



INSPIRATIONS
CLOSE TO YOU

MICROPLUS®

THE SURFACE WITH ANTIBACTERIAL EFFECT
FOR INTERIOR FITOUT AND FINISHES

DUROPAL

thermopal

 PFLEIDERER

INSPIRATIONS CLOSE TO YOU

ONE PFLEIDERER: INSPIRATIONS CLOSE TO YOU – FOR YOUR WORK AND YOUR REQUIREMENTS.

The Pfleiderer brand has reorganised itself. A new, international and powerful brand has emerged from the amalgamation of Pfleiderer Grajewo and Pfleiderer GmbH.

In the course of this process we have been able to harmonise all the production locations, simplify the processes and optimise our product range and services. Thus, you now have access to a range of decors, surface textures and sizes that are identical throughout the world and unique in its breadth and depth.

For you, One Pfleiderer means: a strong partner for high-quality wood-based panels with outstanding decorative surface expertise, customer-oriented service and a consistent focus on sustainability. And last but not least, countless creative and practice-oriented “inspirations close to you”.



ADDED VALUE FOR INTERIOR DESIGN PROJECTS

Those who set the trends of tomorrow for interior design projects would do well to choose the antibacterial surface microPLUS®. Fact: Bacteria are our constant companions, whether at home, in public places, health care facilities or hospitals. The triggers of allergies and infections are a constant and serious problem. Even with repeated use, chemical detergents that contain aggressive substances have little effect – and also place a burden on us and on nature. It is a problem for which Pfeleiderer has now developed a solution, wich has been confirmed by certificates from the independent test institutes SGS FRESENIUS and ISEGA.

To produce our product we deliberately opted for a biocidal active ingredient which is also used in shampoos, toothpastes and skin creams. The combination developed from this acts effectively against germs, but at the same time is safe for humans. So one thing you can be sure of: With the patented, anti-bacterial active surface microPLUS®, hygiene standards are redefined.

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* Patent no.: DE 10 2007 020390.1

AREAS OF APPLICATION



Due to the biocidal active ingredient used in the manufacture of the product, the microPLUS® surface has an antibacterial effect. We can offer interior designers, fitters and end customers real added value, whose advantages speak for themselves: The result is reliability and safety in places where hygiene is important – and especially in health care and interior design projects.

Health and Care	Interior Design Projects
<p>Have you ever caught an illness in hospital? According to the Deutsche Gesellschaft für Krankenhaushygiene e.V., Germany's association for hygiene in hospitals, this is far from unusual: even though a patient's original illness may be cured, many develop new infections by succumbing to one of the many bacteria that occur in a hospital. Even medical disinfectants are only of limited benefit. This is a problem that arises wherever working activities are based around health and care: in doctors' surgeries, nursing homes, or in medical research. This is where the antibacterial effect of the microPLUS® surface sets future hygiene standards: especially in the periods between the cleaning intervals, it provides durable, permanent protection against germs and bacterias.</p>	<p>It can be as simple as touching the bar in your favourite pub, using a public toilet or going to the swimming pool: in any of these everyday activities, bacteria can be quickly transmitted. People who are responsible for public buildings or catering facilities have a high level of responsibility towards their customers or guests. Especially in areas with a high level of public traffic, bacteria have a particularly easy life. Our tip: when it comes to design projects in areas with large amounts of public traffic, advise your customers to use microPLUS®.</p>

TESTED SAFETY



Reliability and safety for the lifespan of the product: the active antibacterial surface microPLUS® fulfils this claim to the highest degree. This has been confirmed by test results and certificates from the independent and renowned test institutes SGS FRESENIUS, ISEGA and GfPS. The result: The antibacterial function of the microPLUS® surface acts safely, reliably, durably and effectively against bacteria. The surface is completely suitable for use with food, and safe to process. SGS FRESENIUS has confirmed this: Frequently occurring bacteria on the microPLUS® surface are reduced by significantly more than 99 % within 24 hours. Even scratches and areas of wear will not affect the anti-

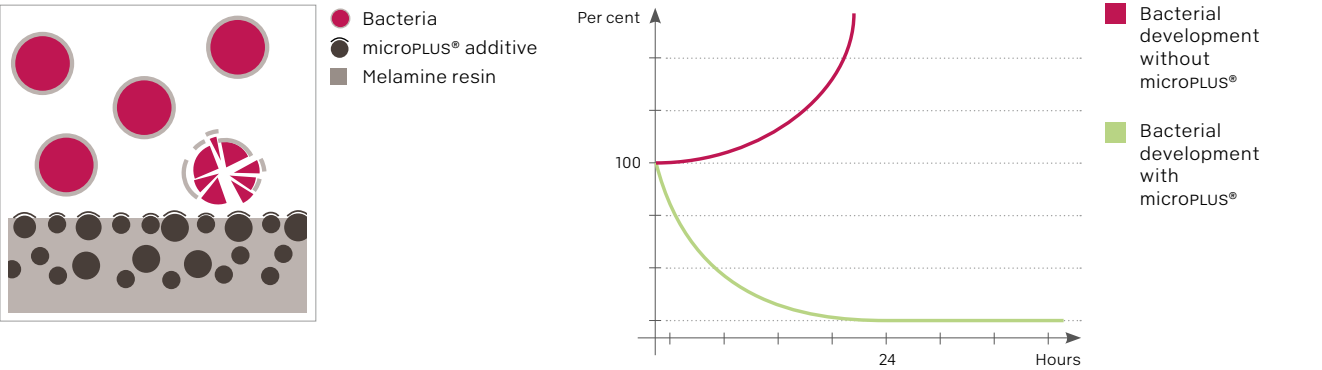
bacterial effects. The integrated protection of microPLUS® neutralises, permanently and effectively, the ability of bacteria to grow and multiply. Due to the uniform distribution, the antibacterial effect of microPLUS® is over the whole surface – and thus even under heavy use conditions it is effective for the whole product life cycle. There is no transfer or emission to, for instance, foods or into the air. microPLUS® is free from organo-chlorine substances and has not toxic side effects. Despite its hygienic effectiveness, cleaning of surfaces is still required, but cleaning intervals and the use of disinfectants are reduced.

Comparison of the antibacterial effects of various materials (test results SGS FRESENIUS)
(effectiveness to the power of ten)

Bacteria	Material						
	microPLUS®	Realstone / granite	Ceramics	Real metal	PVC	Acrylic	Mineral materials
Pseudomonas aeruginosa	> 4.9	−0.6	< −0.6	0.2	−0.3	−0.5	0.3
Staphylococcus aureus	> 4.8	0.2	0.3	1.8	0.2	0.2	0.6
Salmonella choleraesuis	> 4.9	0.1	0.3	2.1	0.2	0.1	0.5
Escherichia coli	> 4.4	< −1.0	< −1.0	< −1.0	< −0.8	< −1.0	< −0.5
Result	highly effective	no effect	no effect	minimal effect	no effect	no effect	no effect

The result: compared to the other materials tested, the surface of microPLUS® is more than 1,000 times more antibacterially effective.

This is how the integrated protection of microPLUS® works



Zertifikat zur antibakteriellen Wirksamkeit

Dr. Ralph Dierha

ISEGA - Forschungs- und Untersuchungs-Gesellschaft mbH

ZERTIFIKAT

Bestätigung der antimikrobiellen Wirksamkeit von

MKT 23MT-A:

Duropal-HPL mit antibakterieller Ausrüstung auf Basis MicroPlus

Die Prüfung der antimikrobiellen Wirksamkeit des antimikrobiell ausgerüsteten Materials MKT 23MT-A (Duropal-HPL mit antibakterieller Ausrüstung auf Basis MicroPlus) erfolgte gemäß der JIS Z 2801.

Das Material wurde mit Staphylococcus aureus ATCC 6538, Staphylococcus aureus ATCC 70908 (= MRSA), Pseudomonas aeruginosa ATCC 15442, Escherichia coli ATCC 8739 und Salmonella enterica ssp. enterica NCTC 6017 mit einer Ausgangskonzentration von 1 - 5 x 10⁶ KBE / Probe belastet. Nach 24 h Kontaktzeit wurde auf dem Material für alle Testkeime eine Reduktion von mehr als 3,6 log₁₀-Stufen ermittelt.

Mit der angewandten Testmethode gemäß der JIS Z 2801 konnte für das untersuchte Material somit eine starke antimikrobielle Aktivität bestätigt werden.

Falls erforderlich kann der Testbefund mit der Labornummer 171213M089 bei Pflücker Aachener GmbH angefordert werden.

Aachen, 21.02.2014

Dipl.-Biol. Heiko Oden-Müll

Extracts from the certificate for the antibacterial efficiency of Duropal microPLUS® – SGS INSTITUT FRESENIUS GmbH, Taunusstein: microPLUS® demonstrated a strong antibacterial effect in all microbiological evaluations (based on JIS Z2801), i.e. a minimum of 99 per cent of all bacteria had been destroyed within 24 hours. Only positive results were achieved in the relevant tests into the long-term effect of microPLUS® products with an antibacterial finish. Maximum damage was caused to microPLUS® surfaces in a simulation of the life cycle. The antibacterial effect remained entirely unaffected.

Extract from the declaration of no objection regarding microPLUS® – test and research centre ISEGA Forschungs- und Untersuchungs-Gesellschaft mbH Aschaffenburg: The product microPLUS®, as per the samples presented, may safely be used as a surface in kitchens where food is prepared and processed and in sanitary facilities. It may get in direct contact with all kinds of foodstuffs.

Excerpt from the GfPS test results for microPLUS® (Gesellschaft für Produktionshygiene und Sterilitätssicherung mbH Aachen): The material was subjected to an impact test with Staphylococcus aureus ATCC 6538, Staphylococcus aureus ATCC 700698 (= MRSA), Pseudomonas aeruginosa ATCC 15442, Escherichia coli ATCC 8739 and Salmonella enterica ssp. enterica NCTC 6017 in a concentration of 1-5 x 10⁵ KBE/ sample. After a contact time of 24 hours a reduction of more than 3.6 log₁₀ levels was found for all test germs.

MRSA are germs resistant to certain antibiotics and are therefore a focus of hospital hygiene. microPLUS® is sustainably effective against MRSA.

DUROPAL HPL

- High-quality, robust high pressure laminates (HPL)
- Hygienic, easy-care, safety for foodstuffs
- Ideal for areas with high usage demands

Format in mm		Dicke in mm			
Length	Width	0.5	0.6	0.8	1.2
Duropal HPL / Duropal HPL IMO					
2,350	1,050 / 1,300			●	
3,050	1,300			●	
4,100	1,300	●	●	●	
5,300	1,300		●	●	●

On request also available in sizes from 2,050 to 5,300 x 1,300 x 0.5 / 0.6 / 0.8 / 1.2 mm.

DUROPAL
FLAT BONDED ELEMENTS

- The right material composition for every application: Duropal HPL with a variety of core materials
- Hygienic and easy-care
- Ideal for areas of high specification demand
- Duropal furniture elements, including high-quality edge option

Format in mm	HPL-Thickness in mm	Overall Thickness in mm								
	0.8	9.6	16	17.6	19	20.6	23.6	25	29.6	39.6
Duropal Element P2										
2,650x1,300	●				●					
3,050x1,300	●				●					
4,100x1,300	●	●	●	●	●	●	●	●	●	●
Duropal Element P3										
4,100x1,300	●					●				
Duropal Element MDF plus										
4,100x1,300	●					●				

Design		Format in mm		HPL-Thickness in mm		Thickness in mm				
Front edge	Rear edge	Length	Width	0.6	0.8	9.2	9.6	11.6	17.6	19.6
Duropal Furniture Element P2										
milled	milled	4,100	600 – 640	●		●				
		4,100	1,285		●		●	●	●	●

Gloss Prospects: DessangeSalon, Hairdressing salon Vienna



Further information and technical data at www.pfleiderer.com

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DUROPAL WORKTOPS
AND WINDOWBOARDS

- The convenient solution for furniture and interior fitting
- High-quality, sturdy HPL surface
- Hygienic and easy-care
- Choice of different variants



Design		Format in mm		Overall Thickness in mm			
Front edge	Rear edge	Length	Width	19	23	28.8	38.8
Duropal Worktop PerForm							
Laser edge	Protective edge	4,100	600 / 900 / 1,200				●
		5,300	600 / 900 / 1,200				●
Laser edge	Laser edge	4,100	670 / 900				●
		5,300	670 / 900				●
Duropal Worktop Classic							
Radius 6 mm	Protective edge	4,100	600 / 900 / 1,200			●	●
		5,300	600 / 900 / 1,200			●	●
Radius 6 mm	Radius 6 mm	4,100	670 / 900			●	●
		5,300	670 / 900			●	●
Duropal Worktop Quadra							
Radius 3 mm	Protective edge	4,100	600 / 900 / 1,200			●	●
		5,300	600 / 900 / 1,200			●	●
Radius 3 mm	Radius 3 mm	4,100	670 / 900			●	●
		5,300	670 / 900			●	●
Duropal Worktop, square edged profile							
milled	milled	4,100	600 / 900 / 1,200			●	●
		4,100	650				●
		5,300	600 / 900 / 1,200			●	●
Duropal Windowboard							
38 mm folded edge	Protective edge	4,100	200 / 250 / 300 / 400 / 500 FBL	●			
Radius 5 mm	Protective edge	4,100	200 / 250 / 300 / 400 / 500 FBK		●		

**YOU CAN HAVE A CLEAR
CONSCIENCE WHEN YOU
WORK WITH US.**



Sustainable thinking and action is essential for all of our futures. Especially amongst your customers, the awareness of sustainably produced products that are suitable for a healthy living environment is constantly growing.

Pfleiderer pays attention to the absolute sustainability of all the company's activities. On all levels – economic, ecological and social: we not only manufacture our products with the utmost care, but also within the framework of a certified environment management system. In the production process, Pfleiderer pays attention to absolute ecology, e.g. in the formaldehyde-free glued panel LivingBoard, which has been synonymous with sustainable construction for almost four decades.

We also have a special responsibility as an employer: for this reason, a culture of trust focused on autonomous action is fostered in our company. Sustainability from which you benefit – through environmentally friendly products, dedicated employees and maximum satisfaction.



For customers in the UK:
24-HOUR SERVICE

**Samples available to order
around the clock:**

Tel.: +44 (0) 1625 660 411

Fax: +44 (0) 1625 617 301

info@pfleiderer.co.uk

www.pfleiderer.co.uk

A smiling woman with brown hair, wearing a patterned top, is talking on a mobile phone. The background is a blurred office setting.

**ANY QUESTIONS?
WE LOOK FORWARD TO
HEARING FROM YOU.**

Your satisfaction is our ultimate goal. But we go beyond this: Our goal is to surpass your expectations. That is why our partners can expect the highest standards in all areas of our operations. Do you have a specific project or just a simple question? Whichever way: We look forward to new challenges – and to your call.



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24-HOUR SERVICE

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Our General Terms and Conditions can be found on our Internet website: www.pfleiderer.com

**Pfleiderer employs wood
from certified sustainable
forest management.**



Matching ABS edges can be obtained
directly from your Pfleiderer dealer
or through Rudolf Ostermann GmbH:
www.ostermann.eu



For CPL laminate edges:

Please contact us for a quotation.

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