

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1:2009

| | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Classification no. | 2016-Efectis-R000219 |
| Sponsor | Intumescent Systems Ltd Envirograf House Barfrestone CT15 7JG DOVER UNITED KINGDOM |
| Product name | Softwood Spruce with Envirograf coating system, product 92 ES/VFR and top coating Sherwin/Williams ED1143 LAQVA |
| Prepared by | Efectis Nederland BV |
| Notified body no. | 1234 |
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1. INTRODUCTION

This classification report defines the classification assigned to **softwood Spruce with Envirograf coating system, product 92 ES/VFR and top coating Sherwin/Williams ED1143 LAQVA** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

2. DETAILS OF CLASSIFIED PRODUCT

2.1 GENERAL

The product, **softwood Spruce with Envirograf coating system, product 92 ES/VFR and top coating Sherwin/Williams ED1143 LAQVA** is defined as a wall covering.

2.2 MANUFACTURER

Intumescent Systems LTD
Envirograf House
Barfrestone
CT15 7JG DOVER
UNITED KINGDOM

2.3 PRODUCT DESCRIPTION

Softwood Spruce (tongue and groove planks) fire retardant treated with a Envirograf coating system

Two coats of product 92 ES/VFR, 12 m² per liter

One top coat of Sherwin/Williams ED 1143 LAQVA, 10 m² per liter

The tongue and groove planks will be mounted on a supporting construction of pine wood timber with a minimum density of 450 kg/m³.

The product has a total thickness of 25 mm, a density of approx. 600 kg/m³ and a mass per unit area of approximately 13.0 kg/m².

3. STANDARDS, REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION

3.1 APPLICABLE (PRODUCT) STANDARDS

EN 14915 Solid wood panelling and cladding - Characteristics, evaluation of conformity and marking

3.2 REPORTS

| Name of Laboratories | Name of sponsor | Report ref. no. | Test method |
|-----------------------------------------|-------------------------------------------|----------------------------------------------|--------------------------------------|
| Efectis Nederland BV THE NETHERLANDS | Intumescent Systems Ltd UNITED KINGDOM | 2016-Efectis-R000217 2016-Efectis-R000218 | EN ISO 11925-2:2010 EN 13823:2014 |

3.3 TEST RESULTS

| Test method and test number | Parameter | No. tests | Results | |
|-----------------------------|--------------------------------------------------------|-----------|---------------------------------|----------------------------|
| | | | Continuous parameter - mean (m) | Compliance with parameters |
| EN ISO 11925-2 | | | | |
| surface flame impingement | $F_s \leq 150$ mm | 6 | 40 | - |
| | Ignition of filter paper | | - | Compliant |
| Edge flame Impingement | $F_s \leq 150$ mm | 6 | 26 | - |
| | Ignition of filter paper | | - | Compliant |
| EN 13823 | | | | |
| 25 mm | FIGRA _{0,2MJ} [W/s] | 3 | 8 | - |
| | FIGRA _{0,4MJ} [W/s] | | 8 | - |
| | THR _{600s} [MJ] | | 1.1 | - |
| | LFS < edge | | - | Compliant |
| | SMOGRA [m ² /s ²] | | 1.3 | - |
| | TSP _{600s} [m ²] | | 19 | - |
| | Flaming debris - flaming ≤ 10 s - flaming > 10 s | | - - | Compliant Compliant |

3.4 CLASSIFICATION CRITERIA

| Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products | | | |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------|
| Classification criteria | | | |
| Class | B | C | D |
| Test method(s) | | | |
| EN ISO 11925-2 Exposure = 30 s | $F_s \leq 150$ mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification. | | |
| EN 13823 | FIGRA _{0,2 MJ} ≤ 120 W/s LFS < edge of specimen THR _{600s} ≤ 7.5 MJ | FIGRA _{0,4 MJ} ≤ 250 W/s LFS < edge of specimen THR _{600s} ≤ 15 MJ | FIGRA _{0,4 MJ} ≤ 750 W/s |
| Additional classification | | | |
| Smoke production | s1 = SMOGRA ≤ 30 m ² /s ² and TSP _{600s} ≤ 50 m ² ; s2 = SMOGRA ≤ 180 m ² /s ² and TSP _{600s} ≤ 200 m ² ; s3 = not s1 or s2 | | |
| Flaming Droplets/particles | d0 = no flaming droplets/ particles in EN 13823 within 600 s; d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s; d2 = not d0 or d1. | | |

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1 REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007+A1:2009.

4.2 CLASSIFICATION

The product, **Softwood Spruce with Envirograf coating system, product 92 ES/VFR and top coating Sherwin/Williams ED1143 LAQVA** in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

Reaction to fire classification: B - s1, d0

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

| | |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Thickness | 25 mm |
| Surface density | 13.1 kg/m ² |
| Other properties | Softwood Spruce with a density of 600 kg/m ³ Supporting construction of Pine wood timber with a minimum density of 450 kg/m ³ |

This classification is valid for the following end use applications:

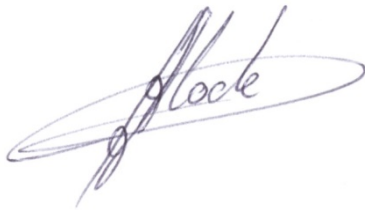
| | |
|-------------------------------------|--------------------------------------------------------|
| Substrate | Not applicable |
| Application | As wall covering |
| Air gap | yes |
| Methods and means of fixing | Mechanically |
| Joints | Horizontal and vertical |
| Other aspects of end use conditions | Closed surface, no openings or gaps between components |

4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

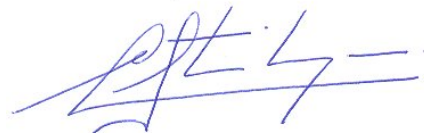
There are no limitations in time on the validity of this report.

5. LIMITATIONS

This classification document does not represent type approval or certification of the product.



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