This **TRANSLATION** of the German original is not verified by the MPA Stuttgart/Otto Graf Institute.

Material Testing Institute
University of Stuttgart
PO Box 801140 • D-70511 Stuttgart

MPA **Material Testing Institute**
University of Stuttgart
Testing, monitoring and certifying body recognised by DIBt, ID number BWU-03

Fire Protection Department – Building Materials Fire Behaviour Unit

General Building Authority Test Certificate

Test certificate **P-BWU03-I-16.5.261**

Object: Pigmented two-component lacquer system
"Hesse UNA COLOUR DB 555-Ft" with
"Hesse PU Isolating filler DP 491-9343" and/or
"Hesse PU Colour lacquer DB 45245-Ft" with
"Hesse PU Isolating filler DP 4791-9343"
applied on flame retardant (DIN 4102-B1)
chipboard - also veneered -
as a flame retardant building material (building material class DIN 4102-B1)
according to NRW technical construction regulations
(VV TB NRW); circular of the Ministry for Housing,
Municipal Affairs, Construction and Equality - 614 - 408; dated
07 December 2018, last amended on 14 June 2019,
sequential no. C 3.4

Applicant: Hesse GmbH & Co. KG,
Warendorfer Straße 21,
59075 Hamm

Date of issue: 10 Oktober 2019

Valid until: 30 September 2024

This General Building Authority Test Certificate means that the above-named object may be used within the scope of the state building regulations.

This General Building Authority Test Certificate contains 7 pages and 0 annexes.
This General Building Authority Test Certificate replaces General Building Authority Test Certificate P-BWU03-1-16.5.261 dated 30 September 2014. A Building Authority Suitability Certificate was first issued for the object on 16 March 2005. The place of jurisdiction and performance is Stuttgart.

I. General provisions

1. A General Building Authority Test Certificate does not replace the approvals, permits and certificates required by law for the realisation of construction projects.

2. This General Building Authority Test Certificate is issued notwithstanding the rights of third parties, especially private property rights.

3. The manufacturer and distributor of the construction product must provide the user of the construction product with copies of the General Building Authority Test Certificate, notwithstanding further provisions in the “Special provisions” section, and must note that the General Building Authority Test Certificate must be available at the place of use. The parties involved must be provided with copies of the General Building Authority Test Certificate upon request.

4. The General Building Authority Test Certificate may only be reproduced in full. Publication of excerpts requires the approval of the University of Stuttgart Material Testing Institute (Otto Graf Institute). Texts and drawings of advertising material must not contradict the General Building Authority Test Certificate. Translations of the General Building Authority Test Certificate must contain the notice “Translation of the German original not reviewed by the University of Stuttgart Material Testing Institute (Otto Graf Institute)”.

5. The General Building Authority Test Certificate is issued irrevocably. Provisions of the General Building Authority Test Certificate may be subsequently supplemented and modified, especially if new technical insights require changes.

6. The product listed in this General Building Authority Test Certificate requires verification of conformity (a certificate of conformity) and labelling with the mark of conformity (Ü-mark) according to the Mark of Conformity Directives of the States.

II. Special provisions

1. Object and scope of use

1.1 Object

Pigmented two-component lacquer system “Hesse UNA COLOR DB 555-Ft” with “Hesse PU Isolating filler DP 491-9343” and/or “Hesse PU Colour lacquer DB 45245-Ft” with “Hesse PU Isolating filler DP 4791-9343” applied in various colours on flame retardant (DIN 4102-61) chipboard - also veneered - as a flame retardant building material (building material class DIN 4102-B1) according to NRW technical construction regulations (W TB NRW); circular of the Ministry for Housing, Municipal Affairs, Construction and Equality - 614 - 408; dated 07 December 2018, last amended on 14 June 2019, sequential no. C 3.4

1.2 Scope of use

1.2.1 This pigmented lacquer system may be used to coat flame retardant chipboard (building material class DIN 4102-B1) - also veneered.

Boards coated with the two-component lacquer system must not be exposed to outdoor weathering.

Flame retardant chipboard (DIN 4102-B1) – also veneered – coated with the lacquer system is only flame retardant provided no additional paints, coatings or the like are applied.

1.2.2 This General Building Authority Test Certificate shall only apply as far as required under NRW technical construction regulations (W TB NRW); circular of the Ministry for Housing, Municipal Affairs, Construction and Equality - 614 - 408; dated 07 December 2018, last amended on 14 June 2019, sequential no. C 3.4.

1.2.3 Evidencing further building authority requirements such as stability, fire resistance, heat, noise, health or environmental protection is not the purpose of this General Building Authority Test Certificate.
Further/ other certificates (general building authority approval) may be necessary for this.

2. Provisions for the construction product

2.1 Properties and composition

2.1.1 The pigmented two-component lacquer is a polyurethane-based coating material.

2.1.2 Pigmented “Hesse UNA COLOR DB 555-Ft” has to be used with “Hesse PU Hardener DR 470” in a mixing ratio (by volume) of 10 : 1; “Hesse PU Isolating filler DP 491-9343” with “Hesse Hardener DR 405” in a mixing ratio (by volume) of 5 : 1.

Pigmented “Hesse PU Colour lacquer DB 45245-Ft” has to be used with “Hesse PU Hardener DR 4070” in a mixing ratio (by volume) of 10 : 1 and “Hesse PU Isolating filler DP 4791-9343” with “Hesse PU Hardener DR 4058” in a mixing ratio (by volume) of 5 : 1.

2.1.3 The composition must correspond with the details lodged with the University of Stuttgart Material Testing Institute (Otto Graf Institute).

2.1.3 Test method

The construction product must meet the requirements for flame retardant building materials (building material class B1) according to DIN 4102-1: 1998-05.

2.1.4 (Test) basis for issuing the General Building Authority Test Certificate

Name of the inspection body	Client	No. of the certificates/test reports/reports	Test method/rules
Materials Testing Institute University of Stuttgart - Otto Graf Institute -	Hesse GmbH & Co. KG 59075 Hamm	900 6168 019/PZ-6 dated 10/10/2019	DIN 4102-1 : 1998 DIN 4102-16 : 2015

2.1.5 Provisions for realisation of the construction product

2.1.5.1 The isolating filler may be applied in a wet film of 1 x 200 g/m^2 application quantity, the pigmented two-component lacquer may be applied in a wet film of 1 x 150 g/m^2 application quantity on flame retardant chipboard (DIN 4102-61) - also veneered.

2.1.5.2 Flame retardant chipboard (DIN 4102-B1) coated with the lacquer system should not be exposed to outdoor weathering.

2.1.5.3 Flame retardant chipboard (DIN 4102-B1) coated with the lacquer system may not additionally be recoated with paints, coatings or the like.

2.1.5.4 The provisions of section II 2.1 must be adhered to when manufacturing the construction product.

2.2 Mark of conformity

The manufacturer must label the construction product with the Mark of Conformity (Ü-mark) according to the Mark of Conformity Directives of the States. This labelling is only permitted if the requirements of sections 3.1 to 3.3 are met.

The Ü-mark must be affixed to the construction product or its packaging (which also includes the package insert) or, if this is not possible, to the delivery note.

The following information must be affixed to the building material or the package:

- Product name
- Mark of conformity (Ü-mark) with
  - Name of the manufacturer
  - Certificate number: P-BWU03-I-16.5.261
  - Icon or name of the certifying body
- Manufacturing facility
- Building material class flame retardant (DIN 4102-B1) according to scope of use

3. Certificate of conformity

3.1 General

The construction product's conformity with the provisions of this General Building Authority Test Certificate must be verified for each manufacturing facility via a certificate of conformity based on in-house production control and regular external monitoring including an initial test of the construction product according to the provisions of this General Building Authority Test Certificate.

The construction product's manufacturer must employ a certification body and a monitoring body recognised for this purpose to issue the certificate of conformity and perform the external monitoring including product tests.

3.2 In-house production control

In-house production control[1] must be established and implemented in each manufacturing facility in which continuous production monitoring to be performed by the manufacturer ensures that the construction product fulfils the provisions of the General Building Authority Test Certificate. The "Directives on the verification of conformity"[2] are decisive for implementation of the in-house production control.
The results of the in-house production control must be recorded and analysed. Such records must contain at least the following information:

- Name of the construction product
- Type of inspection
- Date of manufacture and of the inspection of the construction product
- Result of the inspections and comparison with the requirements
- Signature of the person responsible for in-house production control

These records must be retained for at least five years and submitted to the monitoring body employed for such external monitoring. In the event of unsatisfactory inspection results, the manufacture must take the necessary measures to correct the defect and discard the affected products. As part of the in-house production control, it must be ensured that construction products that do not meet the requirements are not labelled with the Ü-mark. The inspection in question must be repeated after the defect is corrected.

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1) This requires adherence to the general provisions of section C1 of the NRW technical construction regulations (W TB NRW) dated 07 December 2018.

2) "Directives on the verification of conformity of flame retardant building materials (building material class DIN 4102-B1) according to General Building Authority approval" (DIBt Report 2/ 1997)

3.3 External monitoring

In each manufacturing facility, the in-house production control must be reviewed regularly through external monitoring no less than once a year.

The "Directives on the verification of conformity" are decisive for performing such monitoring.

An initial test of the construction product must be conducted as part of the external monitoring. Samples for sampling inspections must be taken during the ongoing external monitoring processes. The sampling and testing are both the responsibility of the recognised monitoring body.

The results of the certification and external monitoring must be retained for at least five years. The certifying body/the monitoring body must submit these results to the highest responsible building authority upon request.

4. Legal basis

This General Building Authority Test Certificate is prepared based on Article 22 of the North Rhine-Westphalia building regulations (BauO NRW 2018) dated 21 July 2018 (which came into force on 01 January 2019) in combination with the NRW technical construction regulations (W TB NRW); circular of the Ministry for Housing, Municipal Affairs, Construction and Equality - 614 - 408; dated 07 December 2018, last amended on 14 June 2019, sequential no. C 3.4. The corresponding legal bases contained in building codes of the other federal states are to be observed.

5. Legal advice

An objection can be made to this General Building Authority Test Certificate within one month of its announcement. Any such objection must be submitted to the University of Stuttgart, Keplerstraße 7, 70174 Stuttgart or PO Box 106037, 70049 Stuttgart in writing or as a notarised transcript.

Fire Protection Department
Building Materials Fire Behaviour Unit

Test engineer	Head of the inspection body
Dr. Sebastian Dantz	Dr. Stefan Lehner, Executive Academic Director

[2] "Directives on the verification of conformity of flame retardant building materials (building material class DIN 4102-B1) according to General Building Authority approval" (DIBt Report 2/ 1997)