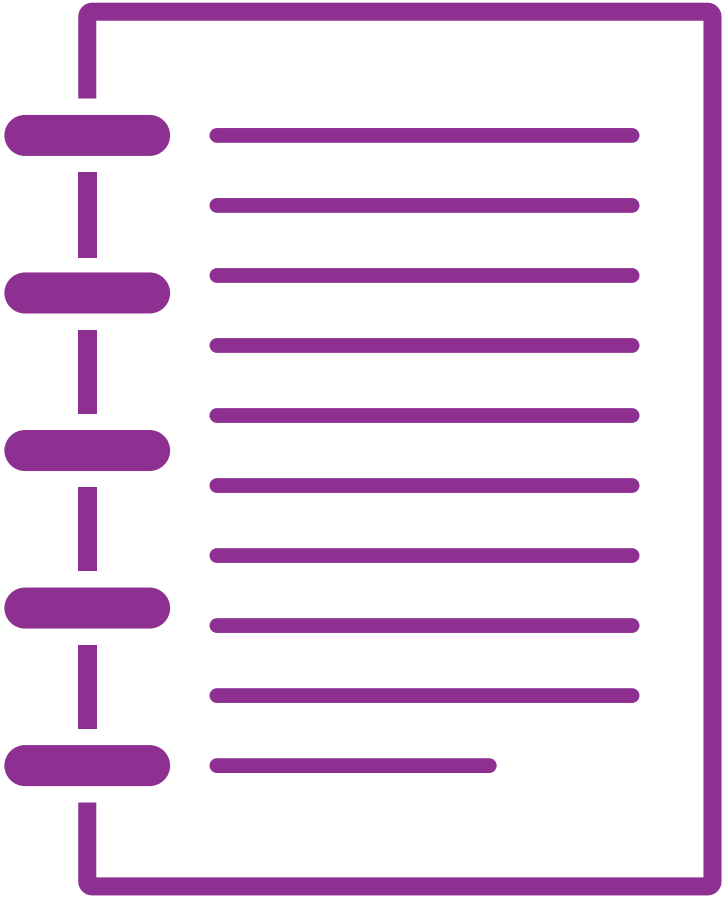


# Guidance Note

## 3. Fire Propagation and Flame Spread in Powder Coatings



# British Standards

British Standard 476 refers to fire tests on building materials and structures. The parts of this standard that are of most relevance to powder coatings are;

## Part 6 - Fire Propagation

The result of this test is a fire propagation index. It is a measure of the contribution to fire growth made by an essentially flat surface. The results of the test are specific to the test specimen i.e. the product on that particular substrate in the form in which it was tested. Therefore it cannot be used as a method for assessing the product in all situations.

## Part 7 - Surface Spread of Flame

This is a method of measuring flame spread along the surface of a specimen. Again the results of the test are specific to the test specimen i.e. the product on that particular substrate in the form in which it was tested. Therefore it can not be used as a method for assessing the product in all situations.

As defined in the UK Building Regulations 2000 - Fire Safety Approved Document B, the highest product performance classification for wall or ceiling linings is Class 0. This is achieved if a material;

- (a) Achieves a class 1 rating in BS476 Part 7, and
- (b) Achieves a fire propagation index of not more than 12 and sub-index of not more than 6 in BS476 Part 6.

Interpon D1000 series and D2000 Series, including D2000 Brilliance, have been tested to BS476 Parts 6 and 7 and have met the criteria for Class 0 building regulation approval.

Test reports available on request.

### Further Information:

Fire Tests on Building Materials and Structures BS476 - British Standard Institute

Building Regulations Approved Document B2 Fire Safety, Internal Fire Spread (Linings) - DETR

# US Standards

ASTM E1321 Ignition and Flame Spread Testing - Interpon D3000

## Flame Spread Test

Flame front position	Arrival time at sample
50mm	155-215s
100mm	200-262s

Flame front velocity: 0.34-0.45mm/s

## Ignition Test

Surface ignition temperature 495°C

Tests conducted by VTEC Laboratories inc.

“The specimen did not burn enough to generate data for final data analysis”

# European Standard

Fire testing and reports issued by external independent accredited laboratories certify that our range of Polyester product in several colours, are classified in agreement with the European Norm EN 13501-1 as:  
Interpon Polyester A2 -s1, d0

## Interpon Polyester A2<sub>L</sub>-s1, d0

### This result means:

**A2<sub>L</sub>** Non combustible - No contribution to fire (Flammable under 20s)

**s1** Expression for the Smoke Emission in: walls, ceilings and floors

**d0** Expression for release of droplets / particles in: walls, ceilings and floors

The results are considered increasingly unfavourable from A1 to E for the principal index, as well as for the release of smoke (s1, s2 o s3) and flaming droplets/ particles (d0, d1 o d2)

# Australian Standard

AS/NZS 1530.3:1999 SIMULTANEOUS DETERMINATION OF IGNITABILITY, FLAME PROPAGATION, HEAT RELEASE AND SMOKE RELEASE

Interpon powder coatings achieved an index score of 0 for Ignitability, Spread of flame, Heat Evolved, and Smoke Developed.

AkzoNobel Powder Coatings  
Issue 6, May 2016

**IMPORTANT NOTE** The information in this guidance note is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using an AkzoNobel product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for AkzoNobel products if available. All advice we give or any statement made about our product by us (whether in this guidance note or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this guidance note is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this guidance note is current prior to using the product.

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