



PALIGHT®

Flat Foamed PVC Sheet



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 available surface and was successfully tested by the majority of digital flatbed printer manufacturers. Printers and advertisers 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 colors
- Ⓒ Standard matte or gloss finishes
- Ⓒ Good insulation, lower heat transmission
- Ⓒ Non-toxic
- Ⓒ Good 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 graphics, 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.



Standard Dimensions*

| Color | Thickness Availability / Dimensions (mm) | | | |
|--------------|------------------------------------------|-----------|----------------|--|
| | 1220x2440 | 1560x3050 | 2030x3050 | |
| White ST-10 | 1-13, 15, 19, 24, 25, 30 | All | All | |
| Yellow ST-30 | 3, 5 | | | |
| Red ST-50 | 3, 5 | | 3, 5 | |
| Black ST-90 | 3, 5, 10 | 3, 5 | 3, 5, 6, 8, 10 | |
| Blue ST-70 | 3, 5 | | 3, 5 | |
| Green ST-80 | 3 | | | |
| Grey ST-100 | 3, 5 | 3, 5 | 3, 5 | |

* Special dimensions are available upon request.

Product Range

| Product | Description |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| PALIGHT® | Flat foamed PVC sheet with matte finish, available in a wide range of standard and special thicknesses and designer colors. |
| PALFOAM™ | Cost-effective, white only, light weight flat foamed PVC sheet. |
| PALIGHT® Print | Flat foamed PVC sheet made specifically to cost effectively meet the stringent requirements of large format print imaging industry. |
| PALFOAM™ LW | Low weight, white only, flat foamed PVC sheet for general purposes. |

Typical Physical Properties

| Property | ASTM Method | Conditions | Units | Value |
|-----------------------------------------|-------------|----------------|-------------------|----------------------|
| Density | (D-792) | | g/cm ³ | 0.57* |
| 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) | Load: 1kg | °C | 75 |
| Coefficient of Linear Thermal Expansion | (D-696) | | cm/cm °C | 6.7x10 ⁻⁵ |
| Thermal Conductivity | (C-177) | | W/mK | 0.06-0.07** |
| Surface Resistance | (D-257) | | Ohm | 5X10 ¹⁵ |
| Volume Resistance | (D-257) | | Ohm-cm | 2X10 ¹⁶ |

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

Flammability

PALIGHT is self extinguishing and complies 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* |
|-------------|-----------------|
| EN 13501 | B, s1-3, d0 |
| BS 476/7 | Class 1 |
| NSP 92501,5 | M-1, M-2 |
| UL 94 | V-0 |

*Depends on thickness, type and color.

Color Chart

| Standard Colors | Code | PANTONE® | RAL |
|-----------------|--------|----------|------|
| White* | ST-10 | | |
| Red | ST-50 | 1807U | - |
| Yellow | ST-30 | 108U | - |
| Blue | ST-70 | 288C | - |
| Green | ST-80 | 3415C | - |
| Black | ST-90 | 4C | 9011 |
| Grey | ST-100 | 430C | 7037 |

* Whites are divided by thickness: 1-10mm: ST-10 12-25mm: Classic White

| Designer Colors | Code | PANTONE® | RAL |
|-----------------|--------|--------------|------|
| Digital White | DE-11 | | |
| Cream | ST-20 | - | 9001 |
| Antique Cream | DE-21 | Warm Grey 2C | 1013 |
| Smoke Grey | DE-141 | 428C | 7047 |
| Dim Grey | DE-151 | 408C | - |
| Dark Grey | DE-131 | 431C | 7012 |
| Burgundy | DE-71 | 187C | 3002 |
| Cardinal Red | DE-211 | 193C | 3031 |
| Firebrick Red | DE-61 | 485C | - |
| Orchid Pink | DE-221 | 204C | 4003 |
| Orange | DE-51 | 21C | 2004 |
| Blaze Orange | DE-41 | 158C | 2011 |
| Bright Yellow | ST-40 | 1235C | - |
| Lemon | DE-31 | 102C | - |
| Lime green | DE-181 | 390C | - |
| Sea Green | DE-171 | 361C | 6018 |
| Mint Green | DE-111 | 340C | 6024 |
| Olive Green | DE-161 | 378C | - |
| Dark Green | DE-121 | 3308C | 6005 |
| Turquoise | DE-101 | 337C | - |
| Steel Blue | DE-81 | 2707C | - |
| Sky Blue | DE-201 | 7401C | - |
| Light Blue | ST-60 | 2935C | - |
| Royal Blue | DE-191 | 287C | - |
| Sapphire Blue | DE-91 | 2757C | 5002 |