

## Antimicrobial agent

HIPE®CARE has been developed to reduce and control microorganisms' growth.

Based on a mixture of inorganic salts, HIPE®CARE is designed to be added to the impregnation bath both for decorative and overlay papers, to produce hygienic surfaces.

NAME	DOSAGE	BENEFIT
HIPE®CARE	1,5%	<ul> <li>Effective against gram positive and negative bacteria</li> <li>Effective also against fungus Aspergillus niger and antibiotic resistant strain MRSA</li> <li>Totally silver-free</li> </ul>

The active agents of HIPE®CARE are incorporated into the melamine resin used to saturate the decorative layer of laminates. Efficacy is demonstrated by the reduction and control of microorganism growth by release of these actives upon direct contact with the surface. Due to the optimized HIPE®CARE formulation, the components work in synergy to increase each other's effectiveness.

## REDUCTION OF MICROBIAL GROWTH

HIPE®CARE has growth inhibiting effect on gram positive and gram negative type bacteria specified in European Norm EN 13727 which is seen to represent a broad range of bacteria strains. Efficacy is tested according to the Japanese standard JIS Z2801:2000.

HIPE®CARE has also been shown to be effective against the fungus Aspergillus niger, known to have very resistant spores. HIPE®CARE is effective even against the dreaded antibiotic resistant bacteria strain MRSA. The graphs show the inhibition of microbial growth by log reduction factors. Each log reduction factor unit refers to the reduction of bacteria colony forming units (cfu) by a factor of 10. This means a change from 100.000 cfu to 100 cfu represents a 3 log reduction (or 99,9% reduction).



## HIPE CARE

As it is incorporated as part of the finished product, HIPE®CARE continues to be effective throughout the life of the laminate. Surfaces in kitchen, hospitals and other public utilities are subject to continuous cleaning and this has been simulated by repeated washing test cycles in our laboratories. The use of HIPE®CARE in laminates is to provide hygienic effectiveness in between normal cleaning intervals. Maintenance of the usual cleaning routines is nevertheless still required.

Efficacy tests carried out by independent testing labs found nearly no loss of efficacy of HIPE®CARE, showing its ability to provide protection of your laminate over a long period of time. Based on these results the product has been certified by the independent labs HYGCEN and LAWLABS.











