

FIBER & TEXTILE AUXILIARIES

SYNTRAJET T

Pigment inks for textiles



ZSCHIMMER & SCHWARZ

SYNTRAJET T

PIGMENT INKJET INKS FOR TEXTILES

Zschimmer & Schwarz provides industrial textile pigment inks and consulting for manufacturers and integrators of printers, accessory retailers as well as for brand owners. Our SYNTRAJET T range is universally applicable and offers ready-to-use printing solutions for a variety of textile fibers such as cotton, polyester, blends or special materials. Our inks guarantee an easy, short and eco-friendly process and thus offer a decisive advantage. They are designed for direct printing on textiles and combine a reliable printing performance with easy handling and cleaning. Zschimmer & Schwarz inks are fully compatible with standard industrial piezo-electric printheads and drying technologies.

Our wide range of color shades impresses with high color brilliancy as well as outstanding fastness to washing and rubbing. To support our customers, we offer full-service ink and inkjet process consulting, ink development and manufacturing of tailor-made inkjet inks.

BENEFITS

- ▶ One ink for different substrates (cellulosics, blends cellulosics/polyester, polyester, polyamide, aramide and special materials such as glass fibers or genuine and artificial leather)
- ▶ Compliant with GOTS and STANDARD 100 by OEKO-TEX®
- ▶ No priming on cellulosics required (additional priming possible to improve depth of shade, brilliancy and contour sharpness)
- ▶ Reliable printing performance, easy handling and cleaning
- ▶ Outstanding lightfastness
- ▶ Outstanding fastness to washing (even after 25 washes at 60 °C)
- ▶ Excellent rub fastness
- ▶ Soft touch compared to competitor pigment inks
- ▶ Available for printheads from manufacturers like Kyocera, Epson, Fujifilm Dimatix, Konica Minolta, Ricoh or Seiko
- ▶ Excellent ink dispersion stability with a shelf life of up to 12 months



CHARACTERISTICS OF THE SYNTRAJET T RANGE

► **Color vibrancy**

Capability to create vibrant and enduring colors on fabrics, ensuring that designs maintain their boldness and vibrancy even with repeated washing

► **Environmental friendliness**

Eco-friendly formulations, low in VOCs (volatile organic compounds) and free from harmful chemicals for environmentally conscious consumers and businesses

► **Fastness properties**

Excellent color fastness properties, including resistance to washing, sunlight exposure and abrasion, ensuring that printed designs remain sharp and vibrant even under harsh conditions

SYNTRAJET T INKS ARE MARKED BY THEIR VERSATILITY

AVAILABLE FOR A WIDE RANGE OF PRINTHEADS

- Low viscosity (3–4 cps)
- Medium viscosity (6–8 cps)
- High viscosity (10–12 cps)

MARKET SEGMENT

- Garment
- Home textiles
- Home furnishing

APPLICATION

- RTR (Roll-to-Roll)
- DTG (Direct-to-Garment)

COMPLEMENTARY PRODUCTS

- Primer T01
- Cleaner T

SYNTRAJET T INK PRODUCTS

VISCOSITY

PRODUCT

COLOR RANGE

Low viscosity (3–4 cps)

SYNTRAJET TL 01

Medium viscosity (6–8 cps)

SYNTRAJET TM 01

High viscosity (10–12 cps)

SYNTRAJET TH 01

SYNTRAJET TH 02

Black	Cyan	Magenta	Yellow	Red	Orange	Violet	Green	Blue	Light Cyan	Light Magenta	White
●	●	●	●	●	●	●	●	●*			
●	●	●	●	●	●	●	●	●*			
●	●	●	●	●	●	●	●		●		
●	●	●	●	●	●		●	●	●	●	●*



INDUSTRIAL PIGMENT INK MANUFACTURING

- ▶ Industrial inkjet ink manufacturing since 2012
- ▶ Close cooperation with printhead suppliers, integrators and printer manufacturers
- ▶ Backward integration: large-scale pigment milling, dedicated dispersants and dispersing technologies
- ▶ State-of-the-art lab and production facilities
- ▶ Lab2Fab-scale ink manufacturing capacities
- ▶ In-process quality control for highest batch-to-batch consistency
- ▶ In-house compliance capabilities

PROPERTIES OF SYNTRAJET T

	SYNTRAJET TL 01	SYNTRAJET TM 01	SYNTRAJET TH 01	SYNTRAJET TH 02
Viscosity mPa*s @ 25 °C	4.0 – 5.0	6.5 – 7.5	10.5 – 11.2	10.5 – 11.2
Surface tension mN/m @ 25 °C	33 – 35	33 – 35	33 – 35	33 – 36
Density g/l	1.05 – 1.15			
pH	7 – 8			
Jetting temperature	25 to 32 °C (depending on specific setup)			
Shelf life (under recommended storage conditions)	12 months			

SYNTRAJET: FASTNESSES AND RESULTS

FASTNESS	SPECIFICATION	
Rub fastness	ISO 105-X12 DRY	≥ 4 of 5
	ISO 105-X12 WET	≥ 3.5 of 5
Wash fastness	AATCC61 at 70 °C, shade change	5 of 5
	Washing machine, 10 × 60 °C, shade change	5 of 5
Perspiration fastness	ISO 105-E04 Alkaline	5 of 5
	ISO 105-E04 Acid	5 of 5
Light fastness	XE Lamp, 72 h	8 of 8



SYNTRAJET T IS SUITABLE FOR:

PRINTHEAD MANUFACTURER	PRINTHEAD MODEL	SYNTRAJET TL (3–4 CPS)	SYNTRAJET TM (6–8 CPS)	SYNTRAJET TH (10–12 CPS)
Fuji Dimatix				
	Dimatix Samba	▲		
	Dimatix StarFire SG1024			▲
Epson				
	D3000-A1R		▲	
	F1440-A1	▲*		
	I3200-(4)-A1/I1600-A1	▲*		
	I3200-(8)-A1HD	▲		
	L1440-A1	▲*		
	S800-A1	▲		
	S3200-A1	▲		
	S3200-A3		▲	
Konica Minolta				
	KM512i		▲	
	KM1024iSAE-C	▲	▲	
	KM1024iMAE-C	▲	▲	
	Panasonic (UH-HA810)		▲	
	Panasonic (UH-HA820)		▲	
Kyocera				
	KJ4B-0300		▲*	
	KJ4B-EX600		▲*	
	KJ4B-QA		▲*	
	KJ4B-YH		▲*	
Ricoh				
	Gen 4 (MH2420)			▲*
	Gen 4L (MH2620/2820)			▲*
	Gen 5E (MH5421/5441)			▲*
	Gen 5F (MH5421F)			▲*
	Gen 5MF (MH5421MF)		▲	
	Gen 6 (MH5320)			▲*
	GH2220		▲	
	TH5241			▲
	TH6310F			▲
Seiko				
	SII Printek 508GS			▲
	SII Printek RC1536			▲
	SII Printek RCE2560		▲*	
Xaar				
	5601		▲	
	Nitrox GS6			▲
	Nitrox GS12			▲

* Performance tested internally and externally



Chemistry tailor-made

► **Zschimmer & Schwarz**
Mohsdorf GmbH & Co. KG
Chemnitztalstrasse 1
09217 Burgstaedt | DE
T +49 3724 67-0 | F +49 3724 67-209
info.zsm@zschimmer-schwarz.com
zschimmer-schwarz.com

Zschimmer & Schwarz
GmbH & Co KG Chemische Fabriken
Max-Schwarz-Strasse 3-5
56112 Lahnstein | DE
T +49 2621 12-0 | F +49 2621 12-407
info@zschimmer-schwarz.com
zschimmer-schwarz.com

Zschimmer & Schwarz
España, S.L.U.
Ctra. CV-20, km. 3,200. Apdo. 118
12540 Vila-real (CS) | ES
T +34 964 626 365 | F +34 964 626 092
info.zse@zschimmer-schwarz.com
zschimmer-schwarz.es



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