

Classification report

No. 2019-2246-K1

issued 09.12.2019

Applicant: SIMONA AG
Teichweg 16

55606 Kirn

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

Date of order **19.11.2019**

Notification number of the test laboratory

NB 1378

Designation of the classified building product

Product name: SIMOPOR S

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



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This classification report is a translation of the German version 2019-2246-K1 (issued 09.12.2019). 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: SIMOPOR S

Product description:

Trade name: SIMOPOR S

Sample material: Plate

Material type: Hard foamed PVC

Production technique: extruded

Total thickness: 1 to 19 mm

Total area weight: 0,6 and 11,4 kg/m²

Colour: white

Intended end use of product: Construction, advertising, exhibition construction

Surface to be tested: Both sides are the same

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

Plastic plates.

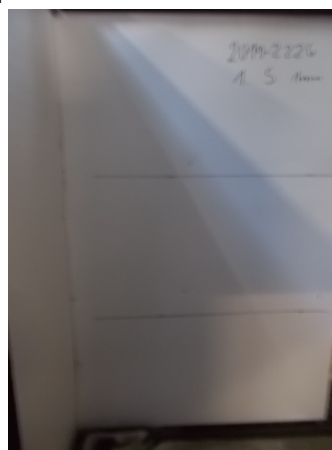
| Sample no. | Material | Colour: | Total thickness: [mm] | Total surface weight: [kg/m ²] |
|------------|-----------|---------|-----------------------|--|
| 1 | SIMOPOR S | white | 1 | 0,67 |
| 2 | SIMOPOR S | white | 19 | 10,99 |
| 3 | SIMOPOR S | white | 19 | 10,80 |
| 4 | SIMOPOR S | white | 19 | 10,95 |

Removed red protective film for testing.

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 material was bolted for the test on a calcium silicate plate (12 mm thickness) and was tested Without any distance to 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 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 | SIMONA AG | 2019-2246 | 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 FIGRA _{0,2MJ} ≤ 120 [W/s] for class B | 95,94 | |
| | FIGRA _{0,4MJ} ≤ 250 [W/s] for class C FIGRA _{0,4MJ} ≤ 750 [W/s] for class D | 93,04 | |
| | 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 | 5,85 | |
| | SMOGRAM-index ≤ 30 [m ² /s ²] für s1 SMOGRAM-index ≤ 180 [m ² /s ²] für s2 | 182,41 | |
| | TSP _{600s} ≤ 50 [m ²] for s1 TSP _{600s} ≤ 200 [m ²] for s2 | 931,72 | |
| | 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 | |
| | 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 | - | |
| | DIN EN ISO 11925-2 (surface) 30s | FS ≤ 150 mm within 60 s for class B, C u. D FS ≤ 150 mm within 20 s for class E | fulfilled |
| | | no inflammation of the filter paper within 60 s for class d0 | fulfilled |
| 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 **s3**. Concerning the dripping off behaviour the tested material is incorporated into the class **d0**.

The classification of the tested material reads thus:

B – s3, d0

3.3 Area of application

The classification is only valid for the for the material described in chapter one, in the tested colour, range of thickness thicknesses 1 up to 19 mm and surface weights, bolted on substrates of massive mineral surfaces of classes A1 and A2 (raw density $\geq 870 \pm 50 \text{ kg/m}^3$) according to DIN EN 13501-1.

4 Reservation

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

Frankfurt 09th December 2019



P. Scheinkönig
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Technical Lab Leader construction product regulations

