

# TECHNICAL CONTROL

# WATERBORNE PUD FOR PRINTING INK

# **Eco-friendly Solutions for Printing Industry**

Technical Control provides advanced solutions for the printing industry, aiming to fulfil the customers' needs for the performance and aesthetic of products. In the context of sustainable development, waterborne PUD has widely used in paper and film printing, suitable for gravure printing inks or flexographic printing inks for OPP, PET and PVC films etc.

Our products are featured with outstanding physical properties such as good adhesion, excellent wetting and leveling, quick drying time, and excellent anti-adhesion. It can be widely used in surface printing of food packaging and other packaging materials.

Matt coating as surface treatment has become the mainstream of the market. Many printing products are treated with matt finish which gives them a more textured look. Given the different needs of water-based matt PU in various market applications, furthermore, TC adopts the most cutting-edge technology and our R&D team modified the matt PU according to the requirements of specific industries to further enhance the performance of the products. Matt PU developed by TC provides rubbery feel and soft touch and can be used for top coat matting agent on a variety of substrates.

Product Code	Product Type	lonicity	Co- solvent	Solvent Content (%)	Solid Content (%)	Viscosity 25°c (Mpas)	TPU	PVC Film	OPP Film	PET Film	Overprint Vanish	Specialty Paper
PU 104	Aliphatic	Anionic	NEP	4	40±1	<400			٠		•	٠
PU 105	Aliphatic	Anionic	NEP	4	40±1	<600			•		•	٠
PU 161	Aliphatic	Anionic	Acetone	<0.5	40±1	<100				٠		
PU 162	Aliphatic	Anionic	Acetone	<0.5	35±1	<60	•	•	•	٠		
PU 165	Aliphatic	Anionic	Acetone	<0.5	35±1	<100			•	٠		
PU 150	Aliphatic	Anionic	$\backslash$	$\setminus$	35±1	<100	•	•	•	٠		
PU 206	Aliphatic	Anionic	NEP	6	40±1	<100	•	•	•	٠		
PU 611	Aliphatic	Anionic	NEP	8	32±1	<60				٠	•	
PU 612	Aliphatic	Anionic	NEP	8	32±1	<60				٠	•	
PU 615A	Aliphatic	Anionic	DEF	4	30-32	<120		•	•	٠	•	
PU 621	Aliphatic	Anionic	NEP	4	25±1	<50	٠	•	•	۲	•	٠
PU 623A	Aliphatic	Anionic	Acetone	≤1	35±1	<120	٠	•		٠	•	
PU 638	Aliphatic	Anionic	Acetone	≤1	35±1	<60	٠	•	٠			
PU 639	Aliphatic	Anionic	NEP	4	35±1	<200	٠	•	•			
PU 650	Aliphatic	Anionic	\	\	28	<25			•	٠	•	
PU 653	Aliphatic	Anionic	NEP	6	35±1	<100	•	•	•	٠	•	•
PU 661	Aliphatic	Anionic	DMM	8	35±1	<100	٠	•		۲	•	
PU 672	Aliphatic	Anionic	NEP	8	35±1	<100	•	•		٠	•	
PU 677	Aliphatic	Anionic	MEK	<0.5	35±1	<50	•	•	•	٠	•	
PU 816C	Aliphatic	Anionic		\	32±2	600-1500	•	•	٠	٠	•	•
PU 822	Aliphatic	Anionic			32±1	400-1200	•	•	٠	٠	•	•
PU 8501F	Aliphatic	Anionic			32±1	400-1200	•	•	•	٠	•	•
UV-PUD 201	Aliphatic	Anionic	\	\	35±1	<100					•	•

# Waterborne Polyurethane

vax Emulsion									
Product Code	Ingredient	Appearance	Gloss	Solid Content (%)	Melting Point (°c)	рН			
WAX-100	Carnauba Wax	Beige Emulsion	Matt	30±1	84	8-10			
WAX-101	Carnauba Wax	Dark Brown Emulsion	Glossy	30±1	84	8-10			
WAX-102	Carnauba Wax	Light Grey Emulsion	Medium-glossy	30±1	84	8-10			
WAX-200	Fischer-Tropsch	Milky White Emulsion	Matt	25±1	105	10-12			
WAX-201	Fischer-Tropsch	Milky White Emulsion	Glossy	25±1	105	10-12			
WAX-400	PE	Milky White Emulsion	Matt	40±1	120-125	8-10			
WAX-401	PE	Light Transluscent Emulsion	Glossy	35±1	137	6-8			

# **Wax Emulsion**

# Water-based Thickener

Product Code	Chemical Type	Solid Content (%)	Viscosity 25°c(Mpas)	Solvent	Solvent Content (%)	
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.

# Water-based Crosslinker

Product Code	Ingredient	Active Content (%)	Solvent	Solvent Content (%)	Viscosity 25°c(Mpas)
Isolink D70	Isocyanate	70	DMM	30	≤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
Isolink PCI	Blocked Isocyanate	40	DMM/Water	5/55	300-600
Poly-azilink 50	Polymeric Aziridine	50	Proglyde DMM	50	20-500





# **Inspire Infinite Creativity**

# **Contact Us**

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