

Test report No. 210258

for applying of a required “Verwendbarkeitsnachweis”
issued 29.04.2021

Applicant: Camira Transport Fabrics Ltd
Meltham Mills
Meltham Mills Road
Meltham
West Yorkshire
HD9 4AY

Date of order: 22.03.2021
Date of sampling: *no official sampling of the specimen by a representative of Warringtonfire Frankfurt GmbH*
Date of arrival: 12.04.2021
Date of test: 28.04.2021

Order

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

Description / designation of the test object

Product name: ASPECT

Description of the relevant test procedure

DIN 4102 part 1 (Mai 1998)

DIN 4102-16 (January 2021)

This test report does not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the “Verwendbarkeitsnachweis”.

1. Description of the test material

1.1 Details of the customer:

Product name: ASPECT

Sample 1
Colour: ATACAMA
Run: 457902

Sample 2
Colour: LUCERNE
Run: 447603

Sample 3
Colour: ZION
Run: 457146

Face to be tested: Label on Face

Product description:

Main components: 75% Trevira CS Flame Retardant Polyester, 25 % Polyester

Thickness: 0.9 mm

Grossweight: 325 g/m² 455 g/lin.m

Color: as above

Intended end use of product Contract Seating

1.2 By Warringtonfire Frankfurt GmbH determined values:

Material: fabric sample fabric sample fabric sample

Colour: yellow blue red-brown

thickness: 0,8 mm 0,8 mm 0,8 mm

square weight: 321 g/m² 308 g/m² 321 g/m²

Testing after storing 14- days under climatic conditions (23°C / 50 % rel. humidity).

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	no	no	no
18	number of sample		no	no	no	no
19	front side of sample	cm	no	no	no	no
20	backside of sample		no	no	no	no
21	flame length		no	no	no	no
22	<u>glowing after end of test</u> duration	min . s	--/--	--/--	--/--	--/--
23	number of sample		no	no	no	no
	place of occurrence		no	no	no	no
24	lower sample part		no	no	no	no
25	upper sample part		no	no	no	no
26	front side of sample		no	no	no	no
27	backside of sample		no	no	no	no
28	<u>smoke density</u> < 400 % x min		0	1	1	1
29	> 440 % x min					
30	<u>diagram in annex no.</u>		1	2	3	4
31	<u>residual length</u> single results	cm	64 / 64 64 / 68	66 / 66 66 / 69	67 / 66 70 / 64	60 / 68 70 / 67
32	average of the single results	cm	65	66	66	66
33	photo of the sample on page		7	7	7	7
34	<u>smoke temperature</u> max. of the average results	°C	115	118	119	120
35	time ¹⁾	min : s	09:41	08:41	09:06	09:41
36	diagram in annex no.		1	2	3	4

¹⁾ time from start of test

Remarks:

2.2 Brandschachtprüfung according to DIN 4102-1

Sample E: Material tested in production direction

red-brown

Sample F: Material tested cross to the production direction

red-brown

colour: light green

Test results of the Brandschacht tests part 1						
line no.		Measurements test sample				
			E	F		
1	<u>no. test arrangement according to DIN 4102 part 15, table 1</u>		1	1		
2	<u>flame height max. over lower sample edge</u> time ¹⁾	cm	40	40		
		min : s	00:11	00:11		
3	<u>ascertainties on the front side</u> Flaming/glowing time ¹⁾	min : s	00:03	00:04		
4	<u>melting / burning through</u> time ¹⁾	min : s	00:06	00:06		
5	<u>ascertainties on the back side</u> Flaming/glowing time ¹⁾	min : s	no	no		
6	discolouring time ¹⁾	min : s	no	no		
7	<u>burning droplets</u> begin ¹⁾	min : s				
8	extent		no	no		
9	occasional dropping of material					
9	constant dropping of material					
10	<u>separating from burning sample parts</u> begin ¹⁾	min : s				
11	occasional separating parts		no	no		
12	constant separating parts					
13	duration of burning on the sieve tray (max.)	min : s	no	no		
14	influence on the burner flame by dropping of / separating material time ¹⁾	min : s	00:38	00:36		
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	no		

¹⁾ time from start of test

Test results of the Brandschacht tests part 2					
line no.		Measurements test sample			
			E	F	
17	<u>flaming after end of test</u> duration	min : s	no	no	
18	number of sample		no	no	
19	front side of sample	cm	no	no	
20	backside of sample		no	no	
21	flame length		no	no	
22	<u>glowing after end of test</u> duration	min . s	--/--	--/--	
23	number of sample		no	no	
	place of occurrence		no	no	
24	lower sample part		no	no	
25	upper sample part		no	no	
26	front side of sample		no	no	
27	backside of sample	no	no		
28	<u>smoke density</u> < 400 % x min		1	1	
29	> 440 % x min				
30	diagram in annex no.		5	6	
31	<u>residual length</u> single results	cm	65 / 68 69 / 68	66 / 70 67 / 70	
32	average of the single results	cm	67	68	
33	photo of the sample on page		7	7	
34	<u>smoke temperature</u> max. of the average results	°C	120	120	
35	time ¹⁾	min : s	08:24	09:57	
36	diagram in annex no.		5	6	

¹⁾ time from start of test

Remarks: As the residual length was > 45 cm during the Brandschacht test, no further tests were necessary according to DIN 4102-16.

Appearance of the specimen after the test:

Sample A



Sample B



Sample C



Sample D



Sample E



Sample F



2.3 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit
Flame application on: lower sample edge
Edge ignition

length direction: colour: yellow

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self-extinguishing of the flame [s]	14	16	17	23	20
Max. flame height [mm]	100	80	90	110	100
Time [s]	13	11	10	12	12
End of afterflaming [s]	-	1	2	8	5
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	-	-	-
Smoke development (visual impression) _{low / moderate / strong}	strong smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

cross direction: colour: yellow

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self-extinguishing of the flame [s]	-	23	-	-	21
Max. flame height [mm]	120	100	120	100	100
Time [s]	20	13	20	15	12
End of afterflaming [s]	>10	8	>10	>10	6
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	25	-	25	25	-
Smoke development (visual impression) _{low / moderate / strong}	strong smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

2.4 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit
Flame application on: lower sample edge
Edge ignition

length direction: colour: blue

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self-extinguishing of the flame [s]	22	9	-	17	19
Max. flame height [mm]	110	90	120	110	130
Time [s]	10	7	10	12	15
End of afterflaming [s]	7	-	>10	2	4
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	25	-	-
Smoke development (visual impression) _{low / moderate / strong}	strong smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

cross direction: colour: blue

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self-extinguishing of the flame [s]	23	11	-	22	-
Max. flame height [mm]	130	90	120	120	130
Time [s]	13	7	12	13	15
End of afterflaming [s]	-	-	>10	7	>10
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	25	-	25
Smoke development (visual impression) _{low / moderate / strong}	strong smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

2.5 Normal flammability test according to DIN 4102-1

Test with edge ignition without deposit
Flame application on: lower sample edge
Edge ignition

length direction: colour: red-brown

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self-extinguishing of the flame [s]	-	-	-	-	-
Max. flame height [mm]	130	110	120	140	120
Time [s]	17	12	13	18	13
End of afterflaming [s]	>10	>10	>10	>10	>10
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	25	25	25	25	25
Smoke development (visual impression) _{low / moderate / strong}	strong smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

cross direction: colour: red-brown

Sample-no.	1	2	3	4	5
Time from start of test					
Ignition point [s]	1	1	1	1	1
Reaching the measuring mark within 20 seconds	no	no	no	no	no
Self-extinguishing of the flame [s]	-	-	-	16	7
Max. flame height [mm]	130	120	110	90	50
Time [s]	14	11	13	10	6
End of afterflaming [s]	>10	>10	>10	1	-
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	25	25	25	-	-
Smoke development (visual impression) _{low / moderate / strong}	strong smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

Appearance of the sample after the small burner test:



Assessment

The material described in chapter one fulfils the requirements of the building class B2 according to DIN 4102-1 (Mai 1998).

The determined test results show that the material also fulfils the requirements

of the building class B1

according to DIN 4102-1 (Mai 1998).

Special note

The fire test result is only valid for the material described in chapter one in the tested colours, square weights and thicknesses.

The test was carried out in free hanging configuration.

The distance to another plane material must be more or equal then 40 mm.

According to DIN 4102-16 Section 5.2, the test result includes all colour settings.

The material wasn't 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.

This test report does not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the “Verwendbarkeitsnachweis”.

Frankfurt, the 29th April 2021



H. Anders
Tester in Charge



P. Scheinkönig
Prüfstellenleiter Bau-PVO



This Test report is valid until 27.04.2026

The results of the tests relate only to the behaviour of the test specimen which is designated on the top.

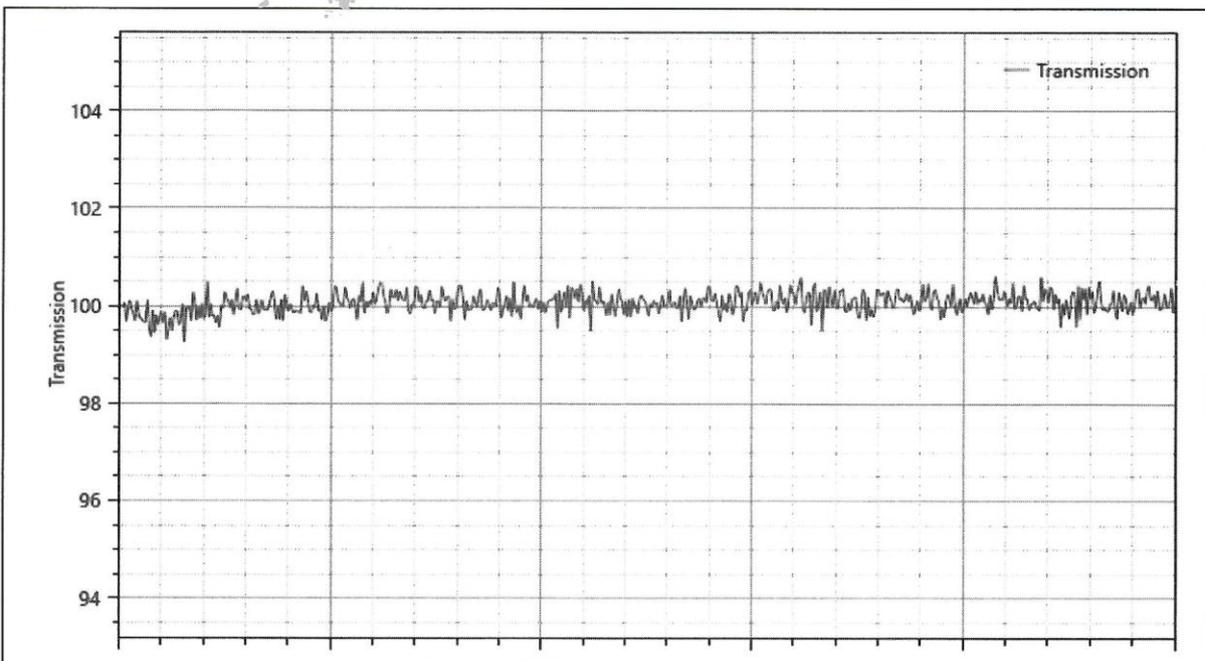
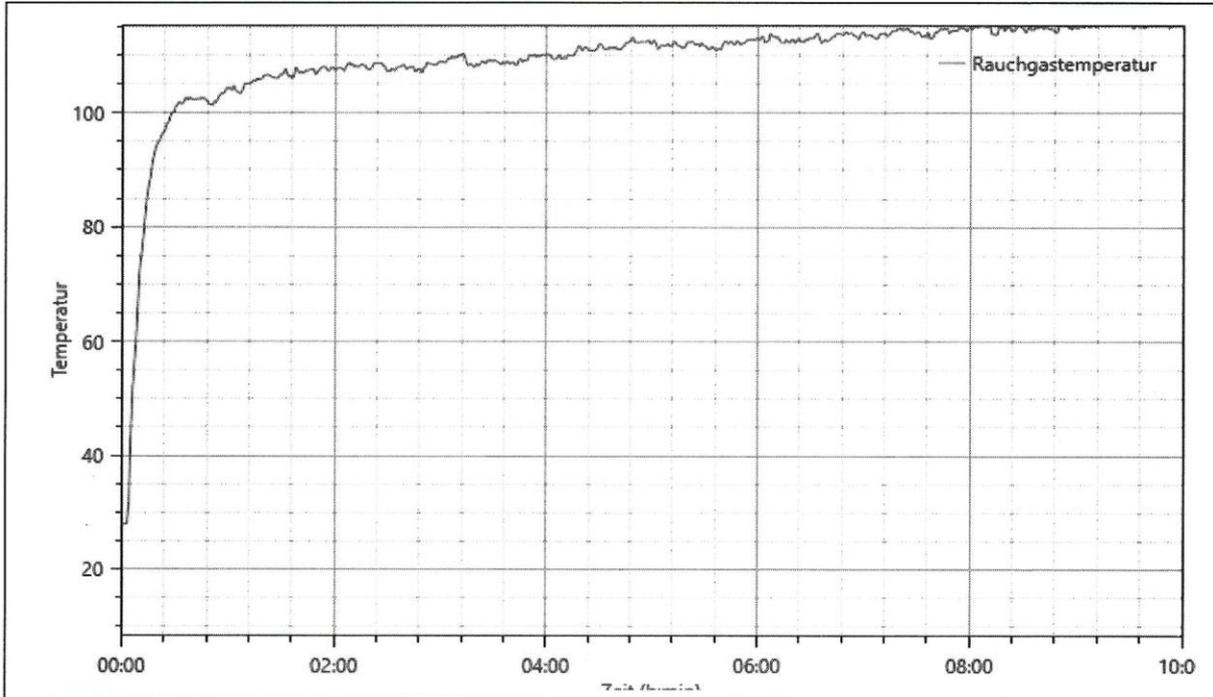
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This test report is a translation of the German version 210258 (issued 29.04.2021). In case of doubt only the German version is valid

This test report contains 12 pages and 6 annexes.

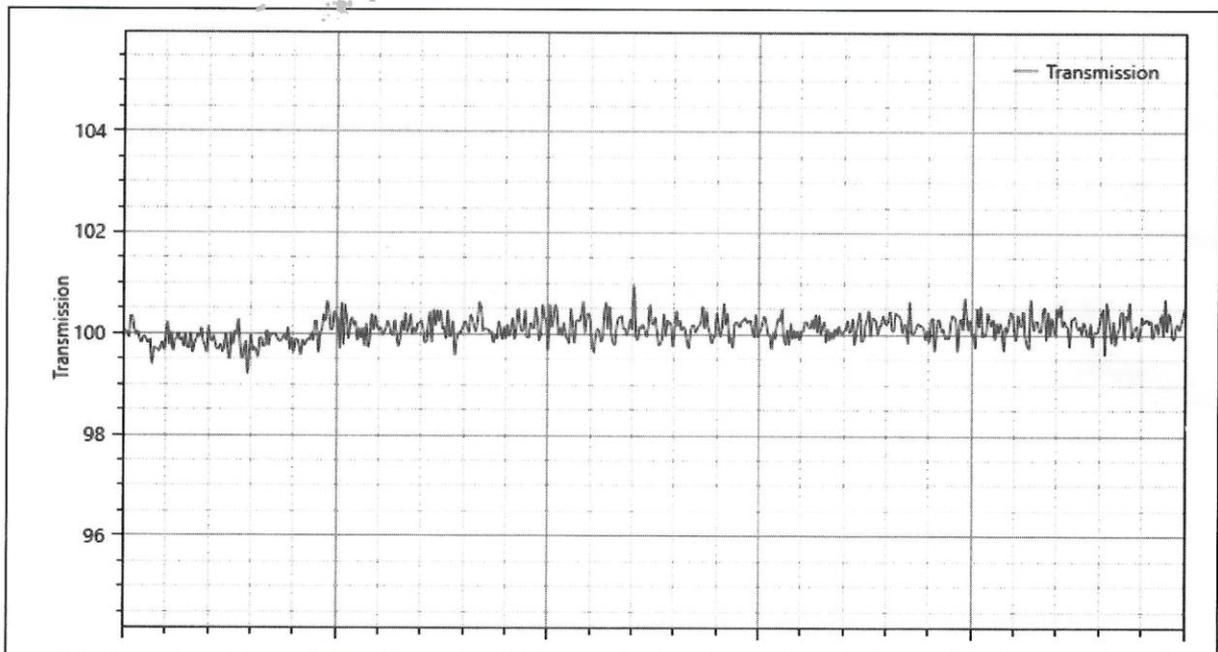
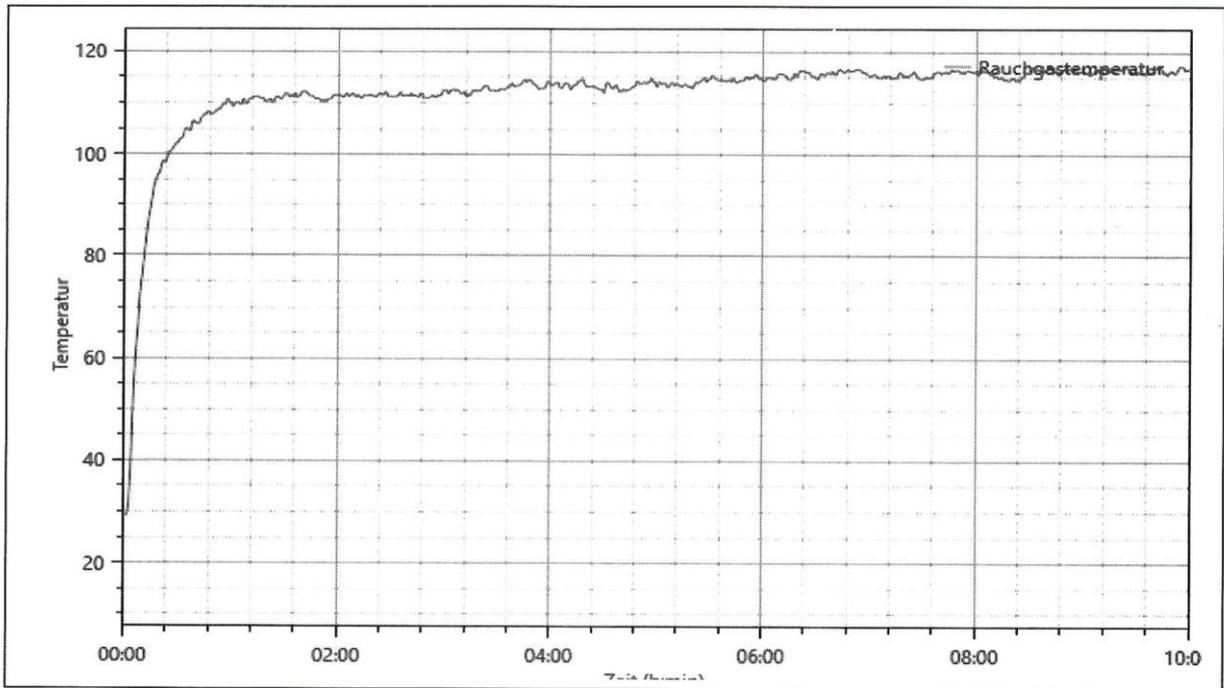
Annex 1 to the Test report No. 210258 issued 29.04.2021

Sample A:



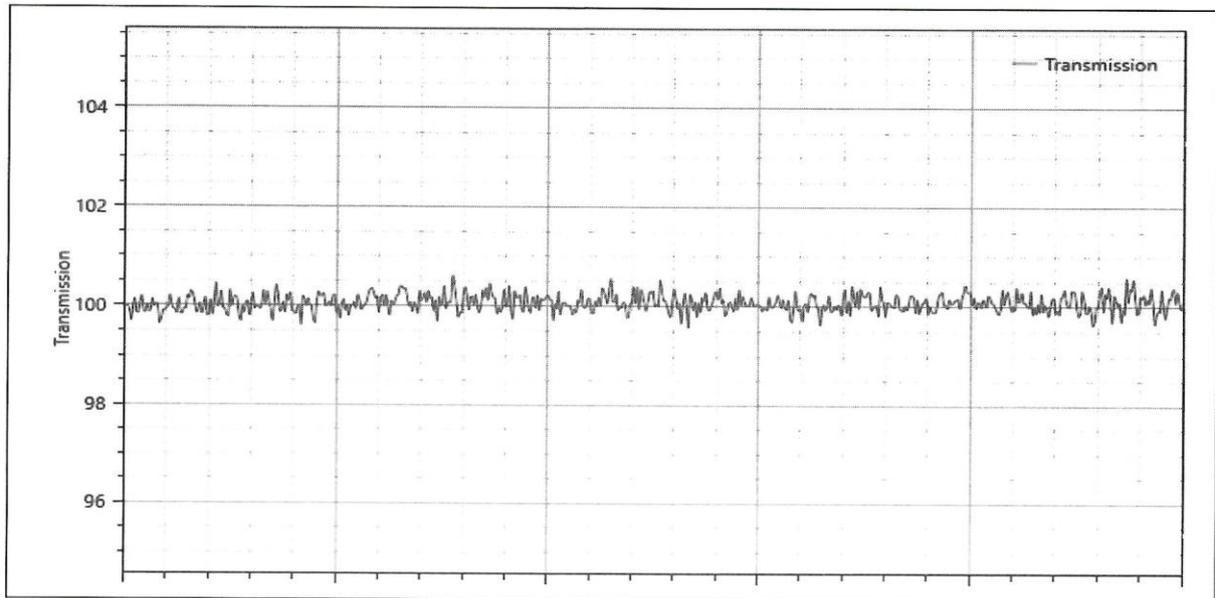
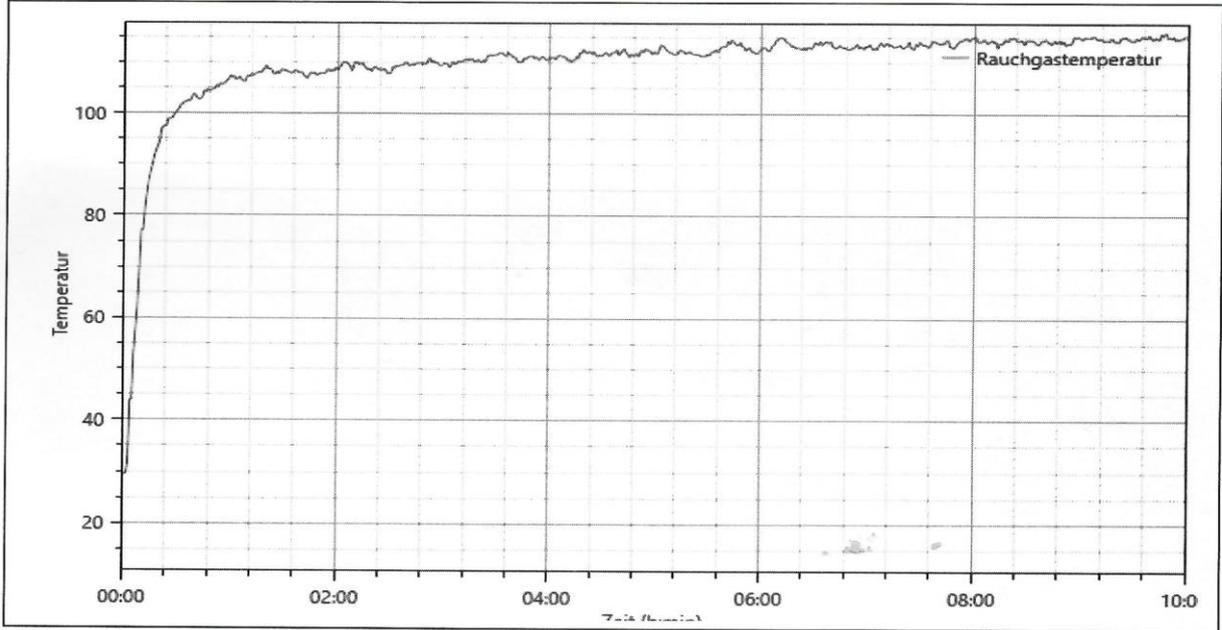
Annex 2 to the Test report No. 210258 issued 29.04.2021

Sample B:



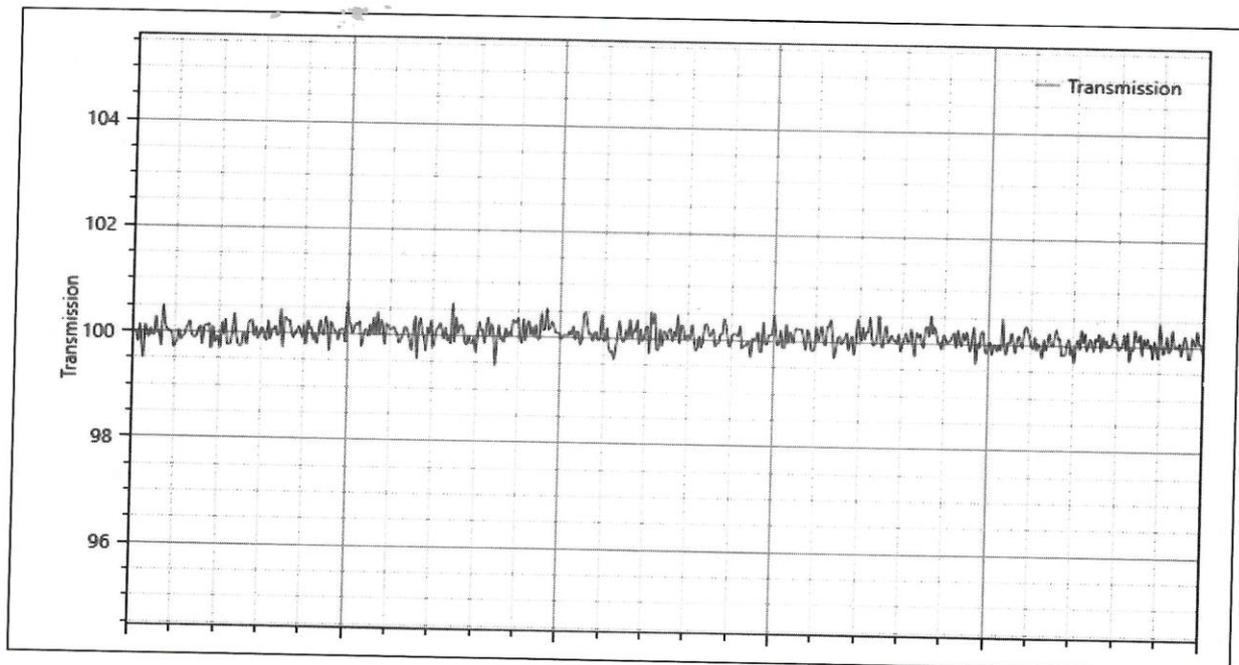
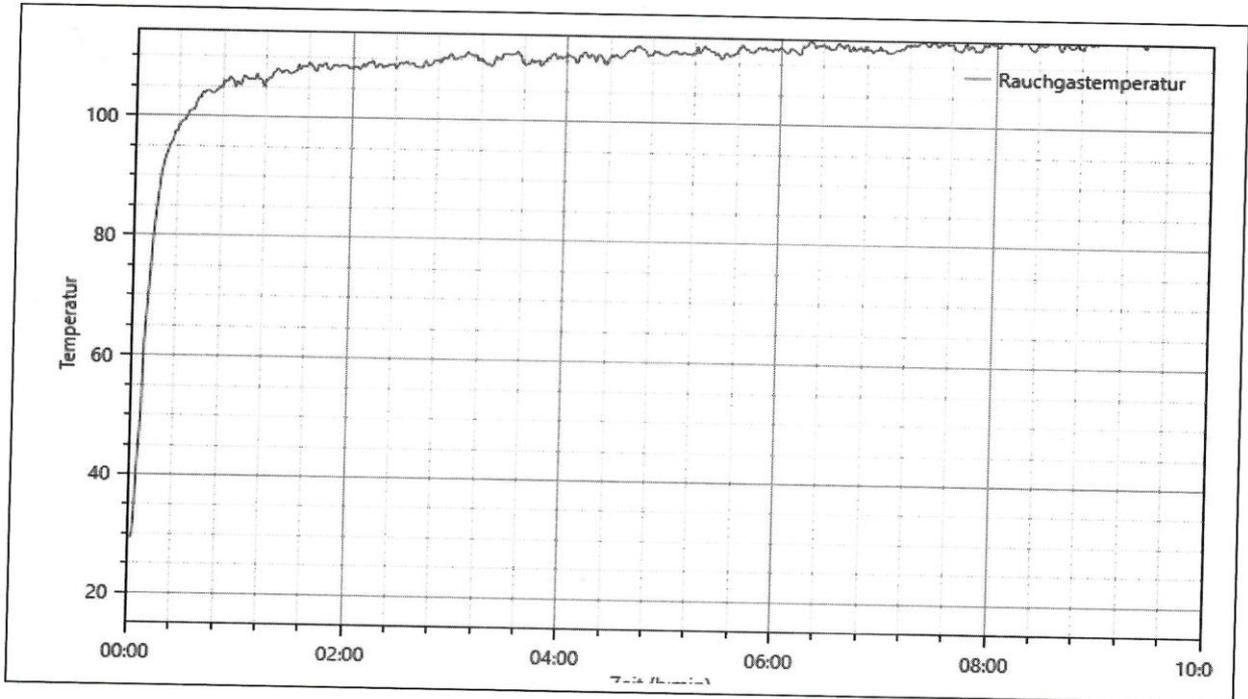
Annex 3 to the Test report No. 210258 issued 29.04.2021

Sample C:



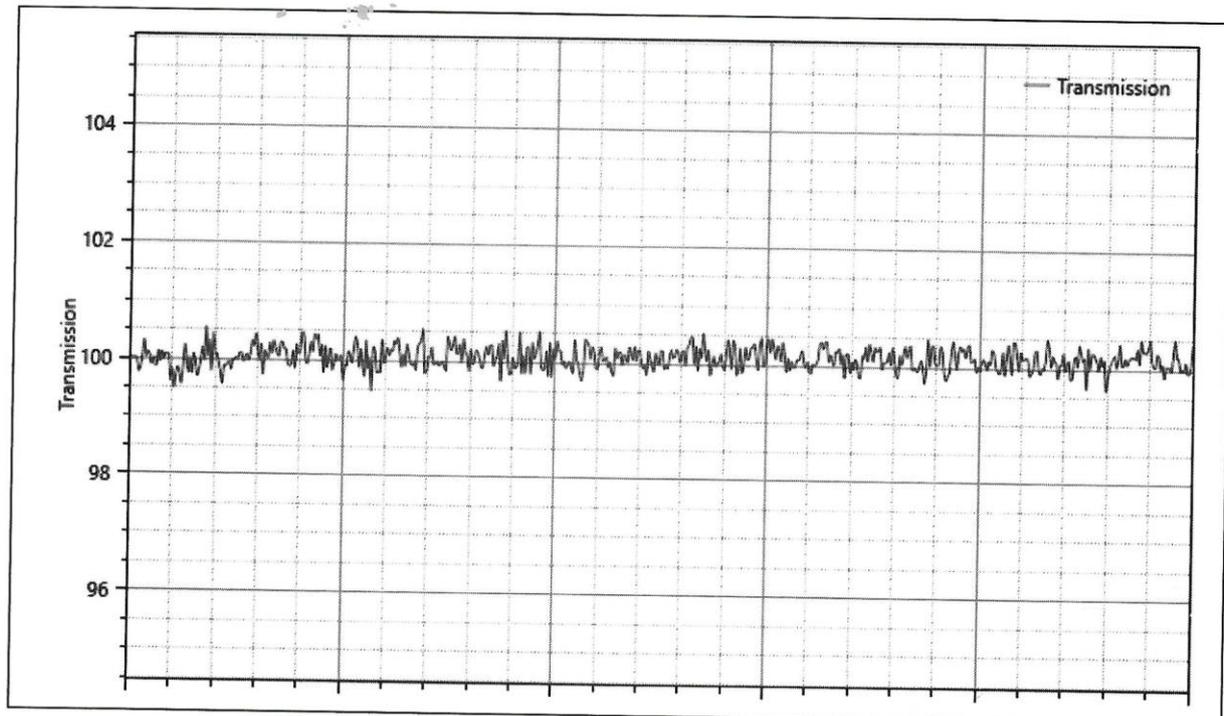
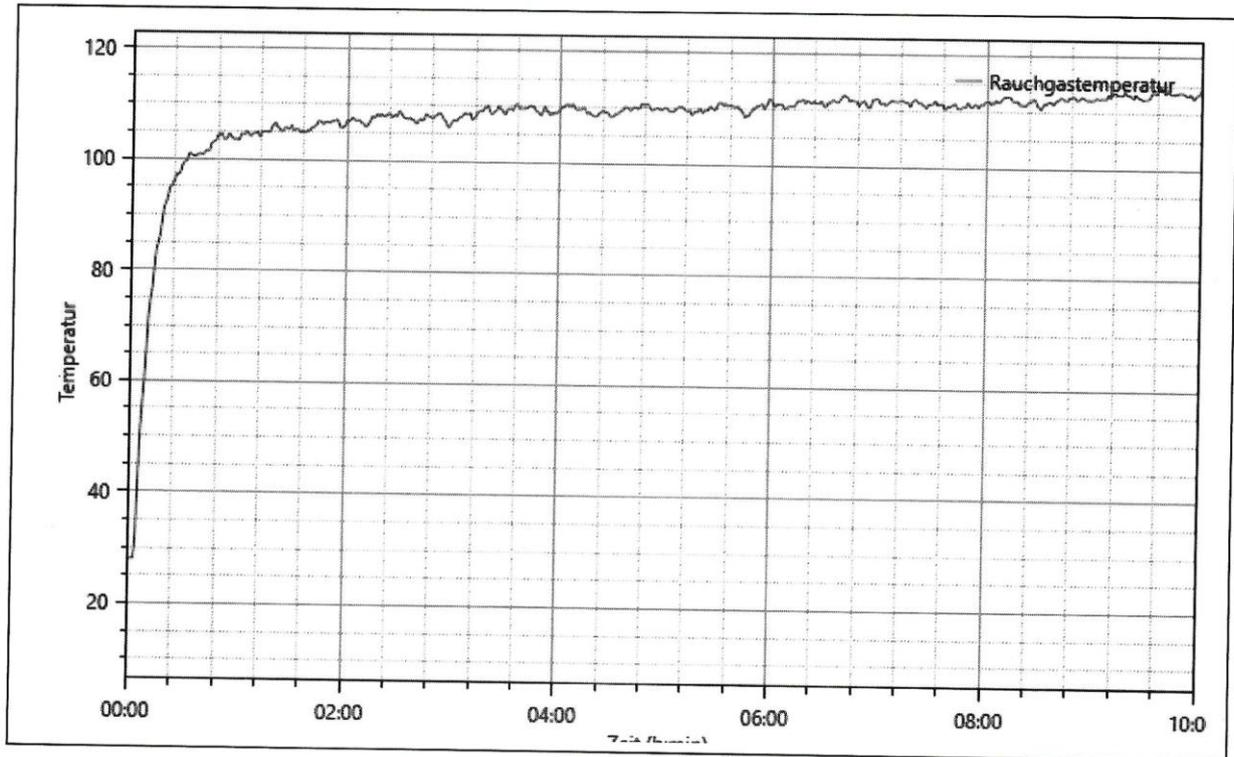
Annex 4 to the Test report No. 210258 issued 29.04.2021

Sample D:



Annex 5 to the Test report No. 210258 issued 29.04.2021

Sample E:



Annex 6 to the Test report No. 210258 issued 29.04.2021

Sample F:

