

Test report no. 081136.1 – Pi
(English Version of the test report no. 080755.1-PI)

Orderer: Tapetenfabrik
Gebr. Rasch GmbH & Co. KG
Raschplatz 1
49565 Bramsche

Order from: 10.03.2008 – Bestellung BÜ46549

Order: Tests of the fire behaviour according to DIN 4102-1: 1998-05,
fire class B1, of wallpaper „Produktgruppe Vinyl auf Vlies“
item number 706970

Notes: In Germany this test report can be used only for a building
material, not for a building product.
For sale on the German market, other special papers according
to the German “Landesbauordnung” are needed in addition.
This test report can be used for these special papers.

This test report consists of 7 pages.

The test material has been consumed.

In case of any dispute the german version is decisive. The test report shall be published unchanged.
Any partial publishing requires written approval by the testing institute. The test results refer only to
the tested material!

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Die Akkreditierung gilt für die in der
Urkunde aufgeführten Prüfverfahren.



Niedersachsen



Notifizierte Stelle
0764

1. Test material**1.1 Sampling and delivery**

date: - / by orderer
delivery: 26.03.2008
number of samples: 1 roll
dimension: 10,05 m x 0,53 m

1.2 Informations about the samples

name: „Vinyl auf Vlies“
item number: 706970
thickness: 0,43 mm
weight per unit area: 272 g/m²

1.3 Mounting

The wallpaper was pasted on plasterboards with a wallpaper paste.

2. Fire tests**2.1 Review**

All fire tests were carried out according to DIN 4102-1: 1998-05.

character and location of tests

tests	amount of tests	lab
Single-flame source test	10	MPA BAU HANNOVER
Brandschacht-test	3	

2.2 Brandschacht-test

The Results of the Brandschacht-test are compiled in the next table. The development of smoke temperature is shown in fig. 1, the appearance of samples after burning in fig. 3 – 5.

The integral value

$$I = \int_{0 \text{ min}}^{10 \text{ min}} S \cdot dt$$

was calculated from the curve in fig. 2

results of the Brandschacht-test

test		A	B	C
max. vertical flame spread time after beginning	cm min:s	80 01:43	80 02:13	80 01:59
melting and burning through time after beginning	min:s	—	—	—
flames on the reverse side of samples time after beginning	min:s	—	—	—
flaming droplets/particles		—	—	—
residual length				
single values	cm	21	22	26
	cm	14	20	21
	cm	19	22	23
	cm	18	19	22
mean value	cm	18	21	23
max. smoke temperature time after beginning	° C min:s	140 01:39	140 01:59	121 01:59
subsequent fire	min:s	—	—	—
smoke intensity				
max. opacity of the smoke	%	59	50	57
integral value I	min·%	64	71	66

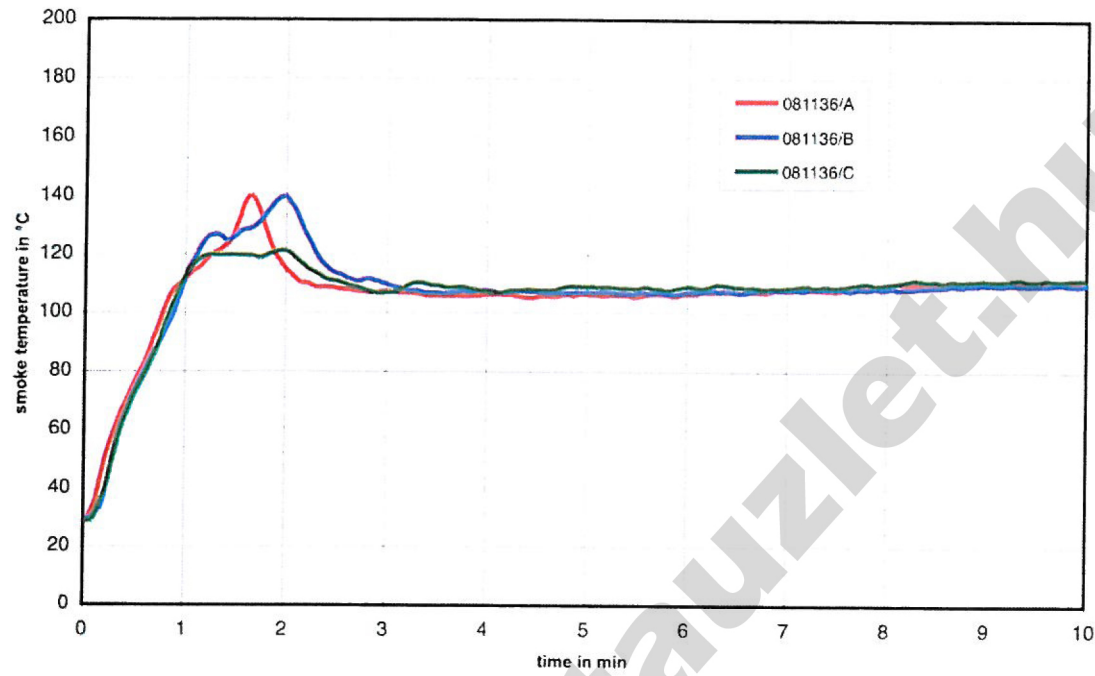


fig 1: smoke temperature

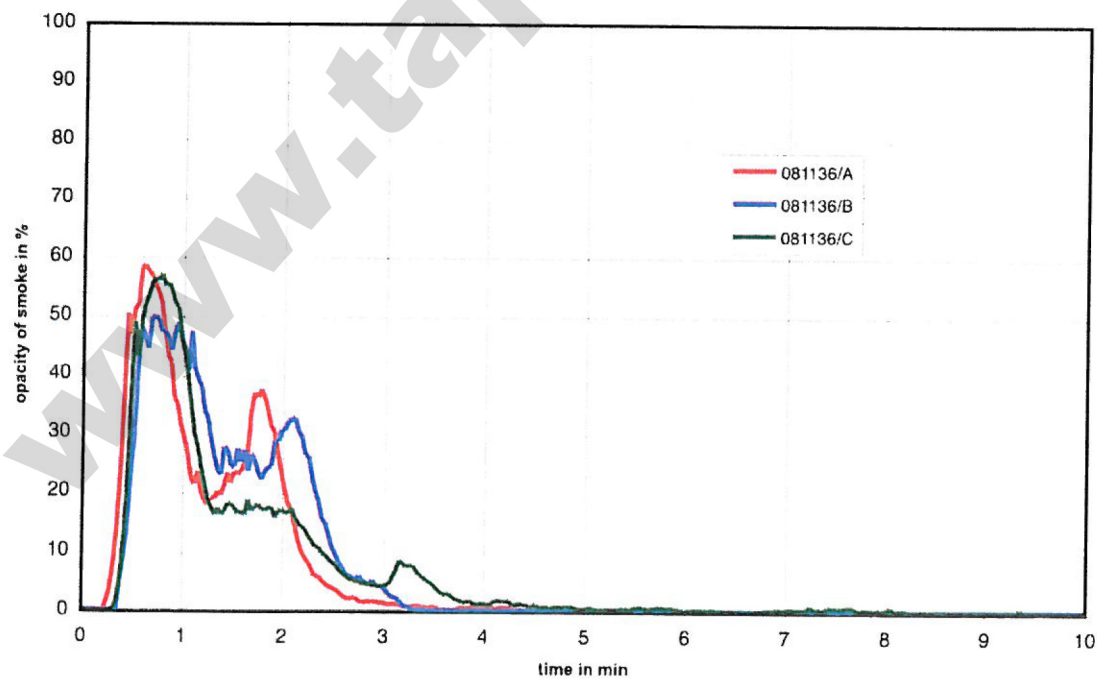
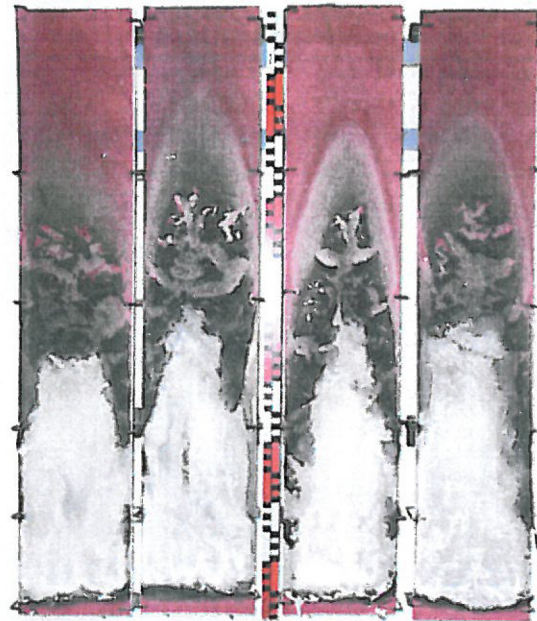


fig 2: opacity of smoke



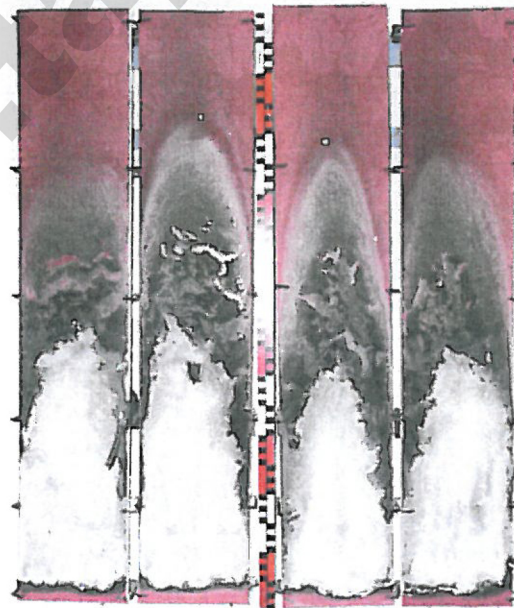
081136 - A

fig. 3: Appearance of specimen A
after 10-minutes burning



081136 - B

fig. 4: Appearance of specimen B
after 10-minutes burning



081136 - C

fig. 5: Appearance of specimen C
after 10-minutes burning

2.3 Single-flame source test

The tests were carried out as edge flame attacks according to DIN 4102-1: 1998-05 clause 6.2.5.2 and as surface flame attacks according to DIN 4102-1:1998-05 clause 6.2.5.3.

flame application time: 15 s

observation time: 20 s

number of tests: 10

position of flame application		edge					surface				
specimen no.		1	2	3	4	5	6	7	8	9	10
ignition occurs after	s	0,3	0,3	0,4	0,3	0,3	2,5	2,7	2,1	2,0	1,6
duration of flames	s	15,2	15,2	14,9	15,5	15,1	13,0	12,6	13,8	13,4	14,0
max. vertical flame spread	mm	40	40	50	50	40	50	60	50	50	50
smoke production		moderate									
flaming droplets/particles		no ignition of the filter paper									

Requirement: max. vertical flame spread < 150 mm

3. Summary

summary of test results

name		Produktgruppe „Vinyl auf Vlies“ item number 706970
thickness	mm	0,43
weight per unit area	g/m ²	272
Brandschacht-test		
max. vertical flame spread	cm	80
residual length	cm	21
max. smoke temperature	°C	140
flaming droplets/particles		—
max. opacity of smoke	%	59
max. integral value	min·%	71
single-flame source test		
max. flame spread	mm	60
flaming droplets/particles		—

4. Classification

The product „Vinyl auf Vlies“, item number 706970 with a weight per unit area of 272 g/m², fulfils the requirements of DIN 4102-1 – B1 and is thus classified in relation to its reaction to fire.

During the tests there were no flaming droplets/particles according to DIN 4102-1.

5. Notes

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The validity of this test report expires on 30.04.2013.

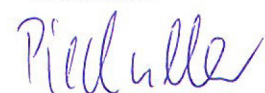
Hannover, 16.04.2008

Head of fire laboratory


(ORR Dipl.-Ing. Restorff)



Technician


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