

# TECHNICAL DATA SHEET

## GF C2 PHOS CUT & CRAFT FILM

2.0 MIL CLEAR POLYESTER  
LIGHT-GREEN PIGMENTED PERMANENT ADHESIVE

C2 Phos is a 2.0 mil photoluminescent polyester film with white permanent acrylic adhesive on a 90# layflat liner. This 'Glow-in-the-Dark' product is designed for indoor safety signage and promotional displays, as well as craft and hobby applications. The film surface has been print treated to accept a variety of UV curable and solvent-based screen inks. C2 Phos may also be used with flexographic, offset, and letterpress inks but should be tested prior to use.

*Note: Check local regulations as Phosphorescent film may not meet state and local codes for use as safety film in your area.*

PRODUCT NAME	C2 PHOS
<b>FILM</b>	
Film Type	Print-Treated Polyester with Phosphorescent coating
Film Thickness (mils/ $\mu$ m)	*4.0-4.5 / 102-114 (+/- 10%) *2 mil clear film with coating
Film Weight (gsm)	150-180
Gloss (60°)	$\geq$ 90
Opacity (%)	97
Tensile Strength (lbs/in)	N/A
Elongation (%)	N/A
Dimensional Stability (FTM 14)	MD $\leq$ 0.00 mm / CD $\leq$ 0.00 mm
<b>ADHESIVE</b>	
Adhesive Type	Solvent Acrylic
Adhesive Thickness (mils/ $\mu$ m)	1.4-1.6 / 36-41
Adhesive Color	White
Peel Strength on Stainless Steel (lbs/in) / (N/25mm) 15 min	3.5 / 15
Peel Strength on Stainless Steel (lbs/in) / (N/25mm) 24 hrs	5.8 / 25
<b>LINER</b>	
Liner Weight (#/gsm)	90 / 145
Liner Type	White 2-sided PE-Coated Kraft
Liner Thickness (mils/ $\mu$ m)	6.7 / 170
Release Force @ 300" / min (g/2")	25-45
<b>PERFORMANCE GUIDANCE</b>	
Application Temperature	$\geq$ +40 °F
Service Temperature	-40 °F to 180 °F
Shelf Life	1 year
Storage Temp / Rel. Humidity	70 °F / 50%
Outdoor Durability	No recommended for outdoor use

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PRODUCT SNAPSHOT	APPLICATIONS	INK TYPE
<p><b>APPLICATION</b></p> <ul style="list-style-type: none"> <li><input type="radio"/> WET APPLY</li> <li><input checked="" type="radio"/> DRY APPLY</li> <li><input type="radio"/> HOT STAMP</li> <li><input type="radio"/> DIE CUTTABLE</li> <li><input type="radio"/> HOT KNIFE</li> <li><input type="radio"/> THERMAL DIE</li> <li><input checked="" type="radio"/> FLATBED CUTTABLE</li> <li><input checked="" type="radio"/> CONTOUR CUTTABLE</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="radio"/> GENERAL SIGNAGE</li> <li><input checked="" type="radio"/> POP/RETAIL</li> <li><input type="radio"/> WALL</li> <li><input type="radio"/> WRAP</li> <li><input type="radio"/> WINDOW</li> <li><input type="radio"/> FLOOR</li> <li><input type="radio"/> TRANSLUCENT</li> <li><input type="radio"/> FLEET</li> <li><input checked="" type="radio"/> INDOOR</li> <li><input type="radio"/> OUTDOOR (SHORT TERM)</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> SOLVENT</li> <li><input type="radio"/> ECO-SOLVENT</li> <li><input type="radio"/> LATEX</li> <li><input checked="" type="radio"/> UV CURABLE</li> <li><input checked="" type="radio"/> THERMAL</li> <li><input checked="" type="radio"/> SCREEN</li> <li><input type="radio"/> OFFSET</li> </ul>
<p><b>SUBSTRATES</b></p> <ul style="list-style-type: none"> <li><input checked="" type="radio"/> OEM PAINTED METAL</li> <li><input checked="" type="radio"/> GLASS</li> <li><input checked="" type="radio"/> POLYESTER</li> <li><input type="radio"/> LOW-ENERGY SURFACES</li> <li><input checked="" type="radio"/> ACRYLIC</li> <li><input type="radio"/> PVC</li> </ul>		

### FAQS

What are the best applications for C2 Phos film?	C2 Phos is a glow-in-the-dark phosphorescent film primarily meant for printed safety signage, craft cut and novelty use.
How does it work?	A simplified answer is that C2 Phos film incorporates a special pigmented ink that absorbs and slowly releases light. This creates the glow feature after exposing the product to a bright light for an extended time.
How long will the glow last?	Afterglow is dependent on the type and amount of light exposure and is shown in the Performance Guidance chart above. The glow will begin to fade over time, but GF C2 Phos is designed to provide illumination for 20-30 minutes following max light exposure.

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## C2 PHOS ADDITIONAL INFORMATION

### LIGHT EXPOSURE DATA

Light Exposure for Maximum Brightness

- Sunlight, Clear 5 minutes
- Sunlight, Cloudy 5 minutes
- Office Fluorescent 15 minutes
- Home Fluorescent 30 minutes

Afterglow Brightness = 20-30 mcd/m<sup>2</sup> (Brightness after 10 min. excitation with D65 illuminant for 5 min @ 1000 lx.)