

Palopaque

Flat Opaque PVC Sheet



Overview

Palopaque is a flat UV-stabilised PVC sheet, with over 40 years of manufacturing experience that is reflected in its high quality. Easily formed and fabricated, Palopaque is ideal for a wide variety of applications.

Palopaque makes an excellent printing substrate for the advertising and signage industries and is suitable for digital or traditional printing.

With its high chemical resistance, Palopaque is highly suitable for industrial applications.

Breakthrough HYG technology adds active sanitation action for hospitals, clinics and laboratories.

Main Benefits

- ❖ Excellent chemical resistance
- ❖ High impact strength
- ❖ Easily fabricated and formed
- ❖ Highest fire rating – self extinguishing
- ❖ Glossy, matte Hair-cell or surfaces
- ❖ High electrical and thermal insulation
- ❖ Easy fabrication
- ❖ Non-toxic
- ❖ Palopaque HYG: Active hygiene

Typical Applications

- ❖ Wall cladding
- ❖ Signs, displays and point of purchase
- ❖ Chemical process industries
- ❖ Chemically resistant signs
- ❖ Sterile surfaces in laboratories
- ❖ Clinics and hospitals
- ❖ Food industry
- ❖ Air vents



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Standard Dimensions

Width x Length	Thickness
1220 x 2440	1 to 15
1000 x 2000	1 to 10
1500 x 3000	1 to 6
2000 x 3000	1 to 4

Colours



* Color may vary slightly with different surface finishes.

Chemical Resistance

Excellent resistance to... Mineral acids, alkalis, plating solutions, paper making chemicals, pickling solutions, other inorganic solutions and fumes thereof.

Good resistance to... Alcohols, aliphatic hydrocarbons, glycols, amines, phenols.

Not recommended to contact... Ketones, chlorinated solvents, aromatic hydrocarbons, some esters and ethers.

PALOPAQUE™ Product Range

Type	Description
PALOPAQUE™	Standard UV stabilized sheet for general purpose and thermoforming applications. *Increased UV resistance is available upon special request
PALOPAQUE™ HYG	Hygienic panels with active antimicrobial action, effectively eliminating a wide range of harmful microbes.

Fabrication Tips

PALOPAQUE can be easily fabricated using various techniques. Below are general recommendations for some of them.

Sawing	Machining	Thermoforming	Drilling	Bonding	Welding
For both band and circular saws use blades with a minimum tooth set, and about 8 to 10 teeth per inch. Prevent overheating by feeding slowly.	Use low machining speeds for turning and shaping, and assure free removal of machining chips.	Between 130°C and 170°C PALOPAQUE sheets become formable and can then be formed, press molded or blow formed.	Use conventional drills, but be certain to remove free drill chips in order to avoid overheating of the sheet. Also, use slow rate of penetration.	PALOPAQUE sheets can be bonded with conventional solvent based PVC adhesives.	PALOPAQUE extruded PVC sheets can be welded by hot-air welding process conventionally used for PVC.

Palopaque Typical Physical Properties

Property	Method	Conditions	Units	Value
Density	D-792	-	g/cm ³	1.4
Heat deflection temp	D-648	Load:1.82MPa	°C	65 – 68
Service temperature	-	-	°C	-10 to50
Thermal conductivity	C-177	-	W/mK	0.15
Coefficient of LTE	D-696	-	Cm/cm°C	6.7x10
Rockwell hardness	D-785	-	R Scale	97R
Tensile strength at yield	D-638	10mm/min	MPa	52
Tensile strength at break	D-638	10mm/min	MPa	50
Elongation at yeild	D-638	10mm/min	%	3
Elongation at break	D-638	10mm/min	%	140
Tensile modulus of elasticity	D-638	1mm/min	MPa	2,900
Flexural strength	D-790	1.3mm/min	MPa	80
Flexural modulus	D-790	1.3mm/min	MPa	2,700
Impact falling weight	ISO6603/1	3mm sheet	J	95

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.

Product	Standard	Classification
Palopaque	EN 13501	B, s3, d0
	BS 476/7	Class 0
	ASTM E 84	Class A
Palopaque LS		B, s2, d0