

Test report No. 201185

for applying of a required “Verwendbarkeitsnachweis”
issued 27.01.2021

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

Date of order: 08.12.2020
Date of sampling: *no official sampling of the specimen by a representative of Warringtonfire Frankfurt GmbH*
Date of arrival: 23.12.2020
Date of test: 07.01.2021 und 20.01.2021

Order

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

Description / designation of the test object

Product name: CITADEL (Collection)

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: CITADEL (Collection)

Sample 1
Colour: Hamiltan
Run: 450107

Sample 2
Colour: Hold
Run: 463321

Sample 3
Colour: Beacon
Run: 461765

Face to be tested: Label on Face

Product description:

Main components: 100% Flame Retardant Polypropylene

Thickness: 1.1 mm

Grossweight: 230 g/m² 334 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: blue red beige

thickness: 0,9 mm 0,9 mm 0,9 mm

square weight: 230 g/m² 222 g/m² 219 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		1	1	0	0
29	> 440 % x min					
30	<u>diagram in annex no.</u>		1	2	3	4
31	<u>residual length</u> single results	cm	66 / 66 66 / 66	66 / 68 66 / 67	67 / 65 66 / 65	67 / 65 65 / 65
32	average of the single results	cm	66	66	65	65
33	photo of the sample on page		7	7	7	7
34	<u>smoke temperature</u> max. of the average results	°C min : s	117	118	116	117
35	time ¹⁾		09:56	09:42	09:47	09:58
36	diagram in annex no.		1	2	3	4

¹⁾ time from start of test

Remarks: melting of the samples

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		0	0	
29	> 440 % x min				
30	diagram in annex no.		1	1	
31	<u>residual length</u> single results	cm	68 / 66 69 / 65	66 / 66 69 / 65	
32	average of the single results	cm	67	66	
33	photo of the sample on page		8	8	
34	<u>smoke temperature</u> max. of the average results	°C min : s	115	116	
35	time ¹⁾		09:37	09:10	
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, melting of the samples

Appearance of the specimen after the test:

Sample A



Sample B



Sample C



Sample D



Appearance of the specimen after the test:

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: 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]	-	-	-	-	-
Max. flame height [mm]	110	110	110	120	90
Time [s]	20	20	20	20	20
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}	moderate smoke development				
Separating from burning material	yes	yes	yes	yes	yes
Time [s]	15	15	14	13	15

Remarks: burning droplets

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]	-	-	-	-	-
Max. flame height [mm]	110	110	130	110	130
Time [s]	20	20	20	20	20
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}	moderate smoke development				
Separating from burning material	yes	yes	yes	yes	yes
Time [s]	14	13	13	12	12

Remarks: burning droplets

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: red

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]	18	15	15	15	19
Max. flame height [mm]	90	70	80	70	80
Time [s]	15	8	8	7	13
End of afterflaming [s]	3	-	-	-	4
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	-	-	-
Smoke development (visual impression) _{low / moderate / strong}	moderate smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: none

cross direction: colour: red

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]	8	13	-	22	15
Max. flame height [mm]	60	80	110	100	90
Time [s]	5	8	20	20	10
End of afterflaming [s]	-	-	>10	7	-
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	25	-	-
Smoke development (visual impression) _{low / moderate / strong}	moderate 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: beige

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]	13	15	12	8	9
Max. flame height [mm]	80	80	60	50	60
Time [s]	8	10	7	6	6
End of afterflaming [s]	-	-	-	-	-
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	-	-	-
Smoke development (visual impression) _{low / moderate / strong}	moderate smoke development				
Separating from burning material	no	no	no	no	no
Time [s]	-	-	-	-	-

Remarks: Burning droplets

cross direction: colour: beige

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]	13	6	7	9	6
Max. flame height [mm]	70	60	60	70	50
Time [s]	7	5	5	7	5
End of afterflaming [s]	-	-	-	-	-
End of afterglowing [s]	-	-	-	-	-
Flames extinguished after [s]	-	-	-	-	-
Smoke development (visual impression) _{low / moderate / strong}	moderate 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 with burning droplets

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 27th January 2021



H. Anders
Tester in Charge



P. Scheinkönig
Prüfstellenleiter Bau-PVO



This Test report is valid until 06.01.2026

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

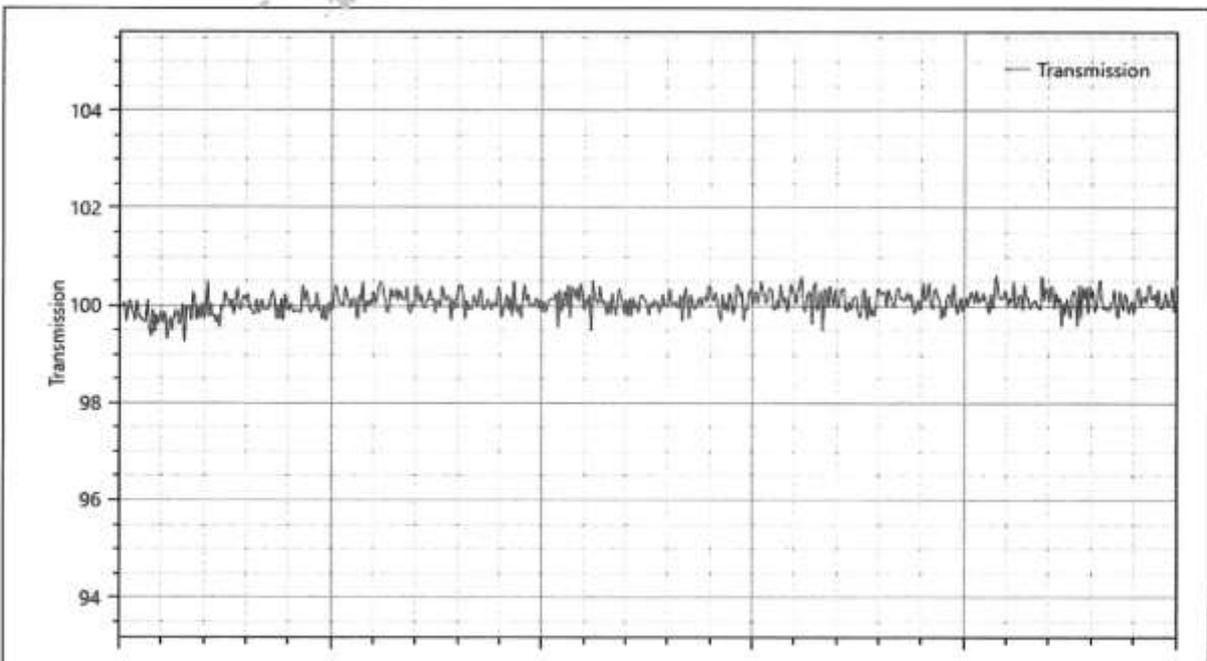
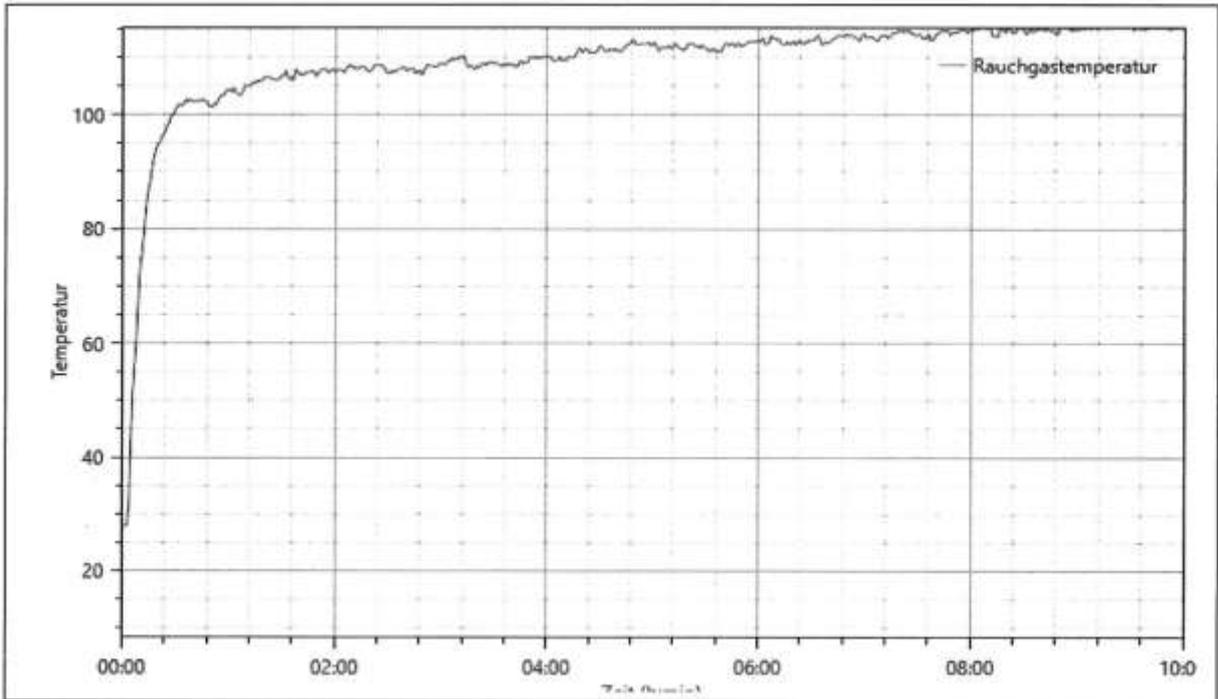
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This test report is a translation of the German version 201185 (issued 26.01.2021). In case of doubt only the German version is valid

This test report contains 13 pages and 6 annexes.

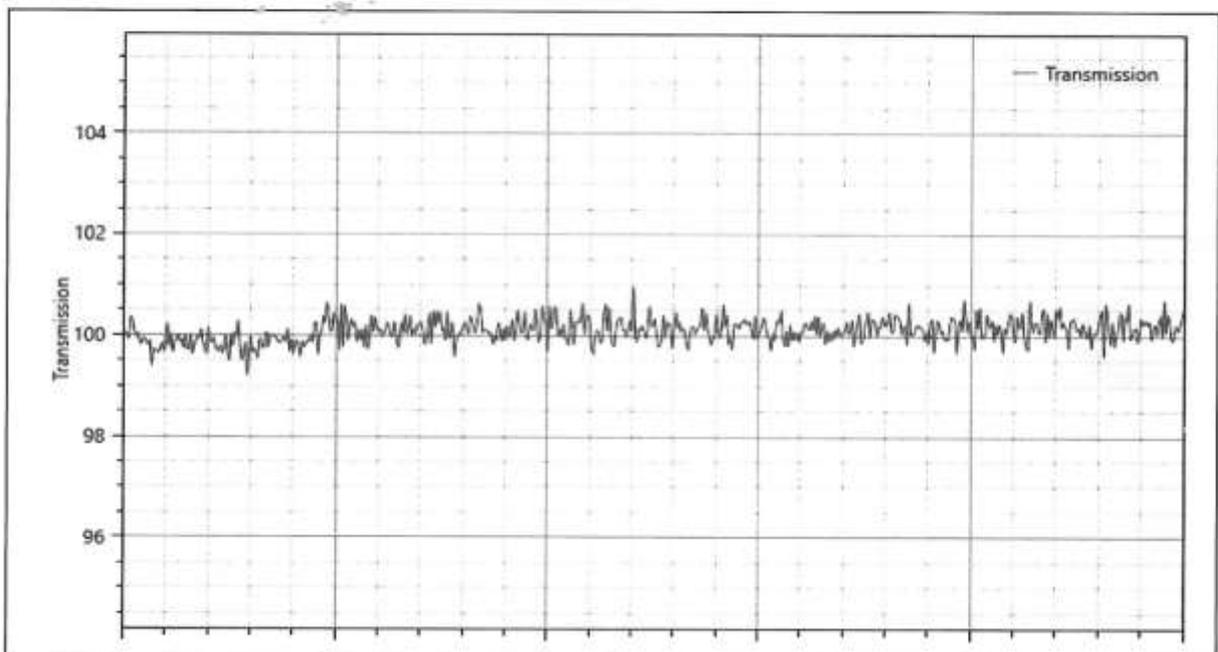
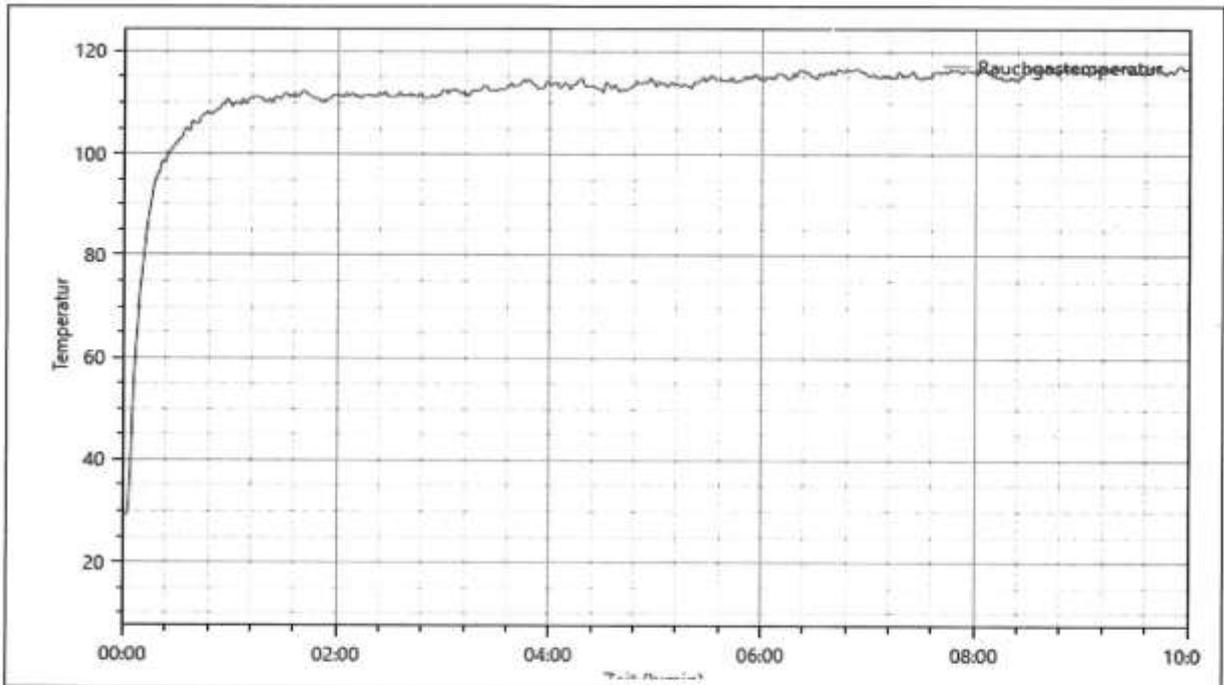
Annex 1 to the Test report No. 201185 issued 27.01.2021

Sample A:



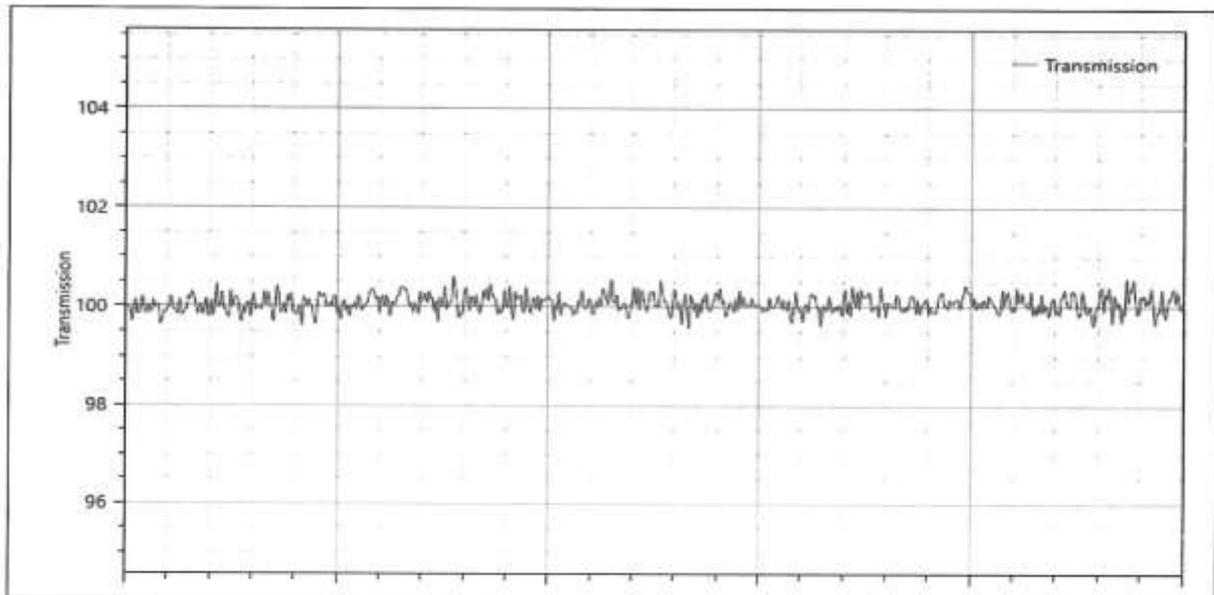
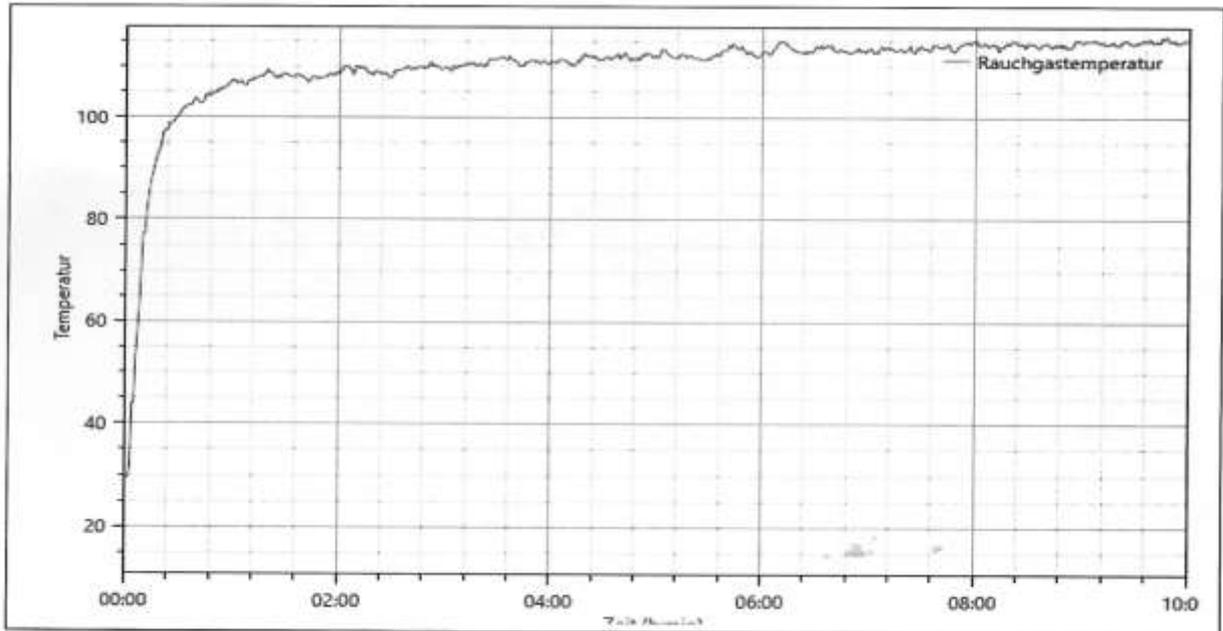
Annex 2 to the Test report No. 201185 issued 27.01.2021

Sample B:



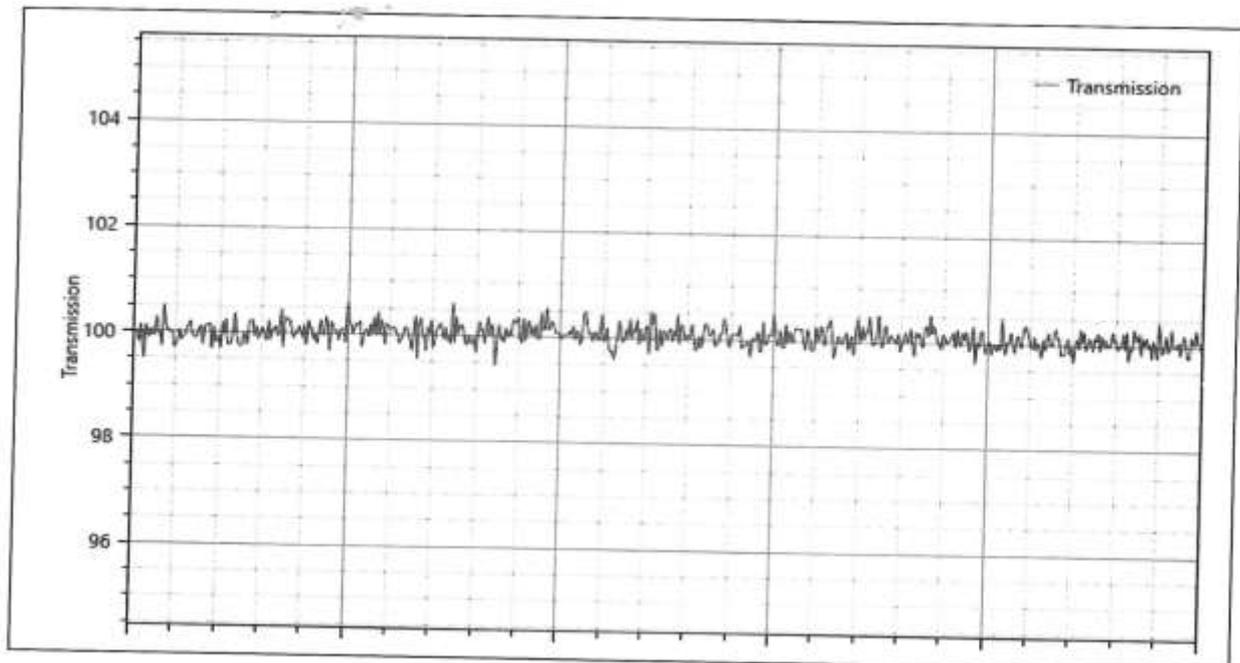
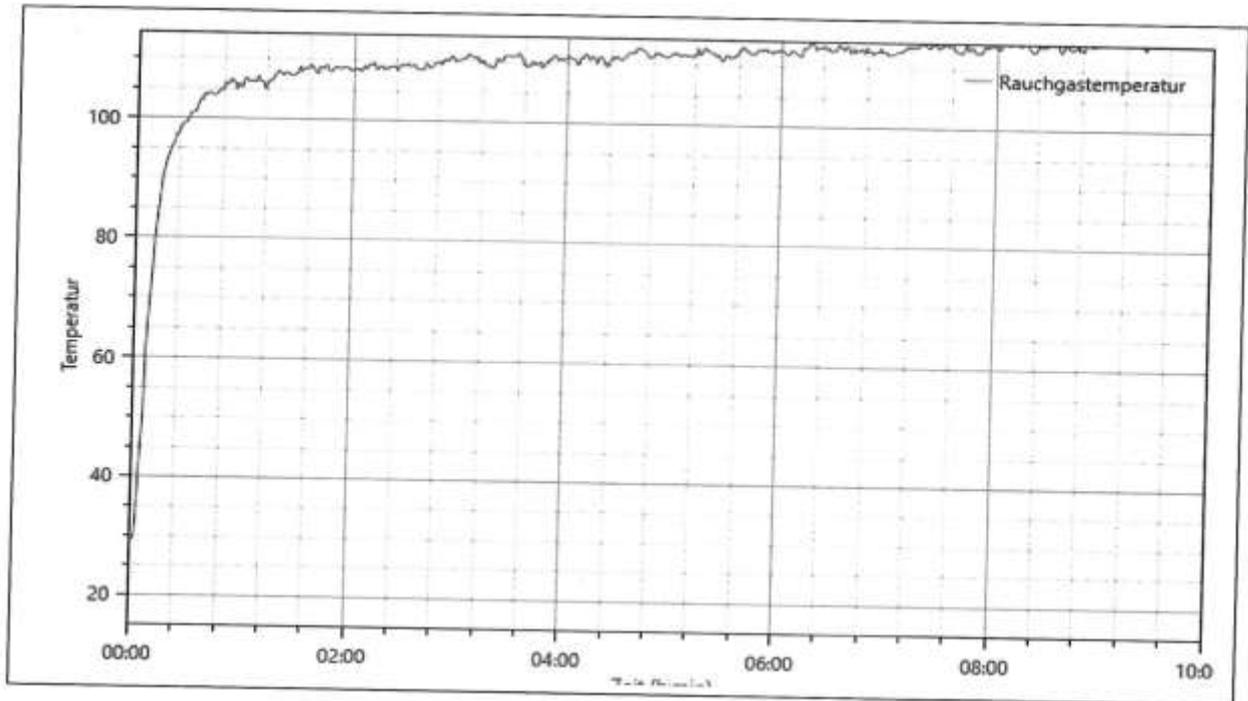
Annex 3 to the Test report No. 201185 issued 27.01.2021

Sample C:



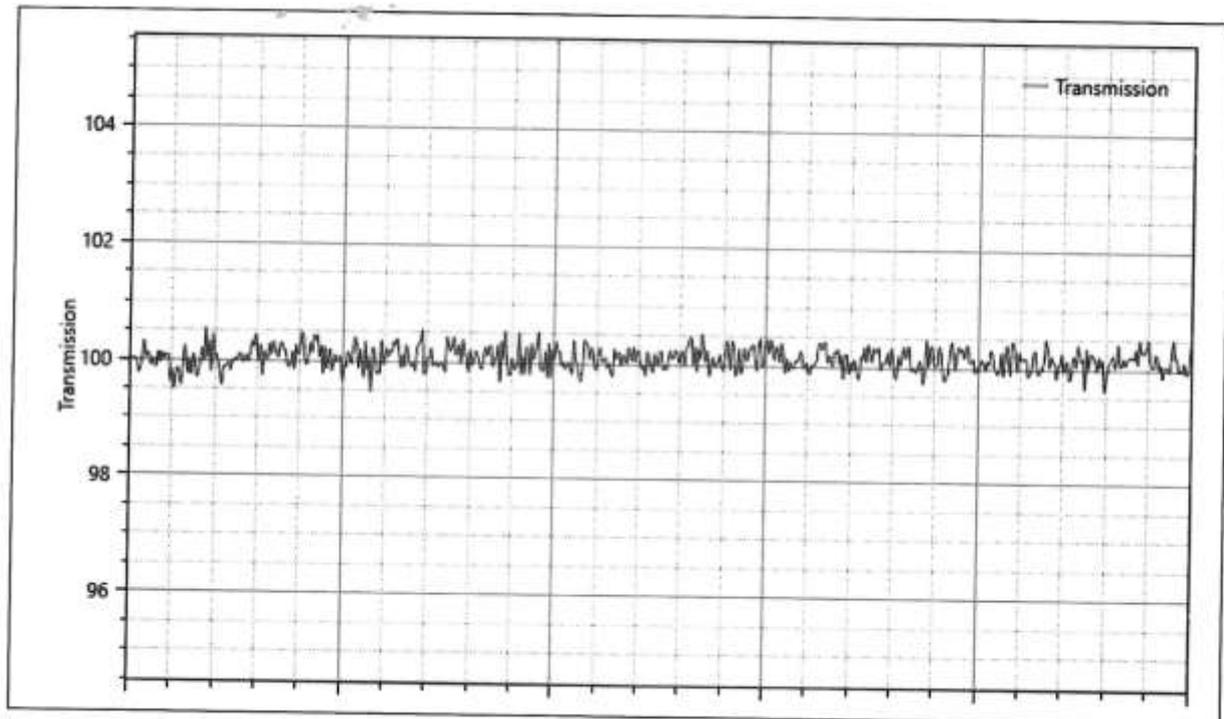
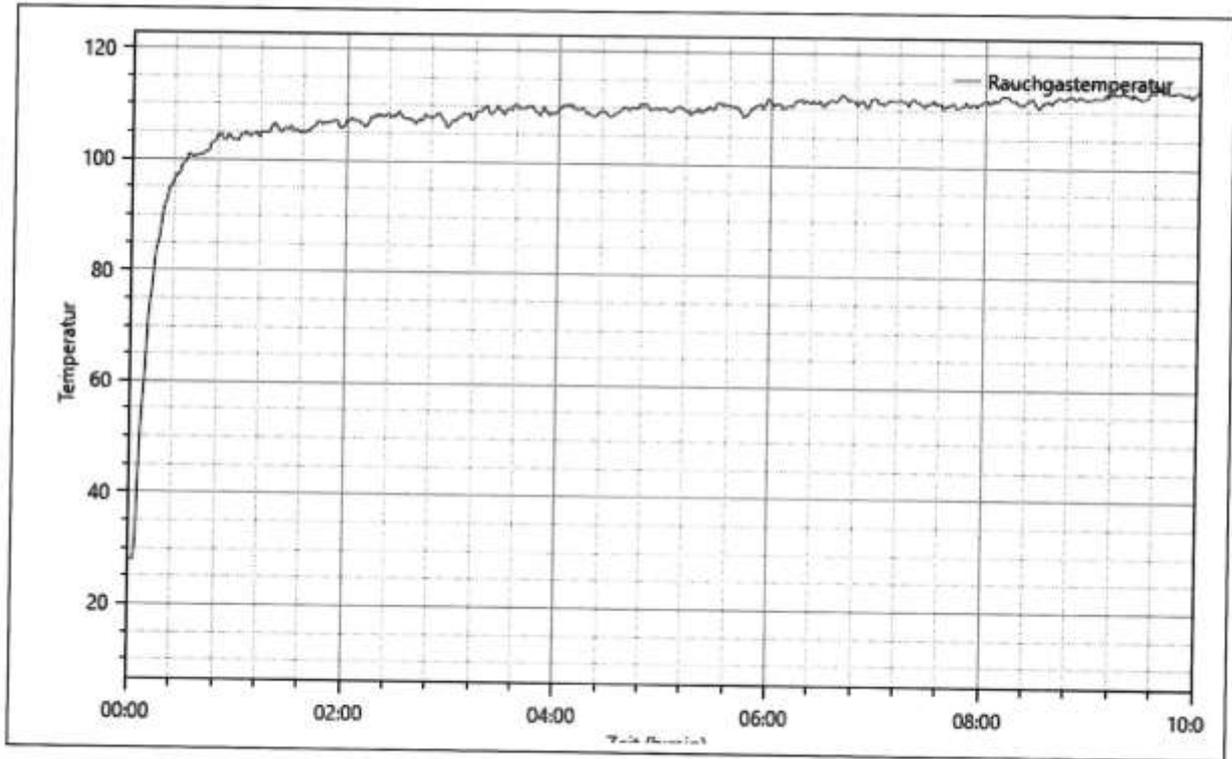
Annex 4 to the Test report No. 201185 issued 27.01.2021

Sample D:



Annex 5 to the Test report No. 201185 issued 27.01.2021

Sample E:



Annex 6 to the Test report No. 201185 issued 27.01.2021

Sample F:

