Data sheet

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

- FCM suitability with GMP for food packaging supported by industry standard documentation[2]
- 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	• 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	• Fast dry time for high-quality, high-speed printing • High durability • Recommended for coated and uncoated substrates	C8842A 49 ml F0L36A[1] 49 ml		Q2320A	Q2321A 400 ml
HP 1918 Black Ink	• 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 2510 Black Ink	• Dark, high-optical density ink • Very long decap time for high-quality, high-speed printing • Recommended for porous substrates	F0L95A[1] 47 ml	W3S26A[1] 370 ml		
HP 2520 Black Ink	• 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	F0L69A[1] 50 ml			
HP 2531 Black Ink	• 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 Ink[2]	• Long decap for intermittent printing • Excellent durability on pharmaceutical blister foil • Recommended to use on other substrates such as UV, foils, PVC • FCM suitability with GMP for food packaging[2]	B3F58A[1] 50 ml[3] B3F58B[1] 47 ml[4]			
HP 2590 Black Solvent Ink[2]	• Fast drying ink on films 3-5 secs • Excellent durability on untreated BOPP • Very good durability on treated films • FCM suitability with GMP for food packaging[2]	W3T10B[1] 47 ml[5]			
HP 2600 Black Solvent Ink[2]	• Consistent dry time of less than 3 seconds • Superior durability on untreated PE (CCL, Blueridge) • Outstanding durability on PVC • Good durability on other types of films • Dependable print quality over the life of the cartridge	3UB79B 47 ml			
Hp Non-fluoresennt Red Ink	• 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	• 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	• 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] HP Food Contact Material (FCM)-suitable inks are designed and manufactured in accordance 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 a Statement of Composition document for an FCM-suitable ink, contact an HP SPTS Sales Representative
[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

Dye

Pigment

Dry time

<3 seconds
(shortest dry time; highly recommended)

>3 seconds, < 5 secound
(longer dry time; recommended)

>10 seconds

All dry time values reported without heat assistance.

Substrate compatibility for HP Aqueous Inks

	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

	HP 2580 A	HP 2580 B	HP 2590	HP 2600
Decap time	24 hours	24 hours	24 hours	15 minutes
Treated BOPP	OD 0.9 High Durability	OD 0.9 High Durability	OD 0.9 High Durability	OD 0.8 High Durability
Untreated BOPP	OD 0.4 Low Durability	OD 0.4 Low Durability	OD 0.7 High Durability	OD 0.8 High Durability
Treated LDPE	OD 0.9 High Durability	OD 0.9 High Durability	OD 1.0 High Durability	OD 0.8 High Durability
Untreated LDPE	OD 0.3 Low Durability	OD 0.3 Low Durability	OD 0.7 Low Durability	OD 0.7 High Durability
PET	OD 1.0 High Durability	OD 1.0 High Durability	OD 1.1 High Durability	OD 0.8 High Durability
UV COAT	OD 0.9 High Durability	OD 0.9 High Durability	OD 0.8 High Durability	OD 0.7 High Durability
Coated blister foil	OD 1.6 High Durability	OD 1.6 High Durability	OD 1.8 High Durability	OD 1.1 High Durability

* OD = Optical Density

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.

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4AA0-0173ENW, January 2025. Rev 8

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