



General Building Authority Test Certificate

Test certificate number: P-3574/850/12-MPA BS

Subject: Fire protection product "KAPPAFLAM CFP" for cellulose fiber fabrics pursuant to serial number C 3.4 of the Administrative Regulation Technical Construction Stipulations ("VV TB") part C 3 - version of March 2022.

Building materials that are only subject to fire behavior requirements and must be flame-retardant (class DIN 4102-B1).

Applicant: KAPP-CHEMIE GmbH & Co. KG
Industriestrasse 2-4
56357 Miehlen

Date of issue: June 20, 2022

Date of expiry: July 31, 2027

According to the present General Building Authority Test Certificate, the construction product described above can be used to comply with the State Building Codes ("Landesbauordnungen") of the respective federal state.

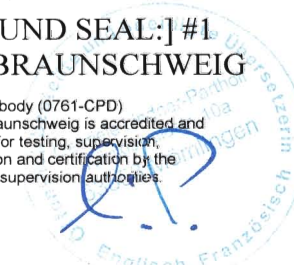
The present General Building Authority Test Certificate consists of 6 pages and -- annexes.

The present General Building Authority Test Certificate P-3574/850/12-MPA BS dated June 20, 2022, replaces the General Building Authority Test Certificate no. P-3574/850/12-MPA BS dated May 23, 2017.

The present General Building Authority Test Certificate no. P-3574/850/12-MPA BS was first issued on July 2, 2012.

The present General Building Authority Test Certificate must only be distributed if it is complete and without any alterations. Excerpts or abridgements need to be authorized by MPA Braunschweig beforehand. Any translations of this document not initiated by MPA must contain the note "Translation of the German original, not verified by Materialprüfanstalt (MPA) für das Bauwesen, Braunschweig". Documents without stamp and signature are not valid. Every page of the present General Building Authority Test Certificate has been stamped with the official seal of MPA Braunschweig.

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**I. General provisions**

1. The General Building Authority Test Certificate proves that the construction product can be used to comply with the State Building Code ("Landesbauordnung").
2. The General Building Authority Test Certificate does not replace the approvals, permits, authorizations, consents and certifications prescribed by law for carrying out construction projects.
3. The General Building Authority Test Certificate is issued without prejudice to any third party rights, in particular private property rights.
4. Without prejudice to more extensive regulations, the producers and distributors of the construction product must provide the users of the construction product with copies of the General Building Authority Test Certificate and must caution them that the General Building Authority Test Certificate must be available at the site of use. Upon request, the authorities concerned must be provided with copies of the General Building Authority Test Certificate.
5. The present General Building Authority Test Certificate must only be duplicated as a whole. Any extract publication must be authorized by MBA Braunschweig. Texts and drawings in advertising brochures must not contradict the General Building Authority Test Certificate. Translations of the General Building Authority Test Certificate must contain the indication "Translation of the original version not verified by Materialprüfanstalt für das Bauwesen Braunschweig".
6. The General Building Authority Test Certificate is issued until revoked. The General Building Authority Test Certificate can be subsequently amended, especially if new technical achievements require it.

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**II. Special provisions****1 Subject and scope of use****1.1 Subject**

- 1.1.1 The General Building Authority Test Certificate shall be applicable for the production and use of the fire protection product called "KAPPAFLAM CFP" for the equipment of cellulose fiber fabric as a flame-retardant building material of the fire classification DIN 4102-B1 in accordance with the DIN standard 4102-1¹⁾:1998-05.
- 1.1.2 The fire protection product is a combination of various inorganic salts.
- 1.1.3 The General Building Authority Test Certificate for the construction product is issued in accordance with serial number C 3.4 of the Administrative Regulation Technical Construction Stipulations ("VV TB") part C 3 - version of March 2022.

1.2 Scope of use

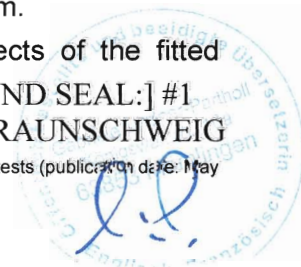
- 1.2.1 The fire protection product is to be used to equip cellulose fiber fabrics with a weight per unit area of $\geq 50 \text{ g/m}^2$ if these fabrics are used as construction products (e.g. stage curtains) which will be permanently installed.
- 1.2.2 The fabric equipped with the fire protection product must only be used in closed rooms without any influence of humidity. The persistence of the flame-retarding equipment against washing, dry-cleaning or weathering has not been proved.
- 1.2.3 The proof of the flame-retardant property is not valid in combination with other construction products, e.g. when the surface of the building material is coated with paint, lamination or the like.
- 1.2.4 The proof of the flame-retardant property is only valid for equipped cellulose fiber fabrics arranged with a distance of $> 40 \text{ mm}$ to laminar building materials.
- 1.2.5 Without prejudice to this General Building Authority Test Certificate, components and special components containing the building material need a Test Certificate ("Prüfzeugnis") / General Building Authority Test Certificate ("allgemeines bauaufsichtliches Prüfzeugnis") or a General Building Authority Approval ("allgemeine bauaufsichtliche Zulassung"), depending on the type of construction product.
- 1.2.6 The present General Building Authority Test Certificate does not contain any statements concerning the compliance with requirements to sound-proofing and thermal protection.
- 1.2.7 On the basis of the declaration of the applicant that in the construction product no products subject to the Ordinance on Hazardous Substances ("Gefahrstoffverordnung"), Chemicals Prohibition Ordinance ("Chemikalien-Verbotverordnung") or the Chemicals Ozone Layer Ordinance ("Chemikalien-Ozonschichtverordnung") were used, and/or that he complies with the obligations under the above regulations (especially the labeling requirements), there was no reason for testing the effects of the construction products on the compliance with requirements concerning health and environment protection.

Furthermore, the applicant declares that - if measures have to be taken for trading and marketing or use with regards to hygiene, health or environment protection - the applicant has initiated them and/or published them in the required form.

Therefore, MPA Braunschweig saw no reason for testing the effects of the fitted construction product to health and environment.

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¹⁾ DIN 4102-1: Fire behavior of building materials and building components: Building materials; concepts, requirements and tests (publication date: May 1998) - Sections 3 and 6.



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2 Provisions for the construction product

2.1 Properties and composition

- 2.1.1 The fire protection product is a white, crystalline powder and is a combination of different inorganic salts.
- 2.1.2 The composition of "KAPPAFLAM CFP" must correspond to the data stored at the MPA in Braunschweig.

2.2 Test procedure

As a fire protection product according to DIN 4102-16 : 2021-01²⁾, section 8.16.2, the product "KAPPAFLAM CFP", applied on cellulose fiber fabrics, must comply with the requirements for flame-retardant building materials (DIN 4102-B1) in accordance with DIN 4102-1 : 1998-05¹⁾, section 6.1.

2.3 Basis for issuing the General Building Authority Test Certificate

The list of documents on the basis of which the General Building Authority Test Certificate was issued, is deposited at the Material Testing Institute.

2.4 Production and labeling

2.4.1 Production

For the production of the fire protection product, the provisions of section 2.1 must be complied with.

2.4.2 Labeling

The producer must label the construction product, the packaging of the construction product or the package insert – or, if this poses difficulties, the delivery note or an annex to the delivery note - with the Conformity Mark ("Ü-Zeichen") in accordance with the Conformity Mark Ordinances ("Übereinstimmungszeichen-Verordnungen") of the federal states. He must only label them if the requirements under section 2.5 have been complied with.

The following information must be included on the construction product or the packaging or the package insert or on an annex to the delivery note:

- Product name
- Conformity Mark ("Ü-Zeichen") with
 - Producer's name
 - Test Certificate number: P-3574/850/12-MPA BS
 - Logo or name of the certifying body
- Manufacturing site
- Flame-retardant (fire classification DIN 4102-B1) on cellulose fiber fabric
- "Only flame-retardant (fire classification DIN 4102-B1) if a distance of >40 mm is observed to the same or other laminar building materials.

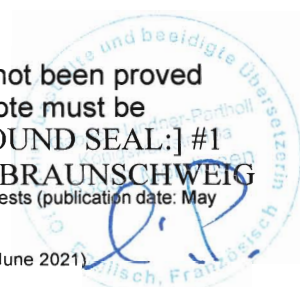
- 2.4.3 A note that the resistance to water, dry-cleaning and weathering has not been proved must be integrated into the instructions for use, and a label with the note must be attached to the equipped product.

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¹⁾ DIN 4102-1: Fire behavior of building materials and building components: Building materials, concepts, requirements and tests (publication date: May 1998) - Sections 3 and 6.1.

²⁾ DIN 4102-16: Fire behavior of building materials and building components: Conducting fire shaft tests (publication date: June 2021) - Sections 8.16.1, 8.16.2, Sections 9 and 10.



2.5 Proof of conformity (“Übereinstimmungsnachweis”)

2.5.1 General information

The confirmation that the construction product conforms to the regulations of this General Building Authority Test Certificate must be carried out for every production plant with a Certificate of Conformity on the basis of an in-house production control and a regular external supervision - including an initial test of the construction product - in accordance with the following regulations:

To be granted a Certificate of Conformity and for the external supervision including the product tests that need to be carried out, the producer of the construction product must involve an accredited certification body and a supervision board accredited for this.

2.5.2 In-house production control

In every production plant, an in-house production control in accordance with DIN 18200³⁾ 2021-04, section 4.2, must be installed, which ensures the consistent production and composition of the construction product as under section 2.1.

For the in-house production control, the Guidelines Concerning the Proof of Conformity of Flame-Retardant Building Materials (fire classification DIN 4102-B1)⁴⁾ in the applicable version shall apply.

The results of the in-house production control must be recorded, evaluated and retained for at least 5 years. They must be submitted to the supervision board upon request.

- Name of the construction product
- Type of control
- Date of manufacture and control of the construction product
- Result of the controls and, if applicable, comparison with the requirements.
- Signature of the person responsible for factory production control.

In case of unsatisfactory test results, the manufacturer shall immediately take the necessary measures to eliminate the defect. Construction products which do not comply with the requirements must be handled in such a way as to prevent confusion with conforming products. After the defect has been eliminated, the respective control must be repeated without delay - if this is technically possible and necessary to prove that the defect has in fact been eliminated.

2.5.3 External supervision

In every production plant, the in-house production control must be inspected by an external supervision regularly, but at least once a year.

For the external supervision, the Guidelines Concerning the Proof of Conformity of Flame-Retardant Building Materials (fire classification DIN 4102-B1)⁴⁾ in the applicable version shall apply.

In the context of the external supervision, an initial testing of the construction product must be carried out. During the external supervision, samples for random inspections must be taken. Sampling and inspection shall be subject to the respective recognized supervision body.

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³⁾ DIN 18 200 “Proof of Conformity for Construction Products - In-house Production Control and Certification of Products” version April 2021 is to be used.

⁴⁾ The „Guidelines Concerning the Proof of Conformity of Flame-Retardant Building Materials (fire classification DIN 4102-B1) after a General Building Authority Approval” must be published in the official newsletter of the German Institute for Civil Engineering (“Mitteilungen” des Deutschen Instituts für Bautechnik).

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The results of the certification and of the external supervision must be retained for at least five years. They must be submitted by the certification body or the supervision board to the competent supreme building authority upon request.

3 Provisions concerning the application

3.1 The fire protection product is applied as an aqueous solution by spraying, submerging and squeezing or spinning on cellulose fiber fabric with a weight per area unit of $\geq 50 \text{ g/m}^2$ in a “dry-in-wet” procedure.

At a pick-up of 80 %, a quantity of $> 150 \text{ g/l}$ of “KAPPAFLAM CFP” is needed on the cellulose fiber fabric to be equipped.

The dry pick-up per weight unit of the fabric must be $\geq 330 \text{ g/kg}$.

3.2 The application procedure must be submitted to the user by the applicant in writing in accordance with the test certificate mentioned in section 2.3.

3.3 The fabric equipped with the fire protection product must only be used in closed rooms without any influence of humidity. The persistence of the fire protection equipment against washing, dry-cleaning or weathering has not been proved.

3.4 The proof of the flame-retardant property is only valid for equipped cellulose fiber fabrics arranged with a distance of $> 40 \text{ mm}$ to laminar building materials.

4 Legal basis

This General Building Authority Test Certificate is issued on the basis of section 19 of the Building Code of Lower Saxony (“Niedersächsische Bauordnung- BauO”) in the version of April 3, 2012 (published in the Lower Saxony law gazette “Nds. GVBl.” no. 5/2012, p. 46-73) last amended by the law amending the Lower Saxony Building Code of November 10, 2021 (Nds. GVBl. p. 732-738) in conjunction with the Administrative Regulation Technical Construction Stipulations (“VV TB” according to the circular decree of the Environment Ministry (“RdErl. d. MU”) dated April 1, 2022 (official newsletter of the state of Lower Saxony “Nds. MBl.” no. 14/2022, p. 508-533). The state building codes of the other federal states contain corresponding legal bases.

5 Information about legal remedies

Opposition against this decision can be filed within one month after notification with Materialprüfanstalt für das Bauwesen, Braunschweig.

[Signature]

Dr.-Ing. G. Blume
Head of test body

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by order: Technical officer
Katharina Feustel-Prause
Official in charge



CERTIFICATION

As a translator for the English language, publicly commissioned and sworn by the President of the Regional Court [Landgericht] of Aschaffenburg, Germany, I hereby certify:
This foregoing is a true and complete translation of the document written in German that has been submitted to me in a copy.

Mömlingen, July 12, 2022

BEGLAUBIGUNG

Als vom Präsidenten des Landgerichts Aschaffenburg öffentlich bestellte und allgemein beeidigte Übersetzerin für die englische Sprache bestätige ich:
Diese Übersetzung der mir in Kopie vorgelegten, in deutscher Sprache abgefassten Urkunde ist richtig und vollständig.

Gabriele Lindner-Partholl



The image shows a handwritten signature in blue ink that reads "Gabriele Lindner-Partholl". The signature is written over a circular official seal. The seal contains the text "Öffentlich bestellte und beeidigte Übersetzerin" at the top, "Gabriele Lindner-Partholl" in the center, "Landgericht Aschaffenburg" below that, and "Mömlingen" at the bottom. At the very bottom of the seal, it lists the languages "Englisch, Französisch".