

Report of the classification of the reaction to fire performance

English version

No. 230005537-10
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Sponsor : Rudolf Hensel GmbH
Lack- und Farbenfabrik
Lauenburger Landstraße 11
21039 Börnsen

Order:
Classification of the reaction to fire performance according to DIN EN 13501-1

Date of order: 22.08.2008

Name of the classified building product:

Particle board according to DIN EN 13238, table 1, not treated with a fire retardant, coated with the coating system „HENSOTHERM® 2 KS AUSSEN“

Before testing, some of the specimens were exposed to the outdoor weathering for approx. 2 years in accordance with DIN 4102-16, section 6.2.3.

This report gives the classification of the above-mentioned building product in accordance with the procedure given in DIN EN 13501-1.

1 Description of the building product

Particle board according to DIN EN 13238, table 1, not treated with a fire retardant, coated on all sides with the coating system „HENSOTHERM[®] 2 KS AUSSEN“

The coating system consists of:

- a) „HENSOTHERM[®] 2 KS AUSSEN“
(amount applied in wet condition 2 x 275 g/m² in two steps)
- b) the top coat „HENSOTOP SB“ ¹⁾
or „HENSOTOP WB“ ¹⁾ (only to be applied indoors)
(amount applied in wet condition 2 x 120 g/m² in two steps)

The drying time between each application was approx. 24 hours.

Thickness of the coated board: on average 14.5 mm
Weight per unit area of the coated boards: on average 11.3 kg/m²

Some of the specimens were exposed to the outdoor weathering for approx. 2 years before testing in accordance with DIN 4102-16, section 6.2.3 (see section 2).

¹⁾ The product was sent in for the tests with another name.

2 Test reports and test results supporting the classification

2.1 Test reports

Test laboratory	Sponsor	Test report no.	Test procedure
MPA NRW	Rudolf Hensel GmbH Lack- und Farbenfabrik Lauenburger Landstraße 11 21039 Börnsen	230005537-1 ¹⁾ dated 26.07.2006 and 230006640-1 ²⁾ dated 12.09.2008	DIN EN ISO 13823
MPA NRW	Rudolf Hensel GmbH Lack- und Farbenfabrik Lauenburger Landstraße 11 21039 Börnsen	230005537-2 ¹⁾ dated 26.07.2006 and 230006640-2 ²⁾ dated 12.09.2008	DIN EN ISO 11925-2

- 1) The specimens were **not** exposed to the outdoor weathering before testing.
2) The specimens were exposed to the outdoor weathering for approx. 2 years before testing in accordance with DIN 4102-16, section 6.2.3.

2.2 Test results

Test procedure	Number of tests performed	Parameter	Test results
DIN EN ISO 13823	6	FIGRA _{0,2 MJ} (W/s)	111
		FIGRA _{0,4 MJ} (W/s)	110
		THR _{600s} (MJ)	8.2
		LFS	< edge
		SMOGRA (m ² /s ²)	10
		TSP _{600s} (m ²)	88
DIN EN ISO 11925-2 Flame exposure: 30 s	36	Duration of flaming droplets / particles (s)	0
		F _s (mm) flaming droplets / particles	≤ 150 no

3 Classification and direct field of application

3.1 Reference

This classification was carried out in accordance with section 11 and 14.1 of the standard DIN EN 13501-1 : 2007.

3.2 Classification

With reference to its fire behaviour the material is classified as : **C**

The additional classification in relation to smoke production is: **s2**

The additional classification in relation to flaming droplets/particles : **d0**

The classification of the reaction to fire performance is therefore:

Fire behaviour	Smoke production	Flaming droplets/particles
C	s2	d0

i.e. **C-s2,d0**

3.3 Field of application of the product

The classification is solely valid for the coating system described in section 1 if the correct amount is applied in wet condition and the drying times are kept, if it is applied on all sides of a wooden substrate with a thickness of at least 12 mm and a density of at least 630 kg/m³ or on substrates with a thickness of at least 6 mm of the Euro classes A1 or A2, each with a distance of ≥ 40 mm flat building products, which have the class A1 or A2-s1,d0 and with a distance of ≥ 80 mm to all other flat building products.

The classification is valid for the indoor use as well as outdoor use of the product.

Remark:

The test results of the specimens which had been exposed outdoor were slightly better than those of the specimens which had not been exposed outdoor.

4 Restrictions

This classification report does not represent a type approval or certification of the product.

5 Remark

This classification report written in English language is issued additionally to the report written in German language with the same report number. In case of doubt, the German version is solely valid.

Erwitte, 18.07.2022

Head of notified testing body
on behalf



(Dipl.-Ing. Kühnen)



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