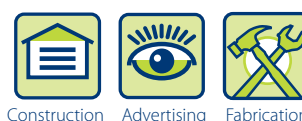# PALIGHT®

Flat Foamed PVC Sheet

Construction   Advertising   Fabrication

▶ Overview

PALIGHT is a lightweight, versatile, flexible, and durable foamed PVC sheet that is ideal for use in advertising and construction. PALIGHT exhibits the whitest color available and was successfully tested by the majority of digital flatbed printer manufacturers. Printers and advertisers may benefit from its constantly smooth and bright surface for producing high quality displays. PALIGHT is easily handled, cut and fabricated using conventional tools and equipment, and can be printed, painted or laminated.

▶ Main Benefits

- Tested and approved for digital printing
- Bright white, smooth and uniform surface
- Available in a wide range of standard and special designer color
- Standard matte or gloss finishes
- Good insulation, lower heat transmission
- Non-toxic
- Flammability: self- extinguishing
- Half the weight of solid PVC sheets
- Same thickness at lower cost
- Good mechanical properties
- Easily worked with conventional tools, prints and paints
- Can be easily bonded, vacuum formed, nailed and bolted
- Low water absorption
- High chemical resistance
- Meet various international standards

▶ Typical Applications

- **Advertising** - Signs, displays, interior decoration, exhibition boards and cladding etc.
- **Construction** - Models, partitions, wall cladding, interior decoration, air conditioning ducts, etc..
- **Industry** - Control cabinets and panels, structures for corrosive environments, ducts, etc.
- **Serigraphy (Screen Printing)** - PALIGHT's flat, consistent surface makes it ideal for screen printing. It is suitable for use with aqueous and solvent-based inks. PALIGHT's sheet surface has low absorption giving excellent ink yield.
- **Digital Printing** - PALIGHT was approved by major digital flatbed printer manufacturers, and is suitable for use with digital inks and UV curing. All 1-10mm white PALIGHT sheets have a bright and smooth surface for true color interpretation.

▶ PALIGHT® Product Range

Product	Description
PALIGHT®	Flat foamed PVC sheet with matte finish, available in a wide range of standard and special designer colors.
PALIGHT® 2001	Flat foamed PVC sheet with glossy hard surface on one side, available in white and standard colors.
PALIGHT® SF	Static-Free foamed PVC sheet for low interference digital printing, available upon special request.

NEW

▶ Standard Dimensions

Specification	PALIGHT® (mm)	PALIGHT® 2001(mm)	
Thickness	1-13, 15, 19, 20, 25	3, 4	White
Dimensions*	1220x2440 1560x3050 2030x3050	1220x2440	White
Color	Colors Standard & Designer Colors	Black, Gray, Red, Blue, Yellow, Green, White	Colors
Thickness	3, 6	3	Colors
Dimensions*	1220x2440 2030x3050	1220x2440	Colors

* Special dimensions are available upon request.

▶ Typical Physical Properties

Property	(ASTM Method)	Conditions	Units	Value
Density	(D-792)		g/cm³	0.55-0.7*
Water Absorption	(D-570)	24 hr. @ 23 °C	%	0.5-0.8**
Flexural Strength at Yield	(D-790)	1mm/min.	MPa	28*
VICAT Softening Temp	(D-1525)	Breme: 1kg	°C	75
Coefficient of Linear Thermal Expansion	(D-696)		cm/cm °C	6.7×10^{-5}
Thermal Conductivity	(C-177)		W/mK	0.06-0.07**
Surface Resistance	(D-257)		Ohm	5×10^{15}
Volume Resistance	(D-257)		Ohm-cm	2×10^{16}

** Results refer to 3mm sheet ** Depending on thickness (3-10mm)*

▶ PALIGHT® Color Chart

Standard Colors			PANTONE®	RAL
	White	ST-10		
	Cream	ST-20	-	9001
	Yellow	ST-30	108U	-
	Bright Yellow	ST-40	1235C	-
	Red	ST-50	1805C	-
	Light Blue	ST-60	2935C	-
	Blue	ST-70	288C	-
	Green	ST-80	3415C	-
	Black	ST-90	4C 2X	9011
	Grey	ST-100	430C	7037

Designer Colors			PANTONE®	RAL
	White DG	DE-11		
	Dark Cream	DE-21	Warm Grey 2C	1013
	Light Yellow	DE-31	102C	-
	Light Orange	DE-41	144U	-
	Orange	DE-51	165C	2004
	Red	DE-61	485C	-
	Dark Red	DE-71	187C	3001
	Pastel Blue	DE-81	277C	-
	Dark Blue	DE-91	2757C	5002
	Turquoise	DE-101	337C	-
	Green	DE-111	348C	6024
	Dark Green	DE-121	3308C	6005
	Dark Grey	DE-131	431C	7012
	Light Grey	DE-141	428C	7074

▶ Flammability

PALIGHT sheets are self extinguishing and comply with the most demanding international fire resistance standards defined in the field of plastics, as indicated by representative results in the attached table.

Standard	Classification*
DIN 4102	B-1
BS 476/7	Class 1
NSP 92501,5	M-1, M-2
UL 94	V-0

*Depends on thickness, type and color.