





**PALIGHT**° Flat Foamed PVC Sheet



# Content

Introduction	2
Main Benefits	2
PALIGHT® Product Range	2
Colors	3
Typical Applications	Ζ
Standard Dimensions	8
Flammability	8
Product Masking	8
Typical Physical Properties	Ç
Palram Display Media	Ç

### Introduction

PALIGHT is a lightweight, flexible and durable foamed PVC sheet that is ideal for many advertising and fabrication applications. It brings quality, convenience and versatility to a whole new level on a wide range of applications. PALIGHT exhibits the whitest color available, which results in high quality displays. Tested and approved by most digital flatbed printer manufacturers, PALIGHT has a consistently smooth and bright surface that gives the best color interpretation. PALIGHT is easy to handle, cut and fabricate using conventional tools and equipment, and can be also painted or laminated. PALIGHT is offered with standard matte or glossy finish and is available in a wide range of standard and special designer colors.

### Main Benefits

- Consistent, smooth, flat surface for printing and lamination
- Excellent mechanical properties
- Easy handling, cutting, fabrication and bonding
- Lightweight (half the weight of solid PVC sheet)
- Low water absorption (closed cell structure)
- Flammability self extinguishing
- Good insulation and low heat transmission
- High chemical resistance
- Non-toxic

### PALIGHT® 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.
PALIGHT® Print	Flat foamed PVC sheet made specifically to cost effectively meet the stringent requirements of wide format print imaging industry.
PALIGHT® LW	Low weight, white only, flat foamed PVC sheet for general purposes.
PALIGHT® 2001	Flat foamed PVC sheet with glossy hard surface on one side, available in white and standard colors.



# Colors

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

<sup>\*</sup> Whites are divided by thickness: 1-10mm: ST-10 12-25mm: Classic White

Designer Colors	Code	PANTONE®	RAL
Digital W	/hite DE-11		
Cream	ST-20	-	9001
Antique	Cream DE-21	Warm Grey 2C	1013
Smoke C	Grey DE-141	428C	7047
Dim Gre	y DE-151	408C	-
Dark Gre	y DE-131	431C	7012
Burguno	ly DE-71	187C	3002
Cardinal	Red DE-211	193C	3031
Firebrick	Red DE-61	485C	-
Orchid P	ink DE-221	204C	4003
Orange	DE-51	21C	2004
Blaze Or	ange DE-41	158C	2011
Bright Ye	ellow ST-40	1235C	-
Lemon	DE-31	102C	-
Lime gre	een DE-181	390C	-
Sea Gree	en DE-171	361C	6018
Mint Gre	een DE-111	340C	6024
Olive Gre	een DE-161	378C	-
Dark Gre	en DE-121	3308C	6005
Turquois	se DE-101	337C	-
Steel Blu	ne DE-81	2707C	-
Sky Blue	DE-201	7401C	-
Light Blu	ie ST-60	2935C	-
Royal Blu	ue DE-191	287C	-
Sapphire	e Blue DE-91	2757C	5002

<sup>\*</sup> The printed colors and the indicated PANTONE® and RAL designations are the closest match. The indices are presented only to give an approximate indication. To view the exact color, please request a sample chip from your Palram distributor.

\*\*The designer colors are available in all thicknesses and dimensions stated above. They are subject to a minimum quantity.

# **Typical Applications**

# Advertising

- Lightweight and durable signsDisplays
- Exhibition stands















## **Construction & Industry**

- Industrial models
- Partitions
- Ducting
- Control cabinets
- Lightweight structures for corrosive environments
- Wet or wash down wall finish
- Insulation for control cabinets

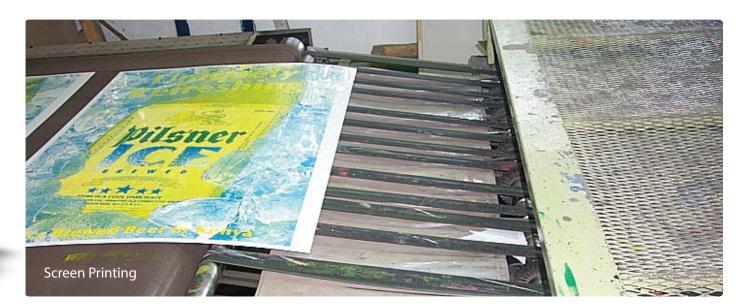






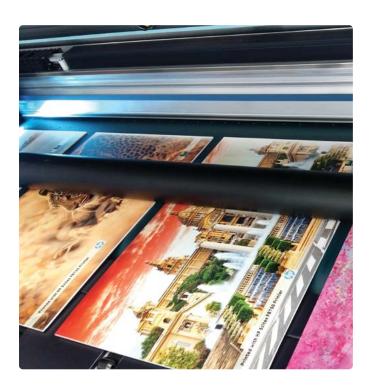
## **Screen Printing**

- Flat, consistent surface is ideal for screen printing.
- Bright white color enables printers to reproduce true colors and achieve greater impact with white space.
- Suitable for use with aqueous and solvent inks.
- Low absorption of sheet surface provides excellent ink yield.



## **Digital Printing**

- Specially designed for digital flatbed printers.
- Combines consistent, flat surface with market-leading quality and thickness control.
- Handling with lint-free gloves during production and optional packaging according to the printer's specific requirements reduce risk of surface contamination and to minimise static.
- Suitable for use with UV curing and solvent-based digital inks, and for heat drying when water-based inks are used.
- Bright white color retains superb whiteness after intense UV curing.









### **Photo Mounting**

- Highly suitable for photo mounting and digital printing lamination due to:Flat and even surface that allows complete lamination.
- Impact strength and ductility that allows cutting by guillotine or knife.
- High rigidity enables the use of large sheets without the need for support.



### **Fabrication**

- Milled and routed letters, logos and other items.
- 3D signage.







## Standard Dimensions\*

### PALIGHT®

Thickness Availability / Dimensions (mm)				
Color	1220x2440	1560x3050	2030x3050	
White	1-13, 15, 19 ,24, 25, 30, 40	All	All	
Yellow	3, 5			
Red	3, 5		3, 5	
Black	3, 5, 10	3, 5	3, 5, 6, 8, 10	
Blue	3, 5		3, 5	
Green	3			
Grey	3, 5	3, 5	3, 5	

<sup>\*</sup> Special dimensions are available upon request.

### PALIGHT® Print

Dimensions (mm)	Thickness (mm)
1,220 X 2,440   1,220 X 3,050	2-10
1,560 X 3,050	2-10
2,030 X 3,050	2-10

<sup>\*</sup> Special dimensions are available upon request. Available in white only.

# Flammability

PALIGHT is self-extinguishing and complies with the most demanding international fire resistance standards in the field of plastics, as indicated in the detailed table herein. The classification is subject to product type, thickness and color.

Standard	Classification*
EN 13501	B, s1-3, d0
BS 476/7	Class 1
NSP 92501,5	M-1, M-2
UL 94	V-0

<sup>\*</sup> For more detailed information please contact your Palram distributor.

# **Product Masking**

PALIGHT has a protective polyethylene film on one side. PALIGHT 2001 has a protective polyethylene film on both sides.



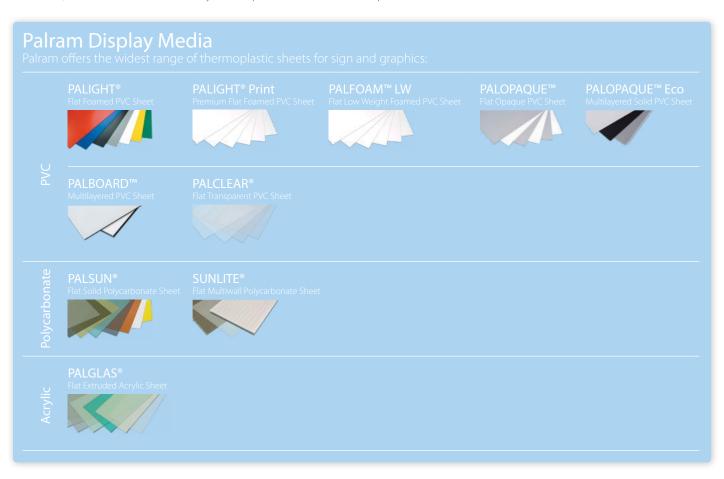




# **Typical Physical Properties**

				3mm (0.12 in.) Sheet	10mm (0.39 in.) Sheet
Property	Conditions (US*)	ASTM Method	Units - SI (US*)	Value (US*)	Value (US*)
Physical					
Density		D-792	g/cm³	0.57-0.6	0.5-0.55
Water absorption	24h @ 23°C (73°F)	D-570	%	0.5	0.8
Mechanical					
Tensile strength at yield	10mm/min (0.4in./min)	D-638	MPa (psi)	16 (1,600)	11(1,600)
Elongation at break	10mm/min (0.4in./min)	D-638	%	30	20
Flexural strength at yield	10mm/min (0.4in./min)	D-790	MPa (psi)	28 (3,200)	22 (3,200)
Flexural modulus	10mm/min (0.4in./min)	D-790	MPa (psi)	900 (130,500)	900 (130,500)
Impact strength notch charpy	23°C (73°F)	D-256	J/m (ft•lb/in.)	29 (0.54)	17 (0.32)
Thermal					
Service temperature			°C (°F)	-10 to 55°C (14 to 131°F)	-10 to 55°C (14 to 131°F)
Heat deflection temperature			°C (°F)	63 (145)	63 (145)
VICAT softening temperature	Load: 1.85MPa (264psi)	D-648	°C (°F)	75 (167)	75 (167)
Coefficient of linear thermal expansion	Load: 11Kg (2.2lb)	D-1525	10 <sup>-5</sup> cm/cm°C	6.7 (3.7)	6.7 (3.7)
Thermal conductivity		D-696	W/mk (Btuin./hrft.²-°F)	0.07 (0.49)	0.07 (0.49)
Electrical					
Surface resistance		D-257	Ohm	5x10 <sup>15</sup>	5x10 <sup>15</sup>
Volume resistance		D-257	Ohm-cm	2x10 <sup>16</sup>	2x10 <sup>16</sup>

<sup>\*</sup>Conditions, units and values in U.S. customary units are presented in the table within parentheses



All marketing materials and any content therewith provided by Palram® are provided solely for the purpose of supporting and enhancing the marketing of Palram® products. These materials are protected by Palram's intellectual property rights and may not be used for any other purpose or in connection with the sale of products of any other manufacturer. These materials may not be transferred to or used by any third party without prior permission of Palram.



#### PALRAM H.Q.

Tel: +972 4 8459900 Fax: +972 4 8444012 palram@palram.com www.palram.com

#### PALRAM EUROPE LTD.

Tel: +44 1302 380777 Fax: +44 1302 380788 sales.europe@palram.com www.palram.com

#### PALRAM AMERICAS

Tel: 610 2859918 Fax: 610 2859928 palramamericas@palram.com www.palramamericas.com



Inasmuch as Palram Industries has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the material's suitability for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Palram Industries patent covering such use or as recommendations for use of such materials in the infringement of any patent. Palram Industries or its distributors cannot be held responsible for any losses incurred through incorrect installation of the material. In accordance with our company policy of continual product development you are advised to check with your local Palram Industries supplier to ensure that you have obtained the most up to date information.

