

Interscience Fire Laboratory Building 63 Haslar Marine Technology Park Haslar Road, Gosport Hampshire PO12 2AG United Kingdom Tel. : +44 (0) 20 8692 5050 Fax.: +44 (0) 20 8692 5155 Email: firetesting@intersciencecomms.co.uk

Test Report: ICL/H18/9164

BS 476 Part 6 Fire tests on building materials and structures Part 6: Method of test for fire propagation for products

> Sponsored By Tensid UK Limited Unit 1 Craven Court, Canada Road, Byfleet, KT14 7JL



Test Report: ICL/H18/9164

BS 476 Part 6 Fire tests on building materials and structures Part 6: Method of test for fire propagation for products

Sponsored By Tensid UK Limited Unit 1 Craven Court, Canada Road, Byfleet, KT14 7JL

1 Purpose of Test

To determine the fire propagation index of the sample specified in Section 2 when subjected to the fire propagation test specified in British Standard 476: Part 6 : 1989 + Amendment Al; 2009.

2 Description of Test Specimen

The description of the specimen given below has been prepared from information provided by the sponsor of the test and Interscience Communications Ltd was not involved in any selection or sampling procedure.

The product was a two part paint referenced "L F P L i n e M a r k i n g P a i n t" consisting of Part a as base and Part B as an activator.

The sponsor of the test stated that the rate of application is 4 to $5m^2$ /litre on one face of a 5mm thick inert board. The sponsor of the test has supplied Technical data / safety sheets relating to the product and these are held on our file relating to this investigation.

3 Conditioning of Test Specimens

The specimens were received on 3rd April 2018

The sample was conditioned to constant mass at a temperature of $23\pm2^{\circ}C$ and a relative humidity of $50\pm10\%$ and maintained in this condition until required for testing.

4 Date of Test

The test was performed on 10th May 2018



5 Test Procedure

The test was carried out in accordance with BS 476: Part 6+A1:2009, and this report should be read in conjunction with this standard.

Note: This test was subcontracted to another UKAS accredited test laboratory.

6 Test Results

The test results relate only to the burning behaviour of the specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results. Uncertainty measurement has not been taken into account when presenting the test results.

Temperature Rise -°C					
Calibration	Specimens				
Sheet	а	b	с		
20	17	19	17		
20	19	25	18		
23	21	24	20		
26	20	25	20		
28	21	27	22		
31	23	29	24		
62	15	31	16		
101	19	106	38		
130	15	67	20		
151	22	55	40		
171	22	50	42		
184	25	45	33		
194	27	42	34		
210	38	52	49		
216	43	53	46		
224	35	45	38		
235	27	37	30		
236	35	39	38		

Table 1 shows the Temperature rise for calibration sheet and specimens Table 2 shows the Index of performance for each specimen

t - time in minutes from the time at which the gas jets were ignited.

a, b and c - represent individual specimens giving valid test results



Specimen	S 1	s ₂	S 3
а	0.1	0.1	0.4
b	1.3	4.0	0.7
с	0.1	1.1	0.5

Table 2: Index of performance

7 Observations

No intumescence or deformation of any specimen occurred that affected the required gas input. No melting or slumping occurred that prevented the material from being exposed to the heating conditions. Air flow through the apparatus was not restricted by fallen material or by soot accumulation in the chimney.

8 Conclusion

A sample as described in this report, when tested in accordance with BS 476: Part 6: 1989 Amendment Al; 2009, achieved:

Fire propagation index, I = 2.8

sub-indices	$i_1 =$	0.5
	$i_2 =$	1.8
	i3 =	0.5

Prepared by

C. B. Chong Fire Scientist

Date of Issue: 10th May 2018

Approved by

S. Kumar Technical Manager