

Classification report

No. 220258-K1

issued 16.03.2022

Applicant: BWF Tec GmbH & Co. KG
BWF Feltec
Bahnhofstraße 20
89362 Offingen

Order: **Classification of the burning behaviour according to
DIN EN 13501-1 (2019-05)**

Date of order 20.10.2021 and 08.03.2022

Notification number of the test laboratory
NB 1378

Designation of the classified building product
polySONIC® sheet 10 mm

This classification report lays down the classification of the building product above according to the procedures of DIN EN 13501-1.



Deutsche
Akkreditierungsstelle
D-PL-18354-01-00

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This classification report is a translation of the German version 220258-K1 (issued 16.03.2022). In case of doubt only the German version is valid.
This classification report contains 5 pages.

1. Description of the material

1.1 Details of the customer:

Product Name: polySONIC® sheet 10 mm

Test surface: Non-decisive

Sample / material dDescription:

Trade name: polySONIC® sheet

Sample material: wall cladding, ceiling panel, wall panel

Material type: 100 % PES

Type of manufacture: Needled and pressed

Total thickness: 10 mm

Total surface weight: 2500 g/m² up to 2800 g/m²

Colour: magma, volcano, cloud

Intended area of application: lifestyle, design, interior, acoustic cladding

1.2 At the specimen preparation from the Warringtonfire Frankfurt GmbH determined values:

Material: Solidified polyester sheets

SBI samoles:

Sample No..	Material	Colour:	Thickness: [mm]	Surface weight [g/m ²]
1	polySONIC® sheet magma	red	approx. 10	2618,67
2	polySONIC® sheet volcano	anthracite	approx. 10	2530,67
3	polySONIC® sheet cloud	white	approx 10	2532,00
4	polySONIC® sheet volcano	anthracite	approx. 10	2909,00

Material construction und fixing see pictures below:



picture: edge of the large sample wing



fixing of specimen

1.3 Production and pretreatment of the samples for the tests according to DIN EN 13823

The material was provided in the necessary sample dimensions and delivered by the manufacturer for testing.

The large sample wing was composed of 2 plates with a width of 500 mm. A 80 mm ventilated cavity was situated between the reverse face of the specimens and the plasterboard substrate in accordance with DIN EN 13823, Point 4.4.10 (calcium silicate, gross density $800 \pm 150 \text{ kg/m}^3$, thickness $12 \pm 3 \text{ mm}$).

The samples were conditioned to constant mass for more than 48h according to DIN EN 13238.

1.4 Production and pretreatment of the samples for the tests according to DIN EN 11925-2

The material was provided in the necessary sample dimensions and delivered by the manufacturer for testing.

The samples were conditioned to constant mass for more than 48h according to DIN EN 13238.

2. Test reports and test results

2.1 Test reports

Name of test laboratory	Customer	Report to form the basis	Test procedure
Warringtonfire, Frankfurt GmbH	BWF Tec GmbH & Co. KG BWF Feltec	220258	DIN EN 13823 (SBI) EN ISO 11925-2 (30s ignition time surface and edge ignition)

2.2 Test results

Test procedures	Parameter / classes	Test results average
DIN EN 13823 (SBI)	FIGRA _{0,2MJ} ≤ 120 [W/s] for class A2	0,00
	FIGRA _{0,2MJ} ≤ 120 [W/s] for class B	
	FIGRA _{0,4MJ} ≤ 250 [W/s] for class C	0,00
	FIGRA _{0,4MJ} ≤ 750 [W/s] for class D	
	THR _{600s} [MJ] ≤ 7,5 MJ for class A2	0,21
	THR _{600s} [MJ] ≤ 7,5 MJ for class B	
	THR _{600s} [MJ] ≤ 15 MJ for class C	
	THR _{600s} [MJ] no requirement for class D	
	SMOGRAM-index ≤ 30 [m ² /s ²] für s1	0,00
	SMOGRAM-index ≤ 180 [m ² /s ²] für s2	
	TSP _{600s} ≤ 50 [m ²] for s1	21,95
	TSP _{600s} ≤ 200 [m ²] for s2	
DIN EN ISO 11925-2 30s	LFS < edge of the specimen for class A2	fulfilled
	LFS < edge of the specimen for class B	
	LFS < edge of the specimen for class C	
	no burning dripping off/dropping within 600s for class d0	fulfilled
	no burning dripping off/dropping > 10 s within 600s for class d1	-
	burning dripping off/dropping > 10 s within 600s for class d2	-
	FS ≤ 150 mm within 60 s for class B, C u. D	fulfilled
DIN EN ISO 11925-2 30s	FS ≤ 150 mm within 20 s for class E	fulfilled
	no inflammation of the filter paper within 60 s for class d0	
	inflammation of the filter paper within 60 s for class d2	-

Explanations of table standing to above:

Figra_{0,2MJ}: Heat release rate with consideration of the THR of threshold value of 0,2MJ [W/s]

Figra_{0,4MJ}: Heat release rate with consideration of the THR of threshold value of 0,4MJ[W/s]

THR_{600s}: Total set free warmth during 600s [MJ]

SMOGRAM: Smoke development rate

TSP_{600s}: Total set free smoke quantity during 600s [m²]

LFS: lateral propagation of flames

3 Classification and range of application

3.1 Reference

The classification was carried out according to the chapter 11 of DIN EN 13501-1

3.2 Classification

The tested material is incorporated regarding its behaviour in case of fire into the class **B**.
Concerning the smoke development the tested material is incorporated into the class **s1**.
Concerning the dripping off behaviour the tested material is incorporated into the class **d0**.

The classification of the tested material reads thus:

B – s1, d0

3.3 Area of application

The classification is only valid for the material described in chapter one, in the tested colours, thickness and surface weight range from 2500 g/m² up to 2800 g/m² in free standing / free hanging configuration. The distance to other plane material must be more or equal to 80 mm.
The classification also includes intermediate colours

4 Reservation

This classification report replaces not a possible required type admittance or type certification of the product.

Frankfurt 16th March 2022



R. Berger / H. Anders
Tester in charge



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