

Materials Testing Institute
Stuttgart University
PO Box 801140 * D-70511 Stuttgart

MPA
Materials Testing Institute - Stuttgart University

Testing, inspection and certification centre accredited by DIBt
Reg. No. BWU-03

Fire prevention Department - Behaviour of building materials in fire

General Appraisal Certificate for Construction Products

Appraisal Certificate No.: P-BWU03-I-16.5.321

Product: Colourless two-pack topcoat "Duocryl Two-Pack PU Waterborne Clear Topcoat DC" applied on "Duocryl Two-Pack PU Waterborne Sealer and Isolating Sealer DC-FI" on low-flammable (DIN 4102-B1) particle boards - also veneered - as low-flammable building material (building material class DIN 4102-B1) according to Building Regulation List A, Part 2, Edition 2015/2 with changes 2016/1 and change notice 2016/2, subparagraph 2.10.2

Client: Akzo Nobel Hilden GmbH
Düsseldorfer Straße 96-100
40721 Hilden

Date of issue: October 30, 2018

Valid until: October 31, 2023

Based on this General Appraisal Certificate, the above-named product is approved for use under the terms of the State Building Regulations.

(Seal)

This General Appraisal Certificate contains a total of 7 pages and 0 enclosures.
This General Appraisal Certificate replaces the General Appraisal Certificate P-BWU03-I-16.5.321 of November 22, 2013. The first time, a proof of usability was issued for this product was on November 3, 2008. Legal domicile and place of fulfilment is Stuttgart.

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05/2017

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I. General Provisions

1. The General Appraisal Certificate does not replace the legally required approvals, consents and certificates necessary for the execution of building projects.
2. The General Appraisal Certificate is granted irrespective of the rights of third parties, especially of private proprietary rights.
3. Irrespective of other regulations in the section "Special Provisions", manufacturers and sellers of the building product have to provide the user of the building product with copies of the General Appraisal Certificate and have to point out that the National Technical Approval must be available at the place of application. Upon request, the parties concerned must be provided with copies of the General Appraisal Certificate.
4. The General Appraisal Certificate may only be duplicated completely. Any publication in extracts requires the approval of the MPA - Stuttgart University (Otto-Graf-Institute). Texts and drawings in leaflets may not be inconsistent with the General Appraisal Certificate. Translations of the General Appraisal Certificate must be marked with "Translation from the German Original, not verified by the MPA - Stuttgart University (Otto-Graf-Institute)".
5. The General Appraisal Certificate is granted revocably. The provisions of the General Appraisal Certificate may be completed or changed subsequently, especially if this should be required due to new technical findings.
6. The building product specified in this General Appraisal Certificate needs the proof of conformity and a marking with the mark of conformity in accordance with the regulations concerning conformity of the Federal States.

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II. Special Provisions

1. Product and Range of Application

1.1 Product

Colourless PU coating system "Duocryl Two-Pack PU Waterborne Clear Topcoat DC" in the gloss levels semi gloss (8), semi matt (9), matt (0) and high gloss (HG) together with "Duocryl Two-Pack PU Waterborne Sealer and Isolating Sealer DC-FI" applied on low-flammable (DIN 4102-B1) particle boards - also veneered - as a low-flammable building material (building material class DIN 4102-B1) according to Building Regulations List A, Part 2, Edition 2015/2, with changes 2016/1 and change notice 2016/2, subparagraph 2.10.2.

1.2 Range of Application

1.2.1 The colourless two-pack coating system may be used for the coating of low-flammable (DIN 4102-B1) particle boards - also veneered -.

The particle boards coated with the coating system may not be exposed to weathers in the open air.

The low-flammable (DIN 4102-B1) particle boards - also veneered - coated with the coating system are only low-flammable without any additional coats of paint, laminations or similar.

1.2.2 This General Appraisal Certificate is only applied if requirements in accordance with the Building Regulations List A, Part 2, Edition 2015/2, with changes 2016/1 and change notice 2016/2, subparagraph 2.10.2, have to be met.

1.2.3 The proof of further building control requirements, such as stability, fire resistance, thermal or sound insulation or the health and environment protection are not subject of this General Appraisal Certificate for Construction Products.

For this, further/other proofs (general technical approvals) might be required

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2. Building Product Requirements

2.1 Properties and Composition

2.1.1 The colourless two-pack coating system is a coating material on polyurethane basis consisting of:

- the topcoat "Duocryl Two-Pack PU Waterborne Clear Topcoat DC" (gloss levels 0, 8, 9 HG)" that must be used together with the "Waterborne PU Paint Hardener PWH 3200" (mixing ratio by weight Sealer : Hardener = 5 : 1).
- the sealer "Duocryl Two-Pack PU Waterborne Sealer and Isolating Sealer DC-FI", that must be used together with the "Waterborne PU Paint Hardener PWH 3200" (mixing ratio by weight Sealer : Hardener = 5 : 1).

2.1.2 The composition must correspond with the data deposited at the MPA - Stuttgart University (Otto-Graf-Institute).

2.1.3 Testing Procedure

The building product must meet the requirements on low-flammable building material (building material class B1) according to DIN 4102-1: 1998-05.

2.1.4 (Testing) specifications for granting the General Appraisal Certificate

Name of the testing centre	Client	Number of the certificates / test reports / Date	Test procedure / Rules
MPA Stuttgart University Otto-Graf-Institute	Akzo Nobel Hilden GmbH 40721 Hilden	900 6806 018/PZ-7 dated October 30, 2018	DIN 4102 Part 1 DIN 4102 Part 16

2.1.5 Provisions for the execution of the building product

2.1.5.1 The colourless two-pack coating system must be applied with the following wet rates of application on low-flammable (DIN 4102-B1) particle boards - also veneered:

- the sealer "Duocryl Two-Pack PU Waterborne Sealer and Isolating Sealer DC-FI" with 1 x 150 g/m²
- the topcoat "Duocryl Two-Pack PU Waterborne Clear Topcoat DC" with 2 x 120 g/m².

2.1.5.2 The boards coated with the coating system may not be exposed to weathers in the open air.

2.1.5.3 The low-flammable (DIN 4102-B1) particle boards coated with the coating system must not be additionally coated with paint, laminations or similar.

2.1.5.4 During the manufacture of the building product, the requirements of Section II 2.1 must be met.

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2.2 Mark of Conformity

The building product has to be marked by the manufacturer with the mark of conformity in accordance with the regulations concerning conformity of the Federal States. The marking may only be carried out after the conditions according to Sections 3.1 to 3.3 have been met.

The mark of conformity has to be indicated on the building product or on its packaging (the package insert is also considered to be the packaging) or, if this should not be possible, on the delivery note.

The following information has to be indicated on the building material or on the packaging:

- Name of the product
- Mark of conformity with
 - Name of the manufacturer
 - Certificate number: P-BWU03-I-16.5.321
 - Logo or name of the testing institute
- Manufacturing site
- Building material class low-flammable (DIN 4102-B1) only if applied on low-flammable (DIN 4102-B1) particle boards - also veneered -

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3. Proof of Conformity

3.1 General

The proof of conformity of the building product with the regulations of this General Appraisal Certificate for Construction Products has to be effected for each manufacturing site based on an in-plant manufacturing control and a regular external control including an initial test of the building product according to the following regulations.

For granting the certificate of conformity and the external control including the product test to be carried out in this connection, the manufacturer has to employ a licensed certification institute and a licensed supervision institute.

3.2 In-Plant Production Control

In each manufacturing site an in-plant production control¹⁾ must be installed and carried out, which guarantees by the continuous control of production carried out by the manufacturer that the building product meets the provisions of this General Appraisal Certificate. The "Instructions concerning the proof of conformity"²⁾ are applied on the execution of the in-plant production control.

The results of the in-plant production control must be recorded and analysed. The records must at least contain the following information:

- Designation of the building product
- Type of control
- Date of manufacture and of the test of the building product
- Results of controls and tests and, if applicable, comparison with the requirements
- Signature of the person responsible for the in-plant production control

The records must be kept for at least five years and must be presented to the supervision body employed for external control. In case of an insufficient test result, the manufacturer has immediately to take measures required to remedy the deficiency and to discard the product concerned. Within the framework of the in-plant production control, it must be ensured that building products that do not meet the requirements are not marked with the mark of conformity. After the deficiency has been remedied, the test must be repeated.

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¹⁾ Under consideration of the Building Regulations List A, Part 1, Par. 4 Edition 2015/2 (DIBT Report (German Institute for Building Technology) dated October 6, 2015).

²⁾ "Instructions concerning the proof of conformity for fire resistant building materials (building material class DIN 4102-B1) after the General Appraisal Certificate for Construction Products has been granted" (DIBT Report 2/1997)

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3.3 External Control

In each manufacturing site, the in-plant production control must be checked by an external control at regular intervals, at least once a year.

For the execution of the control, the "Instructions concerning the proof of conformity"²⁾ have to be applied.

Within the framework of the external control, an initial test of the building product has to be carried out. During the external control, specimens have to be taken for sampling inspection. The licensed supervision institute is responsible for taking the specimens and the tests.

The results of the certification and of the external control have to be kept for at least five years. Upon request, they have to be presented by the certification institute or the supervision institute to the supreme building authority.

4. Legal Basis

This General Appraisal Certificate is issued on the basis of §§ 22 of the State Building Regulation for North Rhine-Westphalia (BauO NRW dated March 1, 2000 in conjunction with the Building Regulations List A, Part 2, Edition 2015/2 with changes 2016/1 in the version as of June 28, 2017 and change notice 2016/2, subparagraph 2.10.2. The State Building Regulations of the other Federal States contain corresponding legal grounds.

5. Instructions on Rights of Appeal

This General Appraisal Certificate can be opposed within one month after the receipt of the certificate. This opposition must be sent in writing or lodged at the Stuttgart University, Keplerstrasse 7, 70174 Stuttgart or PO Box 106037, 70049 Stuttgart.

Fire prevention Department
Behaviour of building materials in fire

The person in charge

(Seal)

The head of the testing institute

Signature

Signature

Dr. Sebastian Dantz

Dr. Stefan Lehner
Chief Acad. Director
