

Technical Data Sheet

Indigo Durable Synthetic Digital Synthetic Paper

	8 mil	10 mil	12 mil
GSM	230	292	345
Basis Weight	85# Cover	108# Cover	128# Cover
Density (g/cm³)	1.21	1.21	1.21
Brightness (T452)	87	87	87
Opacity (T459)	92	95	99
Gloss	5	5	5
Sheffield Smoothness	34	34	34
Melting Point (°C)	166	166	166

Applications and Characteristics:

- Indigo Durable Synthetic is a synthetic paper based on a highly filled polymer substrate. It is coated 2-sides with IndiLuxe pretreatment which lends excellent imaging and toner adhesion.
- Indigo Durable Synthetic has no grain direction.
- Indigo Durable Synthetic is waterproof and greaseproof. Weather resistance depends on location and type of exposure. HP Indigo ElectroInks may require protection of UV coating or lamination depending on the application.

Print Compatibility:

- All thicknesses are RIT certified for use on HP Indigo.
- All thicknesses can be printed on traditional offset or DI presses with fully oxidizing inks designed for synthetic paper substrates. UV curable inkjet printing is also possible. It is not suitable for other inkjet printing applications.

Guidelines for printing and finishing:

Environmental humidity

Make sure that Indigo Durable Synthetic has had ample time to acclimate to your environment before printing. A relative humidity of minimum 45-50% in the press room is recommended.

Offset pre-printing recommendations

Offset pre-printing is possible but should be limited to single color solids and/or 2-color images. In case of 2-color printing, total ink laydown should not exceed 100% (e.g. 30% cyan and 70% yellow is ok). We recommend to not pre-print areas that afterwards need to be HP Indigo printed, since no guarantee can be given on print quality. We recommend using inks that are fully oxidizing and formulated for use on synthetic papers. Please note that oxidizing inks generally will have a stronger tendency to ink set-off. Use ink densities as for uncoated paper, or lower. For black ink, do not exceed density 1.50.

Important: Do not use anti-set-off spray powder as it will contaminate the HP Indigo print engine. Limit printed stack height (maximum 4 inches) and air the stacks a few times after the ink has set to facilitate drying of the ink.

DISCLAIMER: The information provided herein is correct to the best of Nekoosa Coated Products' knowledge. No liability for any errors, facts or opinions is accepted. Customers must satisfy themselves as to the suitability of this product for their application. No responsibility for any loss as a result of any person placing reliance on any material contained herein will be accepted.

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Converting and finishing:

Static adhesion

Static adhesion after printing can make sheet separation and stack alignment difficult. It helps to leave the pile of printed material on a conductive, grounded surface e.g. a metal table for some time to allow static charges to dissipate. Higher environmental humidity also helps to avoid or reduce static problems.

Guillotining

Use sharp and clean blades. Do not cut lifts higher than 2 inches (5 cm). Intermediate spraying on the inside and the outside of the blade with 'dry silicone spray' will facilitate cutting and will extend the life and sharpness of the blade significantly.

Die cutting

Use sharp hard steel blades with rounded inner corners. Avoid inside die-cuts less than or equal to 90 degrees. Keep retention points small and few. The best results are obtained on cylinder type presses. Platen type presses are less suitable especially for complex die cut shapes. Always do a test before deciding to use Indigo Durable Synthetic for a specific die cut job.

Drilling

Use sharp and clean drill bits. Drills have to be free of nicks. Use short dwell times during drilling to eliminate heat generation. Don't drill too high lifts. The best results are obtained with special steel drills coated with Teflon (to prevent sticking). Intermediate spraying on the inside and the outside of the drill with 'dry silicone spray' will facilitate drilling and will extend the life and sharpness of the drill significantly.

Folding and Scoring

All versions of Indigo Durable Synthetic can be folded on a regular folding machine. Cross folding (superimposed or transverse fold) is not recommended. With machine folding, the ridge of the score should be on the outside of the fold. Avoid folds that cause air entrapment, since Indigo Durable Synthetic is not permeable. It is recommended to apply pressure after folding to keep the fold tight.

Hot Foil Stamping & Embossing

Hot foil stamping is possible without modification. Embossing on a cylinder press works well with all Indigo Durable Synthetic weights. On a platen press the pressure and evenness of pressure can be a problem especially with higher Indigo Durable Synthetic weights and more complex embossing forms.

Binding

Indigo Durable Synthetic is a perfect material for Wire-O[®], Unicoil-Spiral[®] and comb binding. Use round holes to avoid tearing. Saddle stitching and perfect binding is possible, but thicker Indigo Durable Synthetic is prone to cause cover gapping on the book spine.

Important: Always do a test before deciding to use Indigo Durable Synthetic for a specific job!

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