Engineering progress Enhancing lives

RAUKANTEX health.protect

Technical information



01 Application areas

Thanks to their hygienic surface, REHAU antibacterial/ antimicrobial edgebands are particularly suitable for use in areas with increased hygiene requirements, such as waiting rooms, medical practices and hospitals. These edgebands are also suited to highly frequented areas such as public facilities, shops or pubs and restaurants.

Terminology

Essentially, there are two types of formulations on the market: antibacterial and antimicrobial.

Antibacterial formulations

These formulations are chemically effective against a wide range of harmful bacteria.

Antimicrobial formulations

These formulations are chemically effective against a wide range of bacteria and specific viruses. Due to their effectiveness over a broad spectrum, materials treated in this way are primarily used in the hygiene field.

Antiviral

Antiviral means "aimed to combat viruses" or "effective against viruses".

REHAU edgebands can be equipped with antimicrobial properties in two ways.

The difference between the two variants lies in the point of application, quantity of the active substance used, as well as the resulting time period required for the antimicrobial effect.

The active substance used is silver phosphate glass. Silver phosphate glass is a biocide registered with the national/EU authorities for use in polymers.

We recommend using edgebands from the RAUKANTEX pro range, which ensure a seamless appearance while also preventing gaps in which dirt can collect and bacteria build up. REHAU health.protect solutions also include our antibacterial surfaces.



Antibacterial Effective against bacteria

Antimicrobial Effective against bacteria, viruses (and fungi)

Antibacterial/antimicrobial differentiation

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Available versions:

Variant 1

Protection with a coating system

The edgeband surface is treated with a special antimicrobial coating system.

Variant 2

Protection with a coating system and base material In variant 2, the base material is additionally treated with the active substance silver phosphate glass.

These two variants are based on the active substance silver phosphate glass.

	Variant 1 Staphylococcus aureus* Escherichia coli*		Variant 2 Staphylococcus aureus* Escherichia coli*	
Antibacterial action Germs tested				
Reduction in bacterial count, tested according to JIS Z 2801	> 99.99% within 24 hours		99.9% within 7 hours	
Antiviral effect of the coating** Tested viruses	SARS-CoV-2 COV2019 Italy/INMI1	Influenza H3N2 Influenza H1N1	SARS-CoV-2 COV2019 Italy/INMI1	Influenza H3N2 Influenza H1N1
Reduction in viral count, tested according to ISO 21702	78.62% after 1 h 91.87% after 8 h	99.9% after 24 h	91.87% after 8 h	99.9% after 24 h
Active substance	Silver phosphate glass (CAS 308069-39-8)		Silver phosphate glass (CAS 308069-39-8)	
Available for the following materials	ABS PP PVC		ABS PP PVC	
Active substance registered with the national/ EU authorities for biocidal use in polymers				

* Germs that are responsible for a large number of secondary, infectious diseases, particularly in the clinical field

** Antiviral against specific viruses

The reduction in the bacterial count was determined after the germs had been in contact with the edgeband for 24 hours (or 7 hours) at a temperature of $36 \,^{\circ}$ C.

03 Test reports



Protection with a coating system

- Material ABS, antibacterial: Test report – order 3712.3 and 3712.4 (tested coatings: SHGL, G85 and SM)
- Material ABS, antibacterial: Test report – order 3712.5 and 3712.6 (tested coatings: GLS and EM)
- Material PP, antibacterial: Test report – order 3712.1.1_Rev_1 and 3712.2.1_Rev_1 (tested coatings: SHGL, G85 and SM)
- Material PVC, antibacterial: Test report – order 3774.1_Rev_1 and 3774.2_Rev_1 (tested coatings: SHGL, G85 and SM)
- Material PP, antiviral: Test report no. 2100017/09_01 according to ISO 21702:2019 and Antiviral Test Certificate (certificate only valid with test report)
- Material ABS, antiviral: Report 2020FM32040R01D according to ISO 21702:2019

Protection with a coating system and base material

 Material ABS, antibacterial: Test report 13458/146 dated 1/10/2018 by ISEGA according to JIS Z 2801:2012

04 Other notes

Cleaning

The use of antimicrobial edgeband version is no substitute for regular cleaning and disinfection of furniture surfaces.

Disposal

From an ecological perspective, waste production should always be avoided or minimised where possible. Dispose of any waste must be in line with the applicable regulations. Waste should not be disposed of in the sewage system. It must be disposed of safely. Incineration or landfill should only be considered if recycling is uneconomical. Release into the ground, watercourses and sewers should be avoided due to the biocide content.

Processing

Process the edgeband in accordance with the technical information applicable for the respective edgeband material.



Notes



Notes



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