

MICHELMAN
DigiPrime®

print receptive solutions for HP Indigo

Labels & Packaging



MICHELMAN®

Michelman, founded in 1949, is a global producer of water-based coatings and print receptive primers for flexible film packaging, paperboard, label stock and corrugated cartons. HP Indigo, as a global leader in high quality digital printing technology, has tested and recommends a broad range of Michelman's DigiPrime® priming solutions that optimize paper and film media to produce the best possible printed output.

Innovation and technology have revolutionized the digital printing industry. HP Indigo regularly offers users new options in presses and application techniques on a wider variety of substrates. Michelman's primer range has also evolved, making it easier for you to take full advantage of the new capabilities offered by Indigo presses.

In-Line Primers

Michelman's primers impart a print receptive surface on the substrate, and improve the ink transfer and adhesion of HP Indigo ElectroInk®

HP Indigo has high capacity presses equipped with integral in-line priming applicators. For some presses, users have the option of an in-line primer applicator to optimize a wide range of substrates just prior to printing. Michelman has developed primers specifically for this equipment and the labels and packaging end uses associated with these presses.

HP Indigo Press	Michelman Primers	Recommended Substrates
WS6000 series	Michem® In-Line Primer 030	designed for label applications
8000 series	DigiPrime® 680	designed for flexible packaging & shrink sleeve applications
	DigiPrime® 022	designed for high performance label applications
	Michem® Clean 1188	cleaning solution for Michem® In-Line Primer 030 priming solution
20000 series	DigiPrime® 050	packaging applications especially for lamination with adhesives
30000 series	DigiPrime® 060	folding carton applications

HP Indigo 30000 Digital Press



HP Indigo 20000 Digital Press



Off-Line Primers

DigiPrime® products are used for a broad array of labels and packaging press applications. Their excellent adhesion to a wide variety of substrates and HP Indigo ElectroInk® offer versatility and security for applications ranging from label printing to flexible packaging.

Michelman's DigiPrime® brand of products provide improved productivity and efficiency for digital printing:

- Environmentally friendly water-based chemistry
- Excellent storage stability with no shelf life or aging issues
- Remains clear and shows no discoloration with time
- Some versions approved for food contact
- Long blanket life and reduced downtime for presses
- Suitable for both commercial and labels & packaging presses

Michelman Primers	Recommended Substrates	Specific Properties	Application Method	Food Contact Suitable
DigiPrime® 2000	uncoated, mottled, semi-gloss and glossy paper grades	general purpose paper	flexo & gravure	●
DigiPrime® 3000	uncoated, mottled, semi-gloss and glossy paper grades, PE	high gloss papers	flexo & gravure	
DigiPrime® 4431	flexible packaging, labels	general purpose paper and plastic substrates	flexo & gravure	●
DigiPrime® 4450	most films and papers	anti-blocking properties	flexo & gravure	●
DigiPrime® 4462	uncoated, semi-gloss, glossy paper grades, and a variety of films	improved water resistance	flexo & gravure	●
DigiPrime® 5000	treated synthetics and soft vinyls	slower drying	flexo & gravure	
DigiPrime® 6611	flexible packaging including most types of film	ideal when corona is not available	flexo & gravure	●

Guidelines for Using Off-Line Primers

In common with most water based coatings, it is necessary to have a corona treatment prior to application to a polymer substrate to allow good wet-out and adhesion. All our coatings are flexography and gravure ready. Please refer to our website for guideline information on using DigiPrime®.

Cleaning

Our DigiPrime® must not be allowed to dry on the anilox. Keep the coater moving, keep the rolls turning and keep the surfaces wet. Use water to wash up.

Coat Weight

On most surfaces, a target coating weight of 1-1.5 GSM wet is recommended; however, if the surface is absorbent and/or textured, higher coat weights may be needed. This must be established by experimentation. Excessive coat weight may result in blocking in the wound roll. Typical anilox specifications and target coat weights are listed in the table below.

To achieve sufficient wet-out on films, it is very important that the surface energy be above 40 dynes/cm. Refresh corona treatment is recommended to obtain optimum wet-out and full adhesion.

Substrate	Target Wet GSM	Anilox Lines/inch	Anilox Lines/cm	Cell Volume BCM	Cell Volume cc/m ²
Films	1.0	400	160	3.9	6
Uncoated Papers	1.5	300	118	5.8	9
Claycoated Papers	1.0 - 1.5	400-300	160-118	3.9-5.8	6-9

In addition to primers, Michelman also offers varnishes for protection and enhancement of the printed image. Please contact us for further details.



Innovating a Sustainable Future with Expert MaterialsSM

As a global developer and manufacturer of environmentally friendly advanced materials for industry, Michelman offers solutions for the coatings, printing & packaging, and industrial manufacturing markets. Motivated by unwavering values, and ingrained with a passion for environmentally conscious innovation, we help companies around the globe establish and achieve their product development goals. With access to Michelman's expert materials resources, a compelling combination of world-class talent and specialty chemistries, our customers are excelling in the diverse range of markets they serve with sustainable and responsible solutions.

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