

PRODUCTS WITH PERSPECTIVE



NOVADEX
CHEMICAL INNOVATIONS

TECHNOLOGIES FOR A SECURE FUTURE

With more than many years of experience in developing premium raw materials for the printing market, **NOVADEX** Coatings Solution is proud of a long history of quality, precision and innovation that goes into each of our products.

PRINTING INKS

BINDER & ADDITIVE

Raw materials for printing inks binders and additives for water-based printing inks and overprint varnishes

Technical Properties								Application				
product	Monomer	Non volat.. Content DIN EN ISO 3251 [%]	pH value DIN 53785	Density DIN 51757 [g/cm³]	Tg [°C]	MFT [°C]	Viscosity 20°C, del. from Brookfield, ISO 2555 [mPa.s]	Gravure inks	Flexographic inks	Overprint varnish	Abrasion resistance wet / dry	Blocking stability
PrintDex 109	Cationic pure acrylic solution	30	5.0-6.5	1.05	43	/	150-800		■			
PrintDex 119	Styrene acrylic dispersion	40	8.0-90	1.05	47	56	5000-6000	■	■			
PrintDex 121	Acrylic solution	35	7.0-7.5	1.06	25	<0	2500-3000		■			
PrintDex 133	Styrene acrylic dispersion	45	7.8-8.8	1.07	98	70	400-600	■	■	■		■
PrintDex 138	Acrylic solution/IPA 2:1	40	8.0-9.0	1.02	48	/	2500-3000		■	■		
PrintDex 139	Styrene acrylic dispersion, DMEA-neutralized	52	8.5-9.5	1.06	0	0	300-800		■			
PrintDex 144	Styrene acrylic dispersion	44	7.8-9.0	1.08	48	75	500-1000		■	■		
PrintDex 149	Acrylic dispersion	49	7.8-9.0	1.05	5	5	1250-2750	■	■	■		
PrintDex 162	Styrene acrylic dispersion	41	7.8-9.0	1.06	0	0	200-600	■	■	■		
PrintDex 175	Styrene acrylic dispersion	50	7.8-8.5	1.06	98	75	200-600	■	■	■		
PrintDex 188	Shellac supported polystyrene dispersion	49	7.8-8.8	1.05	91	>100	200-800		■		■	
PrintDex 177	Starch copolymer dispersion	40	3.0-5.0	1.06	/	28	<800	■	■			■
PrintDex 182	Starch copolymer dispersion	50	7.5-9.5	1.04	/	28	<300	■	■			

Specific Properties											Main uses and principal characteristics
High speed printing	Oil / Grease resistance	Gloss	Good compatibility	Hot seal resistance	Pigment stability	Good adhesion	Fast drying	Transparent	Water resistance	Re-solubility	
						■	■			■	Good adhesion to plastic foils
		■									Metallic printing inks
■		■			■						Metallic printing inks, excellent ink stability
■		■	■				■	■	■		High gloss, fast drying, excellent blocking- and water resistance
					■	■				■	General purpose
		■		■	■	■				■	Heat resistance, high gloss
		■		■						■	Heat resistance, very high gloss
		■	■			■			■		Good adhesion to film and other non-porous substrates, ice water crinkle resistance
		■		■		■			■		Heat resistance up to 240°C, highest gloss
		■	■				■				Fast drying, high film hardness
		■				■	■				High gloss, fast drying, high solids at low viscosity
	■				■					■	High renewable raw material content, very good alcohol stability, very high gloss, fast drying, good re-solubility
■			■				■			■	For thin papers, outstanding printability, excellent re-solubility, fast drying, good compatibility

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Additives for water-based rotogravure, flexographic, screen inks and overprint varnishes

Anti-blocking	Anti-creasing	Cross-linking	Defoaming	Dispersing
DEXOSIL 551 DEXOSIL 553 DEXADD 905	WETDEX 3450	DEXADD 905	AQUADEX 210 AQUADEX 242	DISPERDEX 840 DISPERDEX 846 DISPERDEX 870

NOVADEX's binders and additives offer a wide range of applications in the field of printing inks. The unique properties are numerous: some binders have for example a high proportion of renewable raw materials, others are particularly heat-resistant or are compatible for high printing speeds.



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Leveling	Mar resistance	Slip smoothness	Substrate wetting	Water resistance
WETDEX 3450 DEXOSIL 585 FLOWDEX FL 100 FLOWDEX FL 151	DEXOSIL 551	DEXOSIL 551 DEXOSIL 553	WETDEX 3450 DEXOSIL 100 DEXOSIL 151	DEXADD 905



Offset Printing

Offset printing is the perfect solution for cost-effective printing large quantity orders. It offers consistent high-quality images, accurate color reproduction, and crisp professional print quality.

With **PintDex** offset printing **BINDER & ADDITIVE**, you have the ability to make specialty inks, such as metallics, and match specific Pantone Colors.



PrintDex

Binders and additives for offset printing for the highest print quality.

DEXOLAC; Alkyd modified resin

Type	Oil [%]	Oil type	Color/ Gardner	Acid value [mgKOH/g]	Viscosity 20°C [mPa.s]	Supply Form [%]	Main uses and characteristics
L 1904	79	Linseed oil	max. 10	max. 15	8.000 – 10.000	100	High gloss offset inks. Quick-set-printing inks.
L 1004	80	Linseed oil	max. 10	max. 15	2.500 – 3.500	100	High gloss offset inks. Quick-set-printing inks.

DEXOLAC L 1004 & DEXOLAC L 1904 are linseed oil based alkyd resins with low viscosity

By using **DEXOLAC L 1904** high gloss offset inks with good pigment and drying properties can be manufactured.



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DEXOFEN; Rosin-based hard resins, phenol-modified

Product	Melting point Capillary method [°C]	Acid value [mgKOH/g]	Flow time 20°C [s]	Color Gardner	Main uses and characteristics
DEXOFEN F 105	90 - 110	15 – 25	20 – 30 (50% in ws 145-195)	max. 10 (50% in ws 145-195)	General purpose type for alkyd-based paints and primers, low viscos resin, giving excellent gloss and rub resistance on cold set inks
DEXOFEN F 120	110 - 130	10 – 25	80 – 120 (50% in ws 145-195)	max. 10 (50% in ws 145-195)	General purpose type for alkyd-based paints and primers and for cooking with alkyds, fast setting, high gloss resin for sheetfed inks, compatible with alkyds and natural inks
DEXOFEN F 130	120 - 140	15 – 25	120 – 170 (60% in xylene))	max. 10 (50% in ws 145-195)	Cold out modifying resin for paints with good drying properties and high gloss.



DEXODUR; UV-Curable, solvent- water-based and solvent-free

Product	Supply Form [%]	Viscosity [mPa.s]/23°C	Main uses and characteristics
PUV 4561	55 in BA	2.500 – 4.000	Hydroxyl group containing polyester acrylate, curing with isocyanate and radiation (dual cure), non-adhesive and scratch-resistant, for non-yellowing coatings. OH=4.5
EUV 4405 W	40 in water	50 – 200	An aqueous anionic, UV curing, epoxy-modified polyurethane acrylic emulsion for plastic coatings
UC 2365	100	2.000 – 8.000	UV oil for the coating of wood. UC 2365 is particularly suitable for the production of parquet and maintenance oils. It is characterized by very good penetration.
AUC 2345	80 in TPGDA	20,000 – 30,000	An epoxy acrylate for UV coating systems. 2345 should be stored in light protected containers at a temperature below 30 ° C be stored.
AUC 2345	100	40.000 – 60.000	An epoxy acrylate for UV coating systems. 2345 is characterized by its high gloss, high hardness and good reactivity off. The product can be used in all UV / EB applications, eg. as paints, inks and overprint varnishes.
PUV 2169	100	4.000 – 8.000 (80% in TPGDA)	A100% polyester-acrylate resin for UV-curing coating systems. 2169 has good adhesion to the following substrates such as wood and PVC. It can also act as a modifying component in printing inks and overprint varnishes be used.
MUR 2509	45 in TPGDA	850 - 900	Urethane-modified polymethyl methacrylate resin dissolved in dipropylene glycol diacrylate (DPD) for 3D printing in the field of Stereolithography. (laser diode with 405 nm wavelength and 120 mW power)
UVM 2051	100	max. 75	Thinner based on maleate / vinyl ether for UV-systems. UVM 2051 is a reactive diluent for radiation-curing systems, which is particularly well suited for the formulation of lacquers for printing on wood and paper.
UMH 6145 UV	100	55.000 – 75.000	An aliphatic urethane hexaacrylate, offers good elasticity, flexibility and fast curing speed. Exhibits good abrasion- and weather resistance. Used in overprint varnishes for wood, paper & board, UV-based plastic coatings and UV-based inks.



SOCIAL printing inks solution

UV Screen printing



The UV screen printing method is suitable for decorating a large variety of flat and formed substrates, including various types of plastics, metal, ceramics, glass etc.

Screen printing



The screen printing method is suitable for decorating a large variety of flat and formed substrates, including various types of plastics, metal, ceramics, glass etc.

Pad printing



The pad printing method is used for decorating bodies that have no flat surfaces. Important fields of application include the decoration of toys and sales-promoting items

UV Flexo printing



UV flexographic printing is largely used in the label and packaging industries.

UV Dry offset printing



UV dry offset printing inks are used mainly in the decoration of plastic cups.

Gravure and Flexo printing



The decoration of flexible packaging used in the food industry, for example, is the main field of application for flexo and gravure printing inks.