



HYG Products

PVC Cladding with Active Antimicrobial Protection



Overview

Innovative HYG technology has set a new standard in hygienic cladding by offering active antimicrobial cladding with low maintenance requirements. PALOPAQUE HYG has either killed or inhibited growth of all pathogens tested to date. As silver ions are uniformly distributed throughout the sheet, scratched or damaged surfaces will be equally effective.

Overall maintenance costs can be reduced even further since PALOPAQUE HYG requires less concentrated and more economical cleaning agents in comparison with standard cladding.

Main Benefits

- Active antimicrobial protection: Kills microbes
- Complete hygienic cladding system
- Exclusive HYG profiles
- Longlasting antimicrobial effect
- Biocidal capabilities proven by independent tests
- Resists a wide range of chemicals
- Withstands frequent cleaning
- Rigid PVC: not digestible by bacteria
- High fire resistance
- Excellent adhesion properties
- Easy to install and maintain
- Formable: HYG properties are maintained after processing



Typical Applications

Food Industry

- Food manufacturing facilities
- Sorting halls
- Storage/refrigeration rooms
- Food transport trucks

Medical

- Sterile/clean rooms
- Hospitals
- Clinics
- Pharmaceutical plants

www.hansrajnayar.com

Product Availability

HYG Products are currently available as PALOPAQUE flat sheets in standard thicknesses and dimensions (see information below). For more information on HYG products please contact Hansraj.

Standard PALOPAQUE™ Dimensions

Width xLength (mm)	Thickness (mm)
1220x2440	1 to 15
1000x2000	1 to 10
1500x3000	1 to 6

* Custom dimensions are available, subject to minimum quantity.

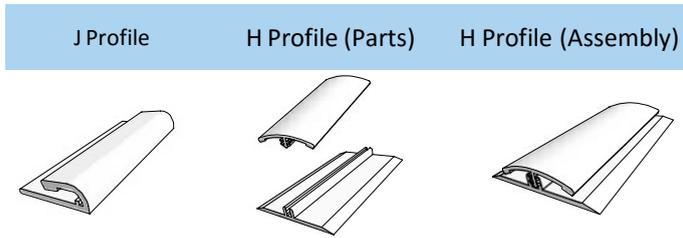
Colors

PALOPAQUE HYG is available in a wide range of standard and special designer colors. The complete range is listed in the HYG Products Brochure.



HYG Cladding System

PALOPAQUE HYG panels are offered as complete cladding system. The profiles, listed below, are offered with the same antimicrobial effect matching colors as the panels.



PALOPAQUE™ Typical Physical Properties

Property	Method*	Conditions	Units	Value
Density	D-792		g/cm ³	1.4
Heat deflection temperature (H.D.T)	D-648	Load: 1.82MPa	°C	65 - 68
Service Temperature			°C	-10 to +50
Thermal conductivity	C-177		W/m K	0.15
Coefficient of linear thermal expansion	D-696		cm/cm °C	6.7x10 ⁻⁵
Rockwell hardness	D-785		R Scale	97R
Tensile strength at yield	D-638	10 mm/min.	MPa	52
Tensile strength at break	D-638	10 mm/min.	MPa	50
Elongation at yield	D-638	10 mm/min.	%	3
Elongation at break	D-638	10 mm/min.	%	140
Tensile modulus of elasticity	D-638	1 mm/min.	MPa	2,900
Flexural strength	D-790	1.3 mm/min.	MPa	80
Flexural modulus	D-790	1.3 mm/min.	MPa	2,700
Impact falling weight	ISO 6603/1 E50	3 mm sheet	J	95

* ASTM except where noted otherwise

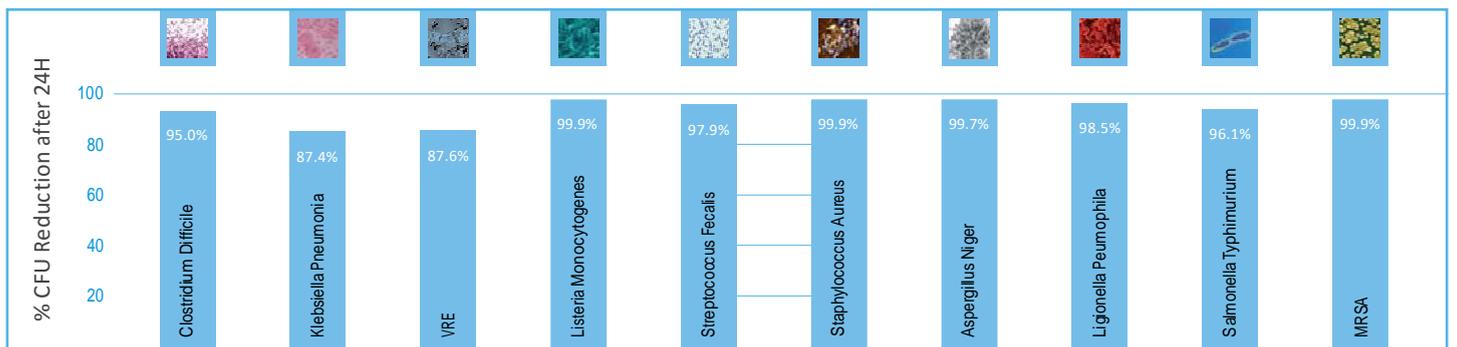
Flammability

PALOPAQUE HYG is self-extinguishing and complies with the most demanding international fire resistance standards defined in the field of plastics, as shown in the following table.

Standard	Classification*
EN 13501	B, s3,d0
DIN 4102	B-1
BS 476/7	Class 1
NSP 92501,5	M-1
ASTM E 84	Class A

* Depends on thickness

Microbe Elimination Test*



* In an independent lab test, 10 common microbes were selected, and each of them was incubated on PALOPAQUE HYG panels for 24 hrs at 37°C and >90% RH. As the graph shows, HYG panels demonstrate high antimicrobial activity. Use of HYG Products, along with an adequate cleaning regime, would significantly reduce microbial growth, including dangerous pathogens.



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