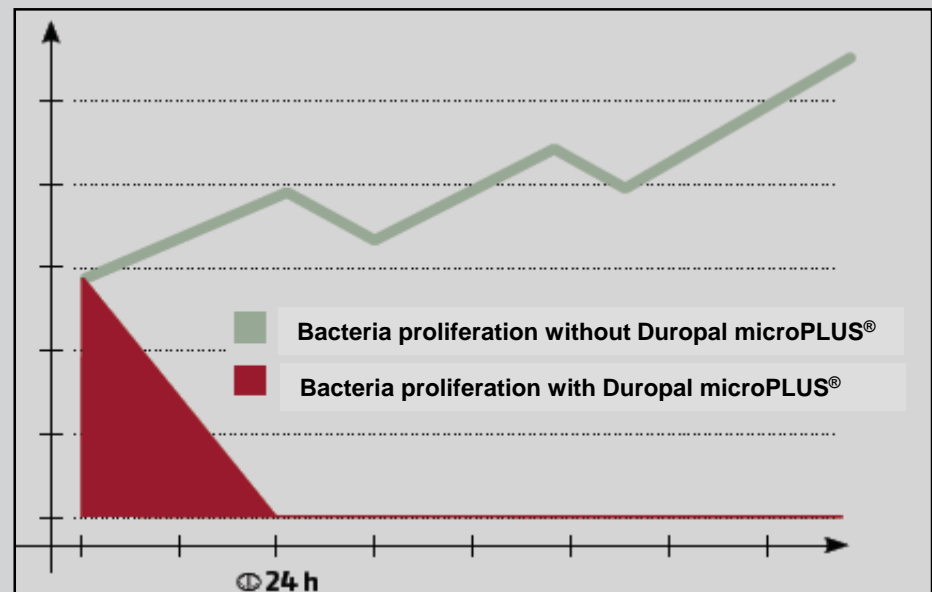




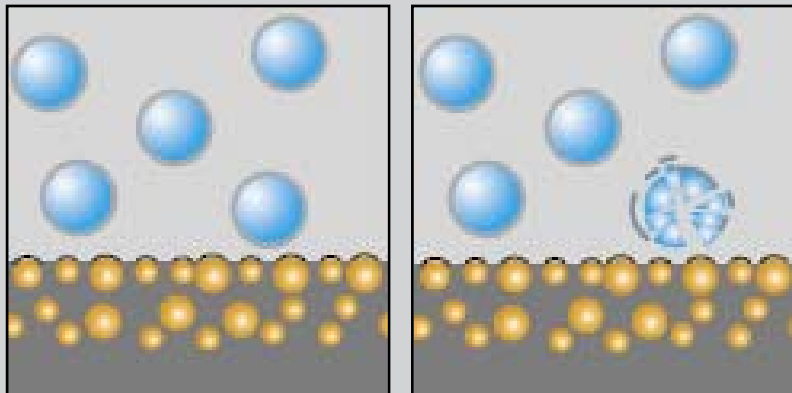
## Hygiene has reached a new level




- DUROPAL microPLUS® offers a decisive „Plus“ in bacteria protection.
- Even at room temperature bacteria can proliferate rapidly. DUROPAL microPLUS® reduces bacteria by more than 99 % within 24 hours.
- DUROPAL microPLUS® features all well-known advantages of DUROPAL-HPL products.



## How does DUROPAL microPLUS® work?

- When bacteria come into contact with the DUROPAL microPLUS® surface essential functions of the bacterial micro-organisms are disturbed.
- Consequence: the bacterial proliferation is stopped and the bacteria will die.



-  Bacteria
-  DUROPAL microPLUS® additive
-  Melamine resin

## DUROPAL microPLUS® – Microbiological analyses

- Predefined test germs, typically found in the food industry and in medical areas, are placed on a testing board. After 24 hours the effectiveness of DUROPAL microPLUS® is analysed.
- DUROPAL microPLUS® reduces bacteria by more than 99%.
- To get a clearer picture: of about 10,000 bacteria, only a maximum of 10 bacteria will have survived after 24 hours, i.e. a reduction of 3 to 4 decimal percentage.



## Why not trying to eat directly off your worktop?

- DUROPAL microPLUS® is totally harmless to humans and the environment. Its surface contains substances with bactericidal action that are also found in shampoos, toothpastes and skin crèmes.
- The active ingredients are fully encapsulated inside the surface, thereby preventing a potential transfer to foods or a release into the air.
- Worktop surfaces still require cleaning, since the antibacterial coating cannot substitute basic cleanliness. DUROPAL microPLUS® provides a stable and reliable protection against bacteria.

## Reliable, long-lasting and effective protection

Analyses of the SGS Fresenius Institute clearly confirm the long-term effectiveness of DUROPAL microPLUS® :

- The antibacterial effectiveness of DUROPAL microPLUS® remained fully intact after the surface had been subjected to a maximum-impact test during a life-cycle simulation.
- Scratches or abrasions do not damage the antibacterial effectiveness of DUROPAL microPLUS® .



## Areas of application of DUROPAL microPLUS®

- Buildings frequented by the public such as swimming pools, wellness areas or nursery schools.
- In the health care sector: hospitals, doctor's surgeries, nursing homes.
- Areas with very high standards of hygiene such as medical research and chemical laboratories.
- Private households, e.g. kitchens and bathrooms.



# Comparison of the antibacterial effectiveness of various materials

## Test results SGS Fresenius

Effectiveness (powers of ten)

Test bacteria							
Bacteria	Duropol microPLUS®	Stone Granite / Marble	Ceramic	High grade steel	PVC	Acrylic	Mineral filled surface material
<i>Pseudomonas aeruginosa</i>	> 4,3	-0,6	< -0,6	0,2	-0,3	-0,5	0,3
<i>Staphylococcus aureus</i>	> 4,3	0,2	0,3	1,8	0,2	0,2	0,6
<i>Salmonella choleraesuis</i>	> 4,3	0,1	0,3	2,1	0,2	0,1	0,5
<i>Escherichia coli</i>	> 4,4	< -1,0	< -1,0	< -0,1	< -0,8	< -1,0	< -0,5
Summary	strong effect	no effect	no effect	small effect	no effect	no effect	no effect

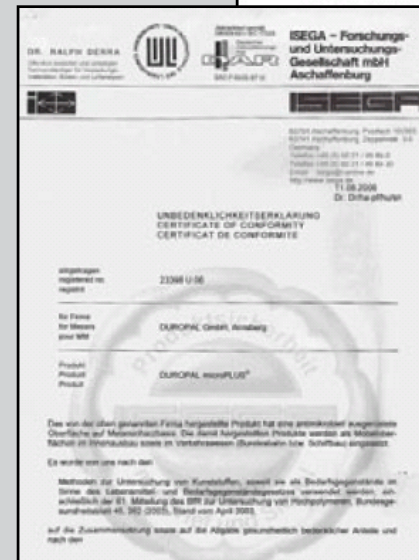
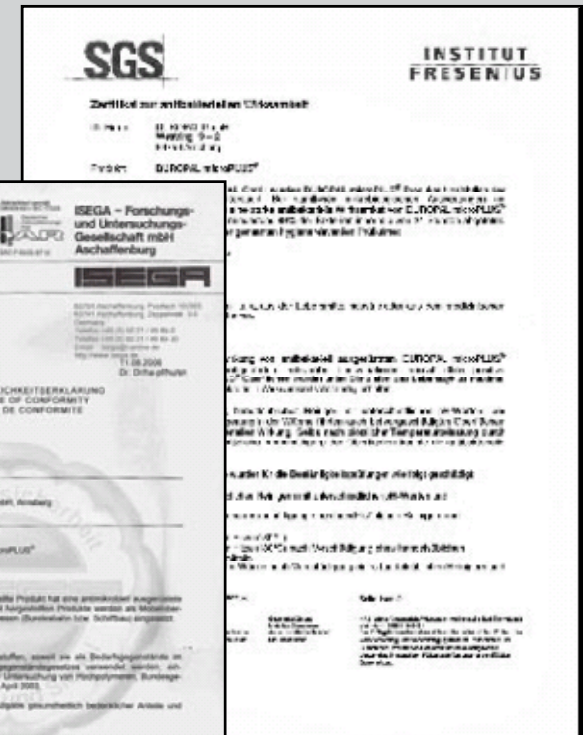
Result: The antibacterial effectiveness of DUROPAL microPLUS® is 1,000 times higher than other tested materials.



# DUROPAL microPLUS® Certifications

The following certifications are available:

- SGS Institut Fresenius GmbH: Certification for the antibacterial and long-lasting effectiveness of DUROPAL microPLUS®
- ISEGA – Forschungs- und Untersuchungsgesellschaft mbH (ISEGA research and testing institute): Declaration of no objection
- Testing of ambient air: No abnormality detected
- Toxicological expertise: No abnormality detected



## DUROPAL microPLUS® - Our product range

- Available décors with antibacterial treatment: HPL décor and surface combinations of the wodego colour match stock range (exceptions: metal and mother-of-pearl décors).
- Products: HPL, HPL Solid, worktops, window sills, sandwich elements, furniture elements.
- HPL minimum order quantities:
  - Print décors = standard minimum quantities/increments
  - Plain décors from 500 linear meters, 5,300 mm = 96 units, 4,100mm = 120 units.

# DUROPAL

**HPL IS OUR WORLD**