



TESTING • CERTIFICATION • AUDITING

# Confidential Report

Our Ref: 53452-4-1



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](mailto:info@bttg.co.uk)  
Website: [www.bttg.co.uk](http://www.bttg.co.uk)

Date: 23 May 2017

Our Ref: 53452-4-1  
Your Ref: 1392

Page: 1 of 7

Client: Kobefab International B.V.  
De Vest 62  
5555 XP Valkenswaard  
Netherlands

Job Title: Fire Test on One Sample of Fabric

Client's Order No: 1392

Date of Receipt: 5 May 2017

Description of Sample(s): Orion, stated to be 34% vi, 26% co, 40% pes

Work Requested: We were asked to make the following test(s):  
BS EN 1021-1:2014 and BS EN 1021-2 2014

- \* 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.  
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 © 2016 Shirley Technologies Limited. All rights reserved.



TESTING • CERTIFICATION • AUDITING

**Client: Kobefab International B.V.**

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: 23 May 2017

Our Ref: 53452-4-1  
Your Ref: 1392

Page: 2 of 7

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

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

**Date of Test:** 18/5/2017

#### **Pre-Treatment**

The sample was water-soaked and dried in accordance with BS EN 1021 Part 1:Annex D.

#### **Conditioning**

After drying 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  $18^{\circ}\text{C}$ .

#### **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  $20\text{-}22\text{Kg/m}^3$ .

Tests were made using ignition source 0.



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.  
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 © 2016 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](mailto:info@bttg.co.uk)  
 Website: [www.bttg.co.uk](http://www.bttg.co.uk)

Date: 23 May 2017

Our Ref: 53452-4-1  
 Your Ref: 1392

Page: 3 of 7

**Client: Kobefab International B.V.**

**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.

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 | --             |          |
| 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>                  |           |    |                |          |
| Occurrence of flames                                      | No        | No | --             |          |
| Ignition / Non Ignition ( I/NI )                          | NI        | NI | --             |          |

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



1066



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: 23 May 2017

Our Ref: 53452-4-1  
Your Ref: 1392

Page: 4 of 7

**Client: Kobefab International B.V.**

### 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

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

### 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 was water-soaked and dried in accordance with BS EN 1021 Part 2:Annex D.

### Conditioning

The sample was water-soaked and dried in accordance with Annex D of this standard. After drying 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  $19^{\circ}\text{C}$ .

### 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.

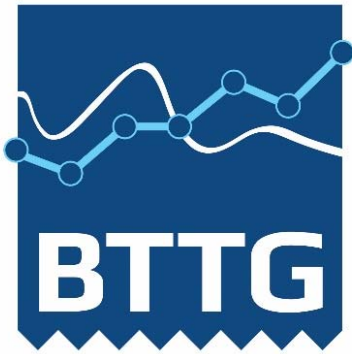
The sample was tested over non-fire retardant polyurethane foam with a density of  $20\text{-}22\text{Kg/m}^3$ .



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.  
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 © 2016 Shirley Technologies Limited. All rights reserved.



TESTING • CERTIFICATION • AUDITING

**Client: Kobefab International B.V.**

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: 23 May 2017

Our Ref: 53452-4-1  
Your Ref: 1392

Page: 5 of 7

Tests were made using ignition source 1.

## Requirements

The specimens shall not:-

### Smouldering Criteria

- a) display escalating combustion requiring active extinction.
- b) smoulders until it is essentially consumed within the test duration.
- c) smoulder 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) 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.

### Flaming Criteria

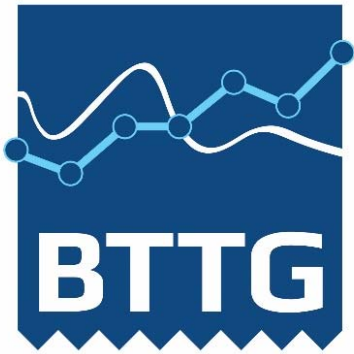
- a) display escalating combustion requiring active extinction.
- b) burns until it is essentially consumed within the test duration.
- c) burns to the extremities of the specimen, or through the full thickness, within the duration of the test.
- d) exhibit any flaming for more than 120 seconds after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



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.  
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 © 2016 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](mailto:info@bttg.co.uk)  
 Website: [www.bttg.co.uk](http://www.bttg.co.uk)

Date: 23 May 2017

Our Ref: 53452-4-1  
 Your Ref: 1392

Page: 6 of 7

Client: Kobefab International B.V.

**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.

**Comments**

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

Reported by:  .....  
 J Coleman  
 Fire Technician

Countersigned By:  .....  
 P Doherty  
 Operational Head

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.  
 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 © 2016 Shirley Technologies Limited. All rights reserved.



TESTING • CERTIFICATION • AUDITING

Client: **Kobefab International B.V.**

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: 23 May 2017

Our Ref: 53452-4-1  
Your Ref: 1392

Page: 7 of 7

## Uncertainty Budget - Annex

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

Measurements:  $\pm 2$  mm  
Timings:  $\pm 2$  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.  
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 © 2016 Shirley Technologies Limited. All rights reserved.