

HP TIJ 2.5 Ink Guide

Print on a wide range of substrates with
HP Thermal Inkjet Technology



Trust HP industrial printing supplies for a wide range of industrial printing applications—from eye-catching direct mail to high-resolution barcodes, text, or graphics on packaging. HP's wide variety of ink supplies in a range of form factors offer the right solution for your business.

Why Choose HP Specialty Inks?

With over 35 years of experience, HP inks are specifically engineered and tuned to the features of HP genuine print cartridges providing our customers the highest quality products that are guaranteed to work out-of-the-box every time. Each ink is formulated with specific applications and substrates in mind. The breadth of HP inks enables you to print on a wide range of substrates including some of the most challenging films used in the food packaging industry.

Benefits

Flexibility

- Supports a wide variety of porous and non-porous substrates
- Select dpi from 150, 300 to 600 depending on your needs
- Single-use cartridges and bulk ink systems to fit your production needs
- Experience enhanced security, authentication, and accurate supplies data with built-in intelligence of Smart Card

Performance

- High resolution readable bar codes, 2D matrix and QR codes
- Intermittent printing with long decap inks and easy snap in and out design

Quality

- Out-of-the-box, no hassle performance
- Consistent performance every time
- Quality backed and supported by over 35 years of engineering experience

Trusted

- Food packaging GMP compliance supported by industry standard documentation²
- Trust in the HP brand allows customers to confidently choose HP inks for their regulated applications



HP TIJ 2.5 Industrial Ink Guide

This chart provides key highlights for each of the products in the HP TIJ 2.5 Industrial Ink Portfolio.

Product name	Description	Product numbers			
		Single use/IFL*	Bulk supply/IFL*	Bulk print cartridge	Ink cartridge/IFL*
HP 45A Black Ink	<ul style="list-style-type: none"> High-optical density ink Fade- and water-resistant Recommended for uncoated substrates 	CG339A 47 ml B3F38A ¹ 47 ml	C6119A 370 ml W3S88A ¹ 370 ml	Q7456A	Q7457A 400 ml
HP Versatile Black Ink	<ul style="list-style-type: none"> Fast dry time for high-quality, high-speed printing High durability Recommended for coated and uncoated substrates 	C8842A 49 ml FOL36A ¹ 49 ml		Q2320A	Q2321A 400 ml
HP Fast Dry Black Ink	<ul style="list-style-type: none"> Fast dry time for high-quality, high-speed printing Recommended for porous substrates 	C6195A 49 ml W3S87A ¹ 49 ml			
HP 1918 Black Ink	<ul style="list-style-type: none"> Long decap time for reliable intermittent printing on a wide variety of substrates Recommended for coated and uncoated substrates 	Q2344A 48 ml B3F36A ¹ 48 ml			
HP Durable Black Ink	<ul style="list-style-type: none"> Durability, decap, and print quality performance at mid-range print speeds Versatility up to 100 ft/min print speeds Recommended for porous substrates 	CQ849A 50 ml			
HP 2510 Black Ink	<ul style="list-style-type: none"> Dark, high-optical density ink Very long decap time for high-quality, high-speed printing Recommended for porous substrates 	FOL95A ¹ 47 ml	W3S26A ¹ 370 ml		
HP 2520 Black Ink	<ul style="list-style-type: none"> Dark black, high-optical density ink Long decap time for reliable intermittent printing Recommended for uncoated and aqueous coated substrates commonly used in pharmaceutical applications 	FOL69A ¹ 50 ml			
HP 2531 Black Ink	<ul style="list-style-type: none"> Fast-drying for high-speed applications Long decap time for reliable intermittent printing Recommended for certain uncoated, matte, and gloss-coated substrates 	CG378A 50 ml B3F37A ¹ 50 ml			
HP 2580 Black Solvent Ink²	<ul style="list-style-type: none"> Long decap for intermittent printing Excellent durability on pharmaceutical blister foil Recommended to use on other substrates such as UV, foils, PVC GMP food packaging compliant 	B3F58A ¹ 50 ml ³ B3F58B ¹ 47 ml ⁴		FOL89B ¹	FOL91A ¹ 400 ml
HP 2590 Black Solvent Ink²	<ul style="list-style-type: none"> Fast drying ink on films 3-5 secs Excellent durability on untreated BOPP Very good durability on treated films GMP food packaging compliant 	W3T10B ¹ 47 ml ⁵		3UB53B ¹	3UB52A ¹ 400ml
HP Non-fluorescent Red Ink	<ul style="list-style-type: none"> Bright red impact on a variety of substrates, including recycled fibers Meets Universal Postal Union guidelines for color and durability 	C6128A 48 ml		Q2357A	Q2358A 400 ml
HP 2242 Blue Ink	<ul style="list-style-type: none"> Bright blue impact For varied direct mail applications Meets Universal Postal Union guidelines for color and durability 	Q2354A 50 ml		Q2382A	Q2356A 400 ml
HP Spot Blue Ink	<ul style="list-style-type: none"> Dries in less than one second on porous substrates Enables higher customer response rates and simple, easy product identification 	C6170A 48 ml			

* IFL = Ink Fill Level

¹ Smart Carded SKU

² Design and manufacture of HP2580 and HP2590 solvent inks are in compliance with Good Manufacturing Practice: Printing Inks for Food Contact Materials (Rev 4, 2016), published by the European Printing Ink Association (EuPIA). To receive a copy of the Statement of Composition, submit a request through HP SPS customer support request form hp.com/go/spssupport.

³ Average delivered ink is 35 ml (vertical) and 25 ml (horizontal).

⁴ Average delivered ink is 34 ml (vertical) and 31 ml (horizontal).

⁵ Average delivered ink is 34 ml (vertical) and 33 ml (horizontal).

 Dye


 Pigment


Substrate compatibility for HP Aqueous Inks

 Dye

 Pigment









Dry time

 **<5 seconds**
(shortest dry time;
highly recommended)

 **<10 seconds**
(longer dry time;
recommended)

 **>10 seconds**

All dry time values reported without heat assistance.

	HP 45A 	HP Versatile Black 	HP Fast Dry 	HP 1918 	HP Durable Black 	HP 2510 	HP 2520 	HP 2531 
Decap time	4 min	<1 min	4 min	5 min	3 min	>60 min	>60 min	30 min
Uncoated	1.0 OD	1.0 OD	0.9 OD	0.9 OD	0.7 OD	1.0 OD	0.9 OD	0.9 OD
Aq coating	1.1 OD	1.2 OD	1.7 OD	0.9 OD	1.1 OD	1.4 OD	0.9 OD	0.8 OD
Tyvek	0.8 OD	0.8 OD	0.8 OD	0.7 OD	0.7 OD	0.9 OD	0.7 OD	0.6 OD
Gloss coated	1.1 OD	1.2 OD	1.0 OD	1.0 OD	1.0 OD	1.1 OD	1.1 OD	1.0 OD
Varnish coated	0.2 OD	0.9 OD	2.0 OD	0.8 OD	1.4 OD	1.0 OD	0.5 OD	0.4 OD




* OD = Optical Density

Substrate compatibility for HP Solvent Inks

Ink performance may vary based on the substrate source, printing system, and environmental conditions. Test the ink with your application to understand true performance.

Dry time, optical density and durability values are based on HP internal testing methods.

- Dry time measured by timed smear test. Heat assistance may help aqueous inks with long dry time >10 secs
- Durability measured mechanically at 30psi
- Optical density measured by 300x300 dpi for solvent and 600x300 dpi for aqueous inks.

	HP 2580 A 	HP 2580 B 	HP 2590B 
Decap time	24 hours	24 hours	24 hours
Treated BOPP	OD 0.9 High Durability	OD 0.9 High Durability	OD 0.9 High Durability
Untreated BOPP	OD 0.4 Low Durability	OD 0.4 Low Durability	OD 0.7 High Durability
Treated LDPE	OD 0.9 High Durability	OD 0.9 High Durability	OD 1.0 High Durability
Untreated LDPE	OD 0.3 Low Durability	OD 0.3 Low Durability	OD 0.7 Low Durability
PET	OD 1.00 High Durability	OD 1.0 High Durability	OD 1.1 High Durability
UV COAT	OD 0.9 High Durability	OD 0.9 High Durability	OD 0.8 High Durability
Coated blister foil	OD 1.6 High Durability	OD 1.6 High Durability	OD 1.8 High Durability

* OD = Optical Density

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