

THE SPOTLIGHT SERIES

Signage Materials You Can't Miss in the Dark

THE LASER SHOP - NIGHTLITES

These new and improved nightlite glow products are constructed from a non-radioactive chemical light source and are specially engineered from a flexible acrylic substrate that glows in total darkness after exposure to light.

Surface Color / Letter Color	Matte	Gloss
REVERSE ENGRAVABLE (1/16")		
Glow/Clear	NTC-100M	
LASERTHIN GLOW (.020" - 1 PLY) WITH ADHESIVE		
	NT-1050-12/ADH	
FRONT ENGRAVABLE (1/16")		
Black / Glow	NT-1001	
Spectrum Red / Glow	NT-1003	
Navy Blue / Glow	NT-1009	
Teal / Glow	NT-1042	
Plum / Glow	NT-1047	
Gold / Glow		NT-1092
Deep Charcoal Gold Fleck Marble / Glow		NT-1202F
Verde Green Gold Fleck Marble / Glow		NT-1204F

OSHA ACRYFIL PAINT COLORS

IPI now Offers OSHA Safety Paint Colors. The colors included in the kit are: Safety Red, Safety Blue, Safety Green Safety Orange, Safety Yellow, and Safety Purple.

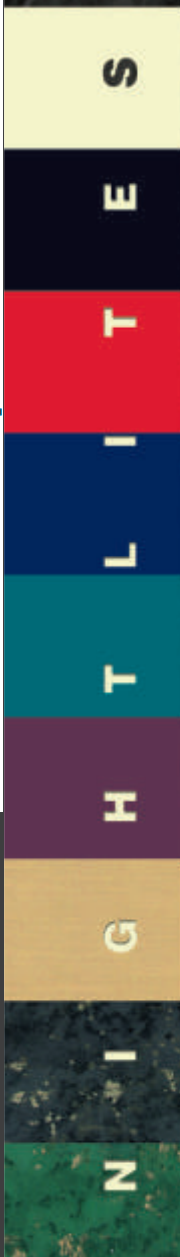
The special polymer acrylic was developed for use specifically with IPI's reverse engraveable materials. Applies smoothly and easily, is self-sealing, non-toxic, and water-based. Mix paints to create custom colors.

Kits available: OSHA Safety, Primary, Designer, and Combo.



IPI'S NIGHTLITES IS APPROVED BY THE MEA.
MEA#: 203-08-M

See the Glow!



NIGHTLITES

New Improved Initial Glow Factor!
Reformulated to meet or exceed most photoluminescent standards for building signage.

An innovative line of engraving materials developed specifically to meet the need for signage and labeling that can be seen in the dark, NIGHTLITES incorporate a non-radioactive chemical light source in a flexible plastic substrate that glows in total darkness after exposure to natural or artificial light. Perfect for exit signs, directionals, identification, evacuation routes, or for creative graphics uses such as logos, posters, numerals, name badges, etc.

Available in 2-ply 1/16" clear/glow reverse surface version, whereby the background glows for optimal visibility, and front surface version in 8 colors and patterns, whereby only the engraved portions glow. Laser and rotary engravable.

And introducing

LASERTHINGLOW

.020 single-ply acrylic with adhesive

Great for vector cutting or for use as a substrate for silkscreening or vinyl letters.

For more information, sample chip charts are available through your IPI distributor.

MATERIAL SPECIFICATIONS



Interior Use



Reverse Engraving



Laser Engrave



Rotary Carbide

MATERIAL: Laminated impact acrylic

SHEET SIZE: 24" x 24"

USAGE: Interior/Exterior Signage

CUTTER: Laser Engrave (Nightlites FRONT surface only) Rotating Carbide
Nightlites FRONT and REVERSE gauge is .060"

GAUGE: Nightlites LaserThin Glow 1-ply w/ adhesive is .020" Nightlites FRONT surface only: .003"
Nightlites reverse surface only: .022"

CUTTING DEPTH: Laser; Saws, Drills; Heat bendable

FABRICATION: Bonds; Hot stamp; Silkscreens; Nightlites FRONT surface only



INNOVATIVE PLASTICS INC.
NEW PERSPECTIVES IN SIGN MATERIALS

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NIGHTLITES NEW AND IMPROVED

GLOW ATTRIBUTES:

- › Glow constructed with a non-radioactive chemical light source.
- › Specially engineered from a flexible plastic component that glows in darkness after charging in light.
- › When Glow is fabricated, the reverse engravable products' background glows as the engraved area can be color filled (back painted) for contrast. IPI recommends using *Acryfil Paint Fill*, a special polymer acrylic developed specially for use with IPI reverse engravable products.
- › Appliqué vinyl letters to both the single-ply version and reverse engravable glow.
- › Glow offers excellent laser and rotary engraving properties.
- › Nightlites New and Improved Glow has been tested by an independent laboratory and meets or exceeds the Photoluminescent standards for DIN, NYC local law 26 of 2004, and other life safety photoluminescent standards.

Nightlites Glow Fabrication Guidelines

Lasering Nightlites Glow Reverse-Engravable & Glow LaserThin w/adhesive:

Nightlites Glow was constructed to make it extremely laser friendly. IPI has administered laser testing of Glow and determined that there are no unique challenges when lasering Glow. Performance is similar to other IPI reverse laserable materials. *IPI recommends for best results: Design files for fabrication using a sans serif font with a character height greater than one inch.*

Vector Cutting Settings:

For best results, leave masking on the material when vector cutting. IPI has achieved favorable vector cutting results at high power and low speed. The settings provided are meant as a guide only. Your settings will need to be adjusted to achieve optimal results.
Settings: 40 Watt laser: 65 Power, 5 Speed -1 Pass.

Raster Lasering LaserGlow:

When raster lasering Glow, IPI suggests, doing one pass "in focus" and a second pass "out of focus." Multiple passes will create a glass like finish, which is more optically clear.

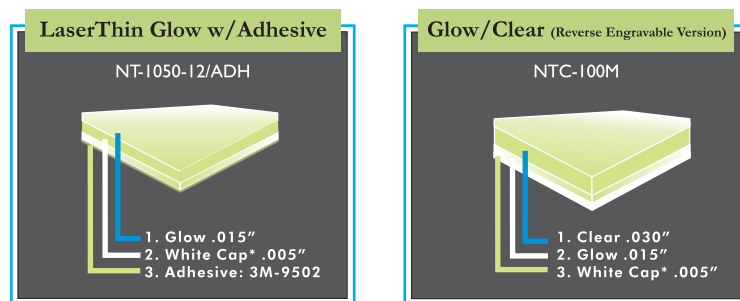
Raster Lasering Settings:

IPI has achieved favorable raster engraving results at high power and medium speed. The settings provided are meant as a guide only. Your settings will need to be adjusted to achieve optimal results. *Settings: 40 Watt laser: 100 Power, 60 Speed - 2 passes.*

Rotary Engraving LaserGlow:

The engraving depth for Glow is .022". Rotary engraving Glow provides clean, crisp edges and sharp graphics. With all rotary engraving, it is recommended that a vacuum system be used to remove debris. This will ensure that the engraving depth is consistent and there is less chance of scratching of the surface during engraving. *IPI recommends for best results: Design files for fabrication using a sans serif font with a character height greater than one inch.*

GLOW SHEET CONSTRUCTION



* The white cap provides a bright, even glow distribution.

GLOW SAMPLE SIGNAGE



Nightlites Glow meets or exceeds the Photoluminescent standards for:

Danish Standard

DIN 67 510 Parts 1-4 -Photoluminescent escape route systems. Excitation of 1000 lux for 5 minutes. At 10 minutes afterglow should be 20 mcd/m², 60 minutes 2.8 mcd/m², and after 340 minutes 0.32 mcd/m². *Nightlites Glow's afterglow luminance (mcd/m²) as compared to the Danish Standard.*

Time to decrease to 0.3mcd/m² min

Time (Minutes)	IPI Glow: .015	DIN Standard	Afterglow (mcd/m ²)	IPI Glow: .015	DIN Standard
10	★ 129	20	.3	★ 1162 minutes (19.36 hours)	340 minutes (5.66 hours)
60	★ 16.6	2.8			

New York City (NYC) Local Law 26

New York City (NYC) Local Law 26 of 2004 in accordance with ISO 17398. All commercial high-rise buildings over 75 feet tall. Excitation of 21.6 lux for 120 minutes.

Time (Minutes)	IPI Glow: .015	New York Standard
10	★ 37.6	30
60	★ 8.8	7
90	★ 5.7	5

International Marine Organization (IMO) Standard

The International Marine Organization (IMO) standard; dealing with Photoluminescent markings on passenger ships carrying more than 35 passengers readings are as follows: Excitation: Fluorescent lamp 25 lx, 24 hours (color temperature 3000K)

Time (Minutes)	IPI Glow: .015	IMO Standard
1	★ 65.6	-
5	★ 39.4	-
10	★ 28	15
15	★ 22.1	-
20	★ 18.4	-
30	★ 13.9	-
40	★ 11.2	-
50	★ 9.4	-
60	★ 8.1	2

★ = Exceeds Photoluminescent Standards