Technical data sheet

Antibacterial properties of EGGER Floorings

The EGGER Flooring products: Laminate Flooring, Comfort Flooring and Design Flooring are characterised by their hygienically sealed surfaces. They are generally easy to clean, can be disinfected very well and also have an antibacterial effect. Thanks to these and other properties, EGGER Floorings have long proven their suitability for use in residential areas but also in commercial areas like shops, restaurants, doctors' surgeries and hotel rooms.

ISO 22196 - Measurement of antibacterial activity on plastic surfaces

In 2000, the JIS (Japanese Industrial Standard) Z 2801 test was developed for plastic surfaces. In 2007, with the publication of ISO 22196, the test method from JIS Z 2801 was also standardised internationally. Today, ISO 22196 is the most important internationally recognised test method for evaluating the antibacterial activity of plastic materials (and other non-porous surfaces) to inhibit or kill the growth of test microorganisms.

For the standard test, two different germs are tested: Staphylococcus Aureus and Escherichia Coli. The bacterium Staphylococcus Aureus belongs to the normal colonisation flora of the skin in humans and Escherichia Coli is a bacterium that normally occurs in the human and animal intestine. Both are applied to the test surfaces. At the beginning of the test the exact concentration is determined. The test surface with germs is stored for 24 hours at 35 °C and a relative humidity of 90 %, under defined conditions. Immediately afterwards, the concentration is measured again.

Decisive for the evaluation of the antibacterial activity is the so-called reduction value: How many germs still exist after 24 hours as compared to the start of the test? ISO 22196 does not provide a scale to classify this value. Therefore, an evaluation scale (Table 1) based on ISO 20743 is generally used. In most cases, requirements are defined according to this scale in tenders for hospitals or similar public institutions.

Effectiveness of antibacterial properties	Value of the antibacterial effect A [$\log_{10}$ KBE].
none	A < 2
significant	2 ≤ A < 3
high	A ≥ 3

Table 1

In the tests performed of EGGER Floorings have achieved the effectiveness "strong", value of antibacterial effect A ≥ 3.

Cleaning

EGGER Floorings must be cleaned regularly during the service life and disinfected if necessary. The antibacterial properties are no substitute for cleaning or disinfecting the surfaces.

Additional Information

The hygienically sealed and closed surfaces of the EGGER products are 99.9% germ and bacteria free 24 hours after being cleaned and sanitized*.

*The product does not contain a known substance that is intended to prevent, destroy, repel or mitigate a pest, and our product is not a device that is intended to trap, destroy, repel or mitigate pests.

Accompanying documents

Further information on the results of the tests for antibacterial activity and effectiveness can be found in the documents listed below:

- Test report "EGGER TR antibacterial Flooring class of use."
- Test report "EGGER TR antibacterial Flooring structure."