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Classification report
No. 201083-K1
issued 07.12.2020

Applicant: BBT Brandschutz Technologie GmbH
Lochstrasse 27
CH – 9404 Rorschacherberg

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

Date of order **24.11.2020**

Notification number of the test laboratory

NB 1378

Designation of the classificated building product

Product name: BBT Anti-Flame 2050 W

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

DAkkS
Deutsche
Akkreditierungsstelle
D-PL-18354-01-00

This classification report is a translation of the German version 201083-K1 (issued 07.12.2020). 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:	BBT Anti-Flame 2050 W	
Test page:	Whole part	
Sample/material description:		
Trade name:	BBT Anti-Flame	
Sample material:	paper and textile	
Material type:	uncoated papers / absorbent textiles	
Type of production:	Textile woven	
Total thickness:	Paper: 0.1 mm	Textile: 0.2 mm
Total area weight:	Paper: 70 g/m²	Textile: 200 g/m²
Colour:	Paper: white	Textile: white
Wet application:	Paper is approx. 130 ml./m²	Textile: approx. 150 ml/m²
Manufacturer:	BBT Brandschutz Technologie GmbH	
Type Flame retardant:	BBT Antiflame 2050 W	
Planned field of application of the product:	decorative items^	indoors

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

Flame retardant-equipped paper and fabric

Material	Colour:	Total thickness: [mm]	Total surface weight: [g/m²]
Paper with BBT Anti-Flame 2050 W	white	0,2	102
Fabric with BBT Anti-Flame 2050 W	white	0,5	251

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

The test was carried out on a full scale.
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 ± 150 kg/m³, thickness 12 ± 3 mm).

The samples were conditioned to constant mass for more then 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 delivered by the manufacturer for testing and was provided for the tests in the necessary sample dimensions.
The samples were conditioned to constant mass for more then 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	BBT Brandschutz Technologie GmbH	**201083**	**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	
		on paper	on fabric
DIN EN 13823 (SBI)	FIGRA $_{0,2MJ}$ ≤120 [W/s] for class A2 FIGRA $_{0,2MJ}$ ≤ 120 [W/s] for class B	**0,00**	**0,00**
	FIGRA $_{0,4MJ}$ ≤ 250 [W/s] for class C FIGRA $_{0,4MJ}$ ≤ 750 [W/s] for class D	**0,00**	**0,00**
	THR $_{600s}$ [MJ] ≤ 7,5 MJ for class A2 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	**0,327**	**0,578**
	SMOGRA-index ≤ 30 [m²/s²] für s1 SMOGRA-index ≤ 180 [m²/s²] für s2	**0,00**	**0,00**
	TSP $_{600s}$ ≤ 50 [m²] for s1 TSP $_{600s}$ ≤ 200 [m²] for s2	**29,23**	**35,46**
	LFS < edge of the specimen for class A2 LFS < edge of the specimen for class B LFS < edge of the specimen for class C	fulfilled	fulfilled
	no burning dripping off/dropping within 600s for class d0	fulfilled	fulfilled
	no burning dripping off/dropping > 10 s within 600s for class d1	-	-
	burning dripping off/dropping > 10 s within 600s for class d2	-	-
DIN EN ISO 11925-2 30s	FS ≤ 150 mm within 60 s for class B, C u. D FS ≤ 150 mm within 20 s for class E	fulfilled	fulfilled
	no inflammation of the filter paper within 60 s for class d0	fullfilled	fullfilled
	inflammation of the filter paper within 60 s for class d2	-	-

Explanations of table standing to above:
Figra$_{02MJ}$: Heat release rate with consideration of the THR of threshold value of 0,2MJ [W/s]
Figra$_{04MJ}$: 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]
SMOGRA: 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 of 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 for the material described in chapter one, as a flame retardant for uncoated papers up to 70 g/m² and absorbent textiles up to 200 g/m², in the tested colour and thickness, in a free-standing/free-hanging configuraton.
The distance to other plane material must be ≥ 80 mm.

4 Reservation

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

Frankfurt 07th December 2020

P. Scheinkönig
Tester in charge
Technical Lab Leader construction product regulations

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