

Indicative test report

No. 2019-2033

issued 17.10.2019

Applicant: Spandex AG
Aegertweg 4
8305 Dietlikon
Schweiz

Date of order: 11.09.2019
Date of sampling: no official taking out of the sample from a
representative of the Warringtonfire Frankfurt GmbH
Date of arrival: 02.10.2019
Date of test: 08.10.2019

Order

Testing of the flammability (building class B1) according to DIN 4102-1 (May 1998)

Description / designation of the test object

Product name: IP 2810-105 Polymeric Laminate

Description of the relevant test procedure

DIN 4102 part 1 (May 1998)

1. Description of the test material

1.1 Details of the customer:

Product name: IP 2810-105 Polymeric Laminate

Face to be tested: Front

Product description:

trade name: IP 2810-105

sample material: self adhesive vinyl

Material type: PVC

Production technique: calandred

total thickness: 50 μ

area weight: N/A

colour: clear

flame retardant: N/A

manufacturer: N/A

adhesive: solvent based acrylic

adhesive type: solvent based acrylic

Intended end use of the product: laminate applications

1.2 By Warringtonfire Frankfurt GmbH determined values:

material: self adhesive film on a 3mm aluminum plate

colour: clear

thickness: 0,06 mm

square weight: 86 g/m²

Testing after clima storage at 23° C and 50 % rel. hum. L. moisture

2. Test results

2.1 “Brandschacht” test according to DIN 4102-1

Specimen A: Sample in direction of production

Test results of the “Brandschacht” tests part 1						
line no.		measurements test sample				
			A	B	C	D
1	<u>sample arrangement according to DIN 4102 Part 15, section 5.4 Table No. 1</u>		1			
2	<u>flame height max. over lower sample edge</u> time ¹⁾	Cm	50			
		min : s	03:37			
3	<u>ascertainties on the front side</u> Flaming/glowing time ¹⁾	min : s	00:24			
4	<u>melting / burning through</u> time ¹⁾	min : s	no			
5	<u>ascertainties on the back side</u> Flaming/glowing time ¹⁾	min : s	no			
		6	discolouring time ¹⁾	min : s	no	
7	<u>burning droplets</u> begin ¹⁾	min : s	no			
8	extent					
9	occasional dripping of material		no			
9	constant dripping of material					
10	<u>separating from burning sample parts</u> begin ¹⁾	min : s	no			
11	occasional separating parts					
12	constant separating parts					
13	duration of burning on the sieve tray (max.)	min : s	no			
14	influence on the burner flame by dripping of / separating material time ¹⁾	min : s	no			
		15	<u>earlier end of test</u> end of the fire scenario on the sample ¹⁾	min : s		
16	time of a possible resulted test stop ¹⁾	min : s	no			

¹⁾ time from start of test

Test results of the "Brandschacht" tests part 2						
line no.			Measurements test sample			
			A	B	C	D
17	<u>flaming after end of test</u> duration	min : s	no			
18	number of sample		no			
19	front side of sample		no			
20	backside of sample		no			
21	flame length		no			
		cm	--/--			
22	<u>glowing after end of test</u> duration	min . s	--/--			
23	number of sample		no			
	place of occurrence		no			
24	lower sample part		no			
25	upper sample part		no			
26	front side of sample		no			
27	backside of sample		no			
28	<u>smoke density</u> < 400 % x min		4			
29	> 440 % x min		--/--			
30	diagram in annex no.		1			
31	<u>residual length</u> single results	cm	47 / 46 47 / 46			
32	average of the single results	cm	46			
33	foto of the sample on page		5			
34	<u>smoke temperature</u> max. of the average results	°C	112			
35	time ¹⁾	min : s	09:35			
36	diagram in annex no.		1			

¹⁾ time from start of test

Remarks: is able to fulfill

2.2 Appearance of the specimen after the test:

Sample A



3. Indicative Assessment

The determined results showed that the material is able to fulfill the requirements for the B1 classification according to DIN 4102-1 (May 1998).

4. Special note

The materials were not tested after an outside storage.

In combination with other materials (for example coatings, deposits) the burning behaviour could be influenced unfavourable so that the classification above is not valid any longer. According to DIN 4102-1 the burning behaviour in combination with other materials has to be tested separately.

Frankfurt, the 17.10.2019



H. Anders
Tester in charge



P. Scheinkönig
Prüfstellenleiter Bau PVO



The results of the tests relate only to the behaviour of the test sample which is designated on the top.
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This test report contains 6 pages and 1 annex.

Annex 1 to the test report No. 2019-2033 issued 17.10.2019

Sample A:

