



TECHNICAL CONTROL



**WATERBORNE
PUD**

**FOR
TEXTILE PRINTING**

Sustainable Textile Printing Solutions

Low-carbon green transformation becomes a global consensus and action, in this context, the textile industry is seeking different solutions for sustainable development transformation. Through monitoring industry trends and improving production processes, our product team is dedicated to employ low-carbon raw materials to develop products and provide green material solutions while maintaining their high performance.

Technical Control has developed a series of environmentally friendly solutions for textile printing to support the sustainable development of the industry. The high performance waterborne polyurethane resin developed by Technical Control can be used in the preparation of shoe screen printing ink, plastisol inks, waterborne textile inkjet printing ink, etc. It has excellent adhesion and washability on substrates such as cotton, denim, nylon, Lycra.

Technical Control is committed to providing high-quality waterborne polyurethane for formulators. Given different substrate coating and performance requirements, our product team can promptly adjust product properties according to the downstream application demands such as elasticity, softness, washability, abrasion resistance, gloss etc., can be fine-tuned to meet complex formulation requirements.

Aliphatic Waterborne Polyurethane

Product Code	Product Type	Ionicity	Co-solvent	Solvent Content (%)	Solid Content (%)	Elongation at Break (%)	Tensile Strength (MPa)	Modulus 100% (MPa)	Application
* PU 104	Polyether	Anionic	NEP	4	40±1	700	28	5	Pigmented inks for printing inks on shoes
* PU 105	Polyether	Anionic	NEP	4	40±1	800	19	4	Pigmented inks for textile printing paste and glossy topcoat
PU 109	Polyether	Anionic	Acetone	<0.5	35±1	600	48	6	Pigmented inks for textile printing and glossy paste
PU 159D	Polyether	Anionic	DMM	4	35±1	600	54	12	High-glossy coatings for printing inks on shoe uppers or garments
PU 168D	Polyether	Anionic	DMM	4	40±1	700-900	30	6	Soft, high gloss and high fullness
PU 206D	Polyester	Anionic	DMM	6	40±1	400-600	46	8.3	High-glossy coatings with good adhesion
● PU 281	Polyether	Anionic	Acetone	<0.5	50±1	600-800	33	3	Primer for shoe upper screen printing inks, soft, easily to achieve thickness
PU 282	Polyether	Anionic	Acetone	<0.5	50±1	700-900	19	2.8	Primer for shoe upper screen printing inks, soft, easily to achieve thickness
PU 283	Polyester	Anionic	Acetone	<0.5	50±1	900-1100	11	1.2	Soft, good elasticity
PU 284	Polyester	Anionic	Acetone	<0.5	50±1	800	20	2.3	Primer for shoe upper screen printing inks, soft, easily to achieve thickness
PU 286A	Polyether	Anionic	Acetone	<0.5	55±1	900-1100	19	2	Soft, good elasticity, excellent dispersibility with titanium dioxide
PU 287	Polyester	Anionic	Acetone	<0.5	60±1	700-900	15	2.3	Soft, good elasticity, excellent dispersibility with titanium dioxide
PU 288	Polyether	Anionic	Acetone	<0.5	60±1	700-900	20	2	Primer
PU 304	Polyester	Anionic	Acetone	<0.5	50±1	800	32	4	Waterproof nylon cloth, umbrella cloth
PU 6232	Polyether	Anionic	Acetone	<0.5	35±1	30	500	22	High gloss, abrasion resistance, anti-sticky, high strength
PU 6261	Polycarbonate	Anionic	Acetone	<0.5	35±1	25	300	25	High gloss, abrasion resistance, anti-sticky, high strength
PU 6265	Polycarbonate	Anionic	Acetone	<0.5	35±1	30	400	28	High gloss, abrasion resistance, anti-sticky, high strength
PU 631	Polycarbonate	Anionic	Acetone	<0.5	35±1	350-550	30-40	8-15	Soft, abrasion resistance
PU 633	Polycarbonate	Anionic	Acetone	<0.5	35±1	400-550	45-55	4-6	Soft, abrasion resistance

● Bluesign® certified product
* Products not available in Europe market



Aliphatic Waterborne Polyurethane

Product Code	Product Type	Ionicity	Co-solvent	Solvent Content (%)	Solid Content (%)	Elongation at Break (%)	Tensile Strength (MPa)	Modulus 100% (MPa)	Application
● PU 822A	Polyether	Anionic	\	\	32±1	\	\	\	Matt topcoat
PU 823	Polyether	Anionic	\	\	32±1	\	\	\	Matt topcoat
WELLPUR FF 18D	Polyester	Cationic	DMM	5	30±1	200	\	\	Pre-treatment for textile inkjet printing

Water-based Thickener

Product Code	Chemical Type	Solid Content (%)	Viscosity 25°C(mPa.s)	Solvent	Solvent Content (%)	Features
● PT-20	HEUR	20±1	7000-20000	Water	\	A newtonian polyurethane rheology modifier, gives the formulation excellent levelling and flow.
PT-25	HEUR	25±1	1000-2000	Water	\	Medium to high shear, APEO free. It is suitable for thickening on topcoats.
PT-66	HEUR	40±1	1800-6000	BCS	23±1	Low to medium shear, APEO free. It provides a good balance between thickening efficiency, levelling and gloss.
● PT-67	HEUR	40±1	4000-10000	DB	23±1	Low to medium shear, APEO free. It provides a good balance between thickening efficiency, levelling and gloss.
PT-68	HEUR	40±1	1000-5000	BCS	20±1	Medium to high shear, APEO free. It provides a good balance between thickening efficiency, leveling and gloss.

Water-based Crosslinker

Product Code	Ingredient	Active Content (%)	Solvent	Solvent Content (%)	Viscosity 25°C(mPa.s)	NCO Content (%)
Isolink S100	Isocyanate	100	\	\	1500-4000	17.5±0.5
Isolink S200	Isocyanate	100	\	\	2000-5000	20.5±0.5
● Carbolinker D30	Carbodiimide	30	Water	70	≤100	\
● Carbolinker D40	Carbodiimide	40	Water	60	50-300	\
● Carbolinker D50	Carbodiimide	50	DPM	50	200-600	\
● Carbolinker D60	Carbodiimide	60	DPM	40	200-600	\
Isolink FF	Blocked Isocyanate	40	Water	60	300-500	* 4.5±0.2
Isolink PCI	Blocked Isocyanate	40	DPM/Water	5/55	300-600	* 4.5±0.2
Poly-azilink A50	Polymeric Aziridine	50	DMM	50	20-500	\
Poly-azilink A60	Polymeric Aziridine	60	DPM	40	500-3500	\

● Bluesign® certified product



* Calculation based on theoretical data





Reliable Innovative Eco-Friendly

Contact Us

Headquarters

Technical Control Ltd.

Flat 501-502, 5/F China Shipbuilding Tower, 650 Cheung Sha Wan Road, Kowloon, Hong Kong SAR, China

Tel: +852 3583 2341

Fax: +852 2407 6945

Email: info@techcrl.com

Production Site

Technical Control Environmental Material (Shaoguan) Co., Ltd

No.7, Gantang Nine Road, Gantang Avenue South, Xi Lian Town, Wu Jiang District, Shaoguan, Guangdong Province, China

Tel: +86 751 8130066/8130060

Email: info.tcs@techcrl.com

Business Center | R&D Center

Dongguan Technical Control New Material Co. Ltd.

BC: Flat 304, 3/F, Blk B8, Songshan Lake Intelligent Valley, Liaobu Town, Dongguan, Guangdong Province, China

R&D: 18/F, Blk B3, Songshan Lake Intelligent Valley, Liaobu Town, Dongguan, Guangdong Province, China

Tel: +86 769-82637091/82637092

Email: info.tcdg@techcrl.com



WeChat



Channels



Rednote



Douyin



www.techcrl.com

member of D&A Group