

Flammability made simple

This guide gives you an insight into the fire performance of Gabriel fabrics and explains the most important international flammability standards. It's flammability made simple!

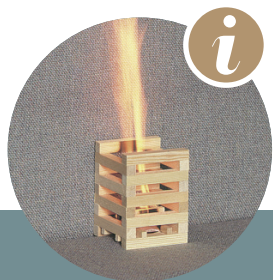
Flammability standards for upholstery fabrics are a matter of preventing fires and saving lives. Unfortunately, there is no single international flammability standard for upholstery fabrics. Instead a range of different standards, regulations and test methods are in force internationally.

Gabriel fabrics meets international flammability standards

Gabriel offers a wide range of fabrics with superior fire performance and is able to meet even the most exacting fire requirements.

Our fabrics are submitted to a range of test methods and cover the most important international flammability standards, including:

- European EN 1021 1&2
- German DIN 4102 – B1
- French M1 NF P 92-503-507
- Austrian ÖNORM A3800-1 and B 3825
- Italian Class Uno – UNI 9175 Class 1.IM
- British BS 5852
- USA – CA TB 117-2013



Did you know that...

- ...all Gabriel fabrics without exception have passed the European EN 1021 1&2 cigarette and match test.
- ...actual fire performance depends not only on the fabric but also on the foam used beneath the fabric.
- ...the fire retardant Trevira CS fabric Go Collection is Oeko-Tex, EU Ecolabel and Cradle to Cradle Certified.

We don't use chemicals!

Did you know that you can achieve superior fire performance without compromising your environmental standards.

Our woolen fabrics are naturally flame resistant due to the high content of water in the wool fibres, and our Trevira CS-based fabrics are not only inherently flame retardant but also Oeko-Tex certified. Why use chemicals, when it is not even necessary.



Gabriel produces fabrics with superior fire performance...

Design - Go Collection

A short guide to flammability standards

European EN 1021 1&2

This standard covers upholstery materials and is accepted and recommended throughout the EU. It examines a fabric's reaction to a burning cigarette and a simulated match (butane flame). The European 1021 1&2 also meet the German DIN 66084 P-b and P-c. Rating: Pass or fail.

German DIN 4102 – B1

This standard covers building materials and components, including light to heavy decorative fabrics, it does normally not apply to upholstery fabrics. It is referred to as the "Brandschacht test" and is considered the highest flammability standard in Germany for upholstery fabrics. It results in a classification: B1 flame retardant, B2 normal flammability and B3 easily flammable.

French M1 NF P 92-503-507

This standard covers decorative fabrics and curtains and is also known as the "Brûleur électrique" – electric burner test (NF P 92 503). A sample is placed face down on the test rig at an angle of 30 degrees above an electric radiator, which gives out heat. A small butane gas pilot flame is applied directly to the fabric. In addition to the electric burner test, two other tests (persistence and drop flame) help to establish the certification: M1 non-flammable, M2 flame retardant, M3 flammable and M4 easily flammable.

Austrian ÖNORM A3800-1 and B 3825

This standard covers upholstery fabrics. The B 3825 standard examines the burning behavior, while A 3800 examines smoke emission. It operates with three classifications: flame retardant, normal ignitability and easily flammable.

Italian Class Uno – UNI 9175 Class 1.IM

This standard examines and classifies the flammability performance of upholstered parts (e.g. seats, backs and arm-rests) and of upholstered products (e.g. seating, mattresses, bed bases and pillows). It combines an ignitability test with a surface spread of flame test. The tests result in a classification ranging from Class 1.IM, the best rating, to Class 3.IM.

British BS 5852

This standard assesses the ignitability of upholstery fabrics. Fabrics are subjected to eight ignition sources covering the intensities of actual sources that might be encountered in various end use environments. The most frequently used ignition sources are ignition source 0 (cigarette), ignition source 1 (butane flame/simulated match) and ignition source 5 (Crib 5). Rating: Pass or fail.

USA – CA TB 117-2013

This standard covers upholstery fabrics and furniture and is in force in California. It examines a fabric's resistance to a small flame. Rating: Pass or fail.



We recommend...

EN 1021 1&2 and Crib 5 are excellent reference tests offering the best safety standards for upholstery.

Trevira facts

Trevira CS fabrics upholstered with suitable foams and upholstery constructions comply with the German standards DIN 66084 P-a according to DIN 54341 (paper cushion test).

Go ahead and ask us

Our team of upholstery experts can help you choose the fabric that meets your exact fire performance requirements. For further information on which standards a specific fabric meets, we advise you to read the technical specifications on our website www.gabriel.dk.