



# *WATERBORNE* POLYURETHANE DISPERSIONS



## ABOUT US

We are bonding sparkling ideas with our chemistry. We are standing for reaching these bonds into their potential with high performance.

For this purpose, we imagine being a platform where each driven solution is created with all our stakeholders. Our toolbox is full of commitment and empowerment to encourage ideas put into practice.

The story of Vynax is based on an intrapreneurship project. Our aspiration comes from those striving and beyond. We are inspired by hydrogen bonding.



Our business is based on urethane chemistry particularly and so on.  
Each product has a story, *welcome on board!*

Vynax for:

**#textile # synthetic leather&leather #general&industrial coatings  
#printing #inks&adhesive #urethane solutions**





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# TEXTILE & SYNTHETIC LEATHER





# Textile & Synthetic Leather

Product Name	Type	Ionicity	Non-Volatile Content By Weight % (105°C)	Appearance	pH (23°C)	10
PUD 101	Aliphatic Polyester	Anionic	40±2	Milky Liquid	8±1	
PUD 102	Aliphatic Polyester	Anionic	40±2	Milky Liquid	8±1	
PUD 103	Aliphatic Polyether	Slightly Cationic	27±1	Translucent Liquid	5±1	
PUD 104	Aliphatic Polycarbonate	Anionic	40±2	Milky Liquid	8±1	
PUD 105	Aliphatic Polyether-ester	Anionic	43±2	Milky Liquid	7,5±1	
PUD 120	Aliphatic Polyether	Weak Cationic	28±1	Translucent Liquid	4,7±0,4	
PUD 121	Aliphatic Polyester	Anionic	40±2	Milky Liquid	8±1	
PUD 122	Aliphatic Polyester	Anionic	40±2	Milky Liquid	8±1	
PUD 123	Aliphatic Polyether-ester	Anionic	50±2	Milky Liquid	7,5±1	
PUD 127	Aliphatic Polycarbonate-ester	Anionic	40±2	Milky Liquid	8±1	



Ref: ASTM  
D2369-07



Ref: ISO 976

DPGDME: Dipropylene Glycol Dimethylether  
MFFT: Minimum Film Formation Temperature  
NDA: No Data Available

Film Properties

s)	100% Modulus (MPa)	Tensile Strength at Break (MPa)	Elongation at Break (%)	MFFT (°C)	Light Fastness (8 scale)	Co-solvent	Key Properties
	1,8	15	>1000	<0	7	free	high elasticity, transparent, gloss and very soft film properties, good pilling and abrasion resistance for textile solutions with good hand feel
	2,0	18	>1000	<0	8	free	good chemical resistance in garment wash elasticity
	*	*	*	NDA	*	free	thermoreactive, self-crosslinking, low molecular weight, for hydrophilic finishes
	10	24	>300	<0	8	DPGDME	PVC free Eco solution rubbery touch, high gloss and hard film properties, good candidate for flame retardant formulations
	2,5	15	>1000	<0	8	free	water column properties with washing resistance under hydrostatic water pressure, transparent coating, soft touch elastic film properties, foamable
	*	*	*	NDA	8	free	easy to formulate with other finishing materials, thermo-reactive, self-crosslinking, low molecular weight, for hydrophilic finishes, moisture management agent
	2,0	18	>1000	NDA	8	free	gloss, shiny effect coating, elastic film properties, foamable
	2,0	18	>1000	NDA	8	free	performance enhancer for anti-cracking properties on flatted design pigment printing, deep colored
	2,2	20	>1000	<0	8	free	water column properties for a hollow structured woven fabric under hydrostatic water pressure, transparent coating, soft touch elastic film properties
	2,5	23	>650	<0	8	free	transparent medium hard coatings, enhance breathable water resistance coatings, good candidate for flame retardant formulations

Ref: ASTM D-1708-18 (films are dried @ RT) N/mm2

Ref: ASTM D2354

Ref: ISO 105-B02

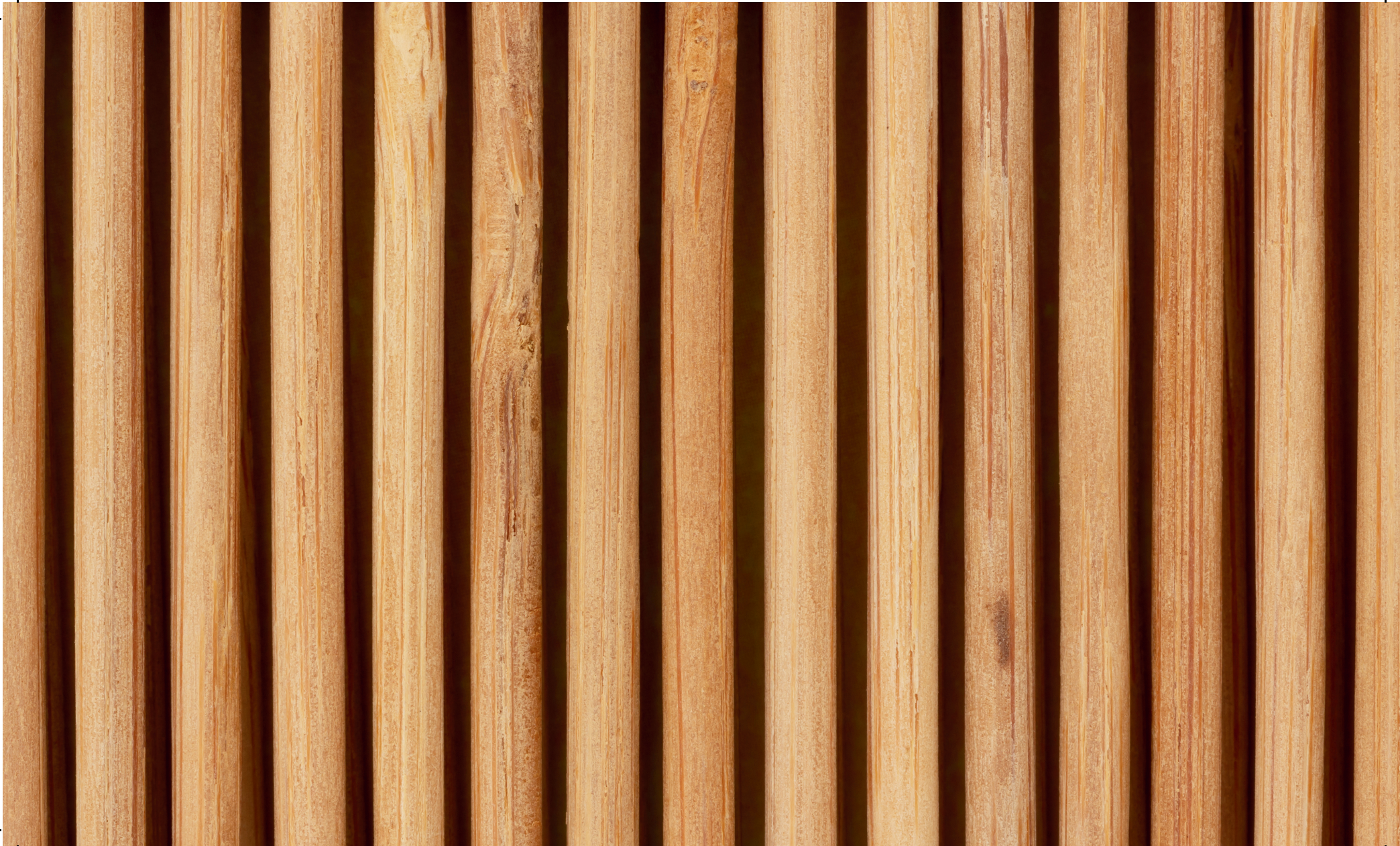




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# COATING







# General & Industrial Coating

Product Name	Type	Ionicity	Non-Volatile Content By Weight % (105°C)	Appearance	pH (23°C)	
PUD 303	Aliphatic Polycarbonate	Anionic	40±2	Milky Liquid	8±1	
PUD 307	Aliphatic Polycarbonate-ester	Anionic	40±2	Milky Liquid	8±1	
PUD 308	Aliphatic Polyester	Anionic	40±2	Milky Liquid	8±1	
PUD 309	Acrylic-Urethane	Anionic	50±2	Milky Liquid	8±1	

Ref: ASTM D2369-07

Ref: ISO 976

DPGDME: Dipropylene Glycol Dimethylether

MFFT: Minimum Film Formation Temperature

NDA: No Data Available





## Film Properties

## Surface

100% Modulus (MPa)	Tensile Strength at Break (MPa)	Elongation at Break (%)	MFFT (°C)	Light Fastness (8 scale)	Co-solvent	Wood	Metal	Glass	Ceramic	Concrete	Paper	Plastic	Key Properties
12	25,5	<300	<0	8	DPGDME	✓		✓		✓			high gloss, transparent and hard film properties good solvent resistance, good for waterproof solutions
2,8	24	>600	<0	8	DPGDME	✓				✓			medium hard coatings, good for waterproof solutions
2,0	18	>1000	<0	8	free	✓	✓		✓			✓	co-binder solution for flexibility in universal pigmented systems
10	14	<160	<0	*	DPGDME	✓	✓						transparent film, improved water resistance, good adhesion on wood and metal surfaces, good chemical resistance,

Ref: ASTM D-1708-18 (films are dried @ RT) N/mm2

Ref:ASTM  
D2354

Ref: ISO 105-B02



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# PRINTING



Film Properties

Product Name	Type	Ionicity	Non-Volatile Content By Weight % (105°C)	Appearance	pH (23°C)	100% Modulus (MPa)	Tensile Strength at Break (MPa)	Elongation at Break (%)	MFFT (°C)	Tg (°C)	Light Fastness (8 scale)	Co-solvent	Key Properties
PUD 201	Aliphatic Polyether-ester	Anionic	43±2	Milky Liquid	7,5±1	2,5	15	>1000	<0		8	free	co-binder for high-performance applications, very soft film properties for textile screen printing ink, easier printing cycle, high pigment dosage without any cracking
PUD 202	Aliphatic Polyester	Anionic	40±2	Milky Liquid	8±1	2,0	18	>1000	<0	-47	8	free	co-binder, elastic film properties to textile screen printing ink, good for foil pigmented application

Ref: ASTM D2369-07

Ref: ISO 976

Ref: ASTM D-1708-18 (films are dried @ RT) N/mm2

Ref: ASTM Tg D2354 (method: DSC)

Ref: ISO 105-B02

DPGDME: Dipropylene Glycol Dimethylether  
MFFT: Minimum Film Formation Temperature  
NDA: No Data Available



The background of the image features a dense field of 3D molecular models. These models consist of spheres representing atoms, connected by rods representing chemical bonds. The spheres are rendered with a blue-to-purple gradient, while the connecting rods are a lighter, translucent blue. The molecules are scattered across the frame, with some appearing more prominent and in focus than others, creating a sense of depth. The overall color palette is cool, transitioning from deep blue on the left to a lighter, almost white, on the right.

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# CROSSLINKER

# Crosslinker



Product Name	Type	Ionicity	Non-Volatile Content By Weight % (105°C)	Appearance	pH (23°C)	Unblocking Temperature	Key Properties
XR-101	Aliphatic Blocked Isocyanate	Anionic	40±2	Opaque Milky Liquid	8±1	110°C-120°C	excellent crosslinking of the resins used in the finishing and in textile printing without any yellowing problem, MEKO free no changing the original appearance, washing resistance

Ref: Internal Method

Ref: ISO 976

DPGDME: Dipropylene Glycol Dimethylether

MFFT: Minimum Film Formation Temperature

NDA: No Data Available

The afore-mentioned information is based on our present state of knowledge and shall inform on our products and their application possibilities.



## CONTACT US



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