarette			Comments
	1	2	3 ¹	
Smouldering Criteria (Yes/No)				
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		
Ignitability Performance (Yes/No)				
Occurrence of flames	No	No		
Ignition / Non Ignition (I/NI)	NI	NI		

Any “Yes” in smouldering or flaming criteria means Ignition

Cigarette Test Result

PASS



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 © 2021 Shirley Technologies Limited. All rights reserved..



TESTING • CERTIFICATION • AUDITING

Client: Gabriel A/S

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

Date: 20 January 2021

Our Ref: 23/58122-12-2
Your Ref: 0011512406

Page: 4 of 7

BS EN 1021-2: 2006 – Source 1 – Butane Flame

The sample was tested in accordance with BS EN ISO 1021-2:2006. The sample was tested over combustion modified polyurethane foam with a density of approximately 35kg/m³.

The test results relate only to the ignitability of the combustion of upholstery composites under the particular conditions of test stated, they are not intended as a means of assessing the full potential fire hazard of the materials of products in use.

Smouldering criteria	1	2
Unsafe escalating combustion	No	No
Testing assembly consumed	No	No
Smoulders to extremities	No	No
Smoulders through thickness	No	No
Smoulders more than 1 hour	No	No
Char >100mm from source	No	No

Flaming criteria	1	2
Unsafe escalating combustion	No	No
Testing assembly consumed	No	No
Flames to extremities	No	No
Flames through thickness	No	No
Flames longer than 120 seconds	No	No

Specimen Result (Ignition or Non-ignition)	Non-Ignition	Non-Ignition
--	---------------------	---------------------

Any “Yes” in smouldering or flaming criteria means Ignition

Match Test Result **PASS**



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 © 2021 Shirley Technologies Limited. All rights reserved..



TESTING • CERTIFICATION • AUDITING

Client: Gabriel A/S

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

Date: 20 January 2021

Our Ref: 23/58122-12-2
Your Ref: 0011512406

Page: 5 of 7

BS 5852: 2006 Source 5 – Crib 5

The sample was tested in accordance with BS 5852:2006.

The sample was tested over combustion modified polyurethane foam with a density of approximately 35kg/m³.

The test results relate only to the ignitability of the combustion of upholstery composites under the particular conditions of test stated, they are not intended as a means of assessing the full potential fire hazard of the materials of products in use.

Results

The test results are shown in the tables below:-

	Specimen 1	Specimen 2
Time of Ignition (s)	5	6
Time of Flame Extinction (s)	187	204
Time of Smoke Extinction (s)	348	365
Time of cover split	9	8
Extent of damage (mm) - Seat		
Width	111	105
Length	151	134
Depth	62	48
Extent of damage (mm) - Back		
Width	420	420
Length	150	117
Depth	56	38
Melting	Yes	Yes
Dripping	No	No
Charring	Yes	Yes
Comments and Observations	-	-
Specimen Result (Ignition or Non-ignition)	Non-ignition	Non-ignition

Acronyms

ME – Manually extinguished
DNS – Material did not split
BTT – Burnt through thickness of foam

EC – Escalating combustion
DNO – Did not observe time of event
DNI – Did not ignite



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 © 2021 Shirley Technologies Limited. All rights reserved..



TESTING • CERTIFICATION • AUDITING

Client: Gabriel A/S

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

Date: 20 January 2021

Our Ref: 23/58122-12-2
Your Ref: 0011512406

Page: 6 of 7

Comment

The results indicate "Non-ignition" of the materials and the test is designated NI/5 i.e. Pass

Conclusion

The combination of materials meets BS 7176: 2007 for Medium Hazard.

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

Uncertainty of measurement has not been taken into account when presenting the test result. The relevant uncertainty value is included as an annex which forms an integral part of the report.

See BS 7176: 2007 + A1: 2011 Clause 6 for labelling and identification requirements. The test results relate only to the ignitability of the combination of upholstery composites under the particular conditions of test stated (BS EN 1021-1: 2006, BS EN 1021-2: 2006 and BS 5852: 2006 respectively); they are not intended as a means of assessing the full potential fire hazard of the materials or products in use.

Reported by:.....
Choose an item.
Laboratory Technician

Countersigned By:.....
P Doherty
Manager



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 © 2021 Shirley Technologies Limited. All rights reserved..



TESTING • CERTIFICATION • AUDITING

Client: Gabriel A/S

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

Date: 20 January 2021

Our Ref: 23/58122-12-2
Your Ref: 0011512406

Page: 7 of 7

Uncertainty Budget - Annex

The overall uncertainty budget for both BS 7176 : 2007 +A1 : 2011 is as follows:-

Measurements: $\pm 2\text{mm}$
Timings: ± 2 seconds.



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 © 2021 Shirley Technologies Limited. All rights reserved..