

Reaction to fire testing of Plasterboard covered with wallpaper treated with 321 Ignitability test according to EN ISO 11925-2:2010/C1:2011

Report no.	2020-Efectis-R000403
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Project number	ENL-20-000061
Date of issue	March 2020
Number of pages	4

1. PRODUCT IDENTIFICATION

Plasterboard covered with wallpaper treated with 321, further referred to as 'the product'.

2. ABSTRACT

Determination of the **ignitability** properties of the product, by **direct small flame impingement** according to EN ISO 11925-2:2010/C1:2011, with the objective to obtain the reaction to fire classification according to EN 13501-1:2018.

3. DETAILS OF THE PRODUCT TESTED

3.1 INTENDED APPLICATION

The product will be used as a fire retardant paint.

3.2 MANUFACTURER

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

3.3 PRODUCT DESCRIPTION

According to the sponsor the product is from inside out composed of:

- Plasterboard, 15 mm;
- Wallpaper adhered with Polyseal wallpaper paste;
- 2 coats of 321 at 12m² per litre.

The product has a total thickness of 15 mm and a mass per unit area of approx. 13 kg/m².

4. DETAILS OF THE EXAMINATION

4.1 SAMPLES

Sampling procedure	The samples were submitted by the sponsor.
Age	At the time of receipt: no information received.
Date of receipt	January 15, 2020

4.2 SPECIMEN PREPARATION

Substrate used	Not applicable
Method of fixing	Not applicable

4.3 CONDITIONING

Prior to the examinations, the specimens were conditioned over a period of 4 weeks minimum at a temperature of (23 ± 2) °C and a relative humidity of (50 ± 5) % according to § 4.1 of EN 13238.

4.4 EXAMINATION

Number of tests	A total of twelve single ignitability tests were carried out according to EN ISO 11925-2.
ETAG 028:2012	Guideline for European Technical Approval of Fire Retardant Products
Deviations from the test method	None
Date of examination	February 4, 2020
Location of examination	Efectis Nederland BV, Bleiswijk, The Netherlands

The results are given in Table 1, Appendix: Results.

5. CONCLUSIONS

A formal classification is to be assessed in accordance with EN 13501-1, "Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests".

Remarks:

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

Regarding the precision of the test method, following Annex B of EN ISO 11925-2, the absolute repeatability/reproducibility for this test method is estimated to lie within 3 s to 5 s for all times measured.



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APPENDIX: RESULTS

Table 1: Ignitability classification parameter results

Flame application time: 30 s					
Sample	Ignition of sample	Maximum flame Height	t_{150}	Afterburning time	Ignition of filter paper
	{Y=Yes/N=No}	[mm]	[s]	[s]	{Y=Yes/N=No}
Surface ignition					
1	Y	50	not reached	-	N
2	Y	60		-	N
3	Y	60		-	N
4	Y	55		-	N
5	Y	55		-	N
6	Y	55		-	N
Maximum		60			
Classification parameters		150 mm reached within 60 s			N
		Ignition of filter paper			N
Edge ignition					
1	Y	50	not reached	-	N
2	Y	55		-	N
3	Y	65		-	N
4	Y	50		-	N
5	Y	50		-	N
6	Y	50		-	N
Maximum		65			
Classification parameters		150 mm reached within 60 s			N
		Ignition of filter paper			N