



Nord Composites Italia is part of Nord Composites Group and it belongs to the Holding Gerard Lavens that with a total turn-over of around 100 Million Euro represents an important reality within the European Chemical Industry.

The Nord Composites Group is composed by Companies operating with different productive units located in France, England and Italy that are integrated each other respecting severe quality standards and satisfying the always more stringent requests of the main users at European level.

The Nord Composites Italia factory - one of the most technologically advanced in Europe in the field of polyesters chemistry - has got a surface of 35.000 square meters and it is located in Monfalcone in the North East of Italy. Head Quarter, Laboratories, Administration and Commercial Departments are all based at the manufacturing site.

In order to ensure and guarantee an accurate quality constancy of its productions, all manufacturing operations carried out in Nord Composites Italia, from the dosing of raw materials into



the reactors to the finishing, are constantly monitored and controlled satisfying the most severe certification standards.

Nord Composites Italia has highly qualified Laboratories and special measuring equipment for all quality controls, from raw materials to finished products.

Nord Composites Italia and its management operate with the maximum responsibility towards the health and safety of its own operators, of the customers and the environment, keeping the satisfaction of its

shareholders as one of the main priorities in its day by day activity.

Nord Composites Italia has built up a vast experience in the development and production of POLYESTER POLYOLS for the Polyurethane Industries.

Inside this catalogue it is possible to find the main technical features and specifications of these products.



Application: FLEXIBLE PU FOAMS

ADICROL

	Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfied viscosity (temperature)	Water content	Hazen colour	
de					mg KOH/g	mg KOH/g	mPa-s	%		
. R 60 BV	Aliphatic	DEG	Branched	Liquid	59 - 63	≤1,7	17000-21000 (25°C)	≤ 0,1	≤ 150	



Field of use

Used in flexible slabstock foam production, mainly for textile industry applications (e.g. flame lamination).

Application: POLYURETHANE SYSTEMS FOR FOOTWEAR

Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfield viscosity (temperature)	Water content	Hazen colour	
				mg KOH/g	mg KOH/g	mPa-s	%		F
Aliphatic	MEG, DEG	Branched	Liquid	44 - 48	≤ 0,5	1400 - 1600 (60°C)	≤ 0,1	≤ 150	
Aliphatic	MEG, DEG	Branched	Liquid	54 - 58	≤1	4000 - 5000 (35°C)	≤ 0,1	≤ 150	N p g
Aliphatic	DEG	Branched	Liquid	59 - 63	≤ 1,7	17000 - 21000 (25°C)	≤ 0,1	≤ 150	
Aliphatic	MEG, DEG	Linear	Liquid	39 - 42	≤1	7500 - 9000 (35°C)	≤ 0,1	≤ 150	It a
Aliphatic	MEG, DEG	Linear	Solid	54 - 58	≤1	4100 - 5000 (35°C)	≤ 0,1	≤ 150	p v
Dicarboxylic	MEG	Branched	Liquid	60 - 64	≤1	9000 - 11000 (35°C)	≤ 0,1	≤ 18 (Gardner)	U lo e
	Aliphatic Aliphatic Aliphatic Aliphatic	Aliphatic MEG, DEG Aliphatic DEG Aliphatic MEG, DEG Aliphatic MEG, DEG Aliphatic MEG, DEG	Aliphatic MEG, DEG Branched Aliphatic MEG, DEG Branched Aliphatic DEG Branched Aliphatic MEG, DEG Linear Aliphatic MEG, DEG Linear	Aliphatic MEG, DEG Branched Liquid Aliphatic MEG, DEG Branched Liquid Aliphatic DEG Branched Liquid Aliphatic MEG, DEG Linear Liquid Aliphatic MEG, DEG Linear Solid	Aliphatic MEG, DEG Branched Liquid 44 - 48 Aliphatic DEG Branched Liquid 54 - 58 Aliphatic DEG Branched Liquid 59 - 63 Aliphatic MEG, DEG Linear Liquid 39 - 42 Aliphatic MEG, DEG Linear Solid 54 - 58	Aliphatic MEG, DEG Branched Liquid $44 - 48$ ≤ 0,5 Aliphatic MEG, DEG Branched Liquid $54 - 58$ ≤ 1 Aliphatic DEG Branched Liquid $59 - 63$ ≤ 1,7 Aliphatic MEG, DEG Linear Liquid $39 - 42$ ≤ 1 Aliphatic MEG, DEG Linear Solid $54 - 58$ ≤ 1	Aliphatic MEG, DEG Branched Liquid $44 - 48$ ≤ 0,5 $1400 - 1600$ (60°C) Aliphatic MEG, DEG Branched Liquid $54 - 58$ ≤ 1 $4000 - 5000$ (35°C) Aliphatic DEG Branched Liquid $59 - 63$ ≤ 1,7 $17000 - 21000$ (25°C) Aliphatic MEG, DEG Linear Liquid $39 - 42$ ≤ 1 $7500 - 9000$ (35°C) Aliphatic MEG, DEG Linear Solid $54 - 58$ ≤ 1 $4100 - 5000$ (35°C) Dicarbovylic MEG Branched Liquid $60 - 64$ ≤ 1 $9000 - 11000$	Aliphatic MEG, DEG Branched Liquid $44 - 48$ $\leq 0,5$ $1400 - 1600$ (60° C) $\leq 0,1$ Aliphatic MEG, DEG Branched Liquid $54 - 58$ ≤ 1 $4000 - 5000$ (35° C) $\leq 0,1$ Aliphatic DEG Branched Liquid $59 - 63$ $\leq 1,7$ $17000 - 21000$ (25° C) $\leq 0,1$ Aliphatic MEG, DEG Linear Liquid $39 - 42$ ≤ 1 $7500 - 9000$ (35° C) $\leq 0,1$ Aliphatic MEG, DEG Linear Solid $54 - 58$ ≤ 1 $4100 - 5000$ (35° C) $\leq 0,1$ Dicarbovylic MEG, DEG Branched Liquid $60 - 64$ ≤ 1 $9000 - 11000$ $\leq 0,1$	Aliphatic MEG, DEG Branched Liquid $44 - 48$ ≤ 0.5 $1400 - 1600$ (60° C) ≤ 0.1 ≤ 150 Aliphatic MEG, DEG Branched Liquid $54 - 58$ ≤ 1 $4000 - 5000$ (35° C) ≤ 0.1 ≤ 150 Aliphatic DEG Branched Liquid $59 - 63$ ≤ 1.7 $17000 - 21000$ (25° C) ≤ 0.1 ≤ 150 Aliphatic MEG, DEG Linear Liquid $39 - 42$ ≤ 1 $7500 - 9000$ (35° C) ≤ 0.1 ≤ 150 Aliphatic MEG, DEG Linear Solid $54 - 58$ ≤ 1 $4100 - 5000$ (35° C) ≤ 0.1 ≤ 150 Dicarbovylic MEG Branched Liquid $60 - 64$ ≤ 1 $9000 - 11000$ ≤ 0.1 ≤ 18 (Garringe)



Field of use

Mainly used for prepolymers and polyols for the production of women's and men's shoe soles with good performance in temperate climates.

It can be used for the production of prepolymers and polyols. Good flexing resistance and physical properties. Used in the production of men's and women's footwear in temperate climates.

Used in polyols for the production of sandals with low moulding density. Being slightly branched, extraction time is reduced.



Application: RIGID PU FOAMS

Application. 1										
	Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfield viscosity (temperature)	Water content	Hazen colour	
Code					mg KOH/g	mg KOH/g	mPa-s	%		Field of use
ADISOL FD 190 TC 90	Aromatic modified	DEG	Linear	Liquid	180-200	≤1	4000 - 5500 (25°C)	≤ 0,15	≤ 6 (Gardner)	Phtalic anhydride based polyester for the production of thermal insulating rigid foam. TCPP content 10%.
ADISOL PD 190 TC 90	Aromatic modified	DEG	Linear	Liquid	175 - 190	0,7 - 1,2	2800 - 4800 (25°C)	≤ 0,15	≤ 10 (Gardner)	PET based polyester for the production of thermal insulating rigid foam. Recycled PET content > 30%. TCPP content 10%.
ADICROL FLD 240	Aromatic modified	DEG	Linear	Liquid	230-250	≤1	3000 - 4000 (25°C)	≤ 0,10	≤ 6 (Gardner)	Used in combination with others polyols for the production of rigid foam with good fire resistance and good mechanical properties.
ADICROL FD 245	Aromatic	DEG	Linear	Liquid	230-250	≤ 1,5	8000 - 10000 (25°C)	≤ 0,10	≤ 2 (Gardner)	Indicated for the production of rigid foam in CASE applications. It is characterised by good fire resistance and balanced mechanical properties.
ADICROL FD 250	Aromatic modified	DEG	Linear	Liquid	230 - 270	≤3	3800 - 4200 (25°C)	≤ 0,10	≤ 3 (Gardner)	Lower OH number polyester for PIR foams or mixed with other polyols for PUR foams manufacturing.
ADICROL TAD 250	Aromatic modified	DEG	Linear	Liquid	240 - 260	2 - 3	3200 - 4600 (25°C)	≤ 0,10	≤ 9 (Gardner)	Terephthalic acid based polyester for the production of rigid foam with enhanced mechanical properties.
ADICROL FD 315	Aromatic	DEG	Linear	Liquid	300 - 330	≤3	2000 - 3000 (25°C)	≤ 0,15	≤ 3 (Gardner)	Low viscosity polyester for the production of rigid PIR (polyisocyanurates) in order to improve thermal insulation efficiency.
ADICROL FT 320	Aromatic	DEG	Linear	Liquid	300 - 330	≤3	4500 - 5500 (25°C)	≤ 0,15	≤ 3 (Gardner)	Aromatic acid based polyester for the production of rigid foam with enhanced mechanical properties and fire resistance.
ADICROL PD 325	Aromatic	DEG	Linear	Liquid	315 - 335	2,0 - 3,0	3000 - 3500 (25°C)	≤ 0,10	≤ 10 (Gardner)	PET based polyester. Indicated for the production of rigid foam in CASE applications. It is characterised by good fire resistance and good mechanical properties. Recycled PET content > 28%.
ADICROL FDFR 240	Aromatic	DEG	Linear	Liquid	230 - 250	≤3	14000 - 18000 (25°C)	≤ 0,1	≤ 4 (Gardner)	Aromatic acid based polyester for the production of rigid foam with enhanced fire resistance. Indicated for the production of rigid foam in CASE applications. Alogen free. Good mechanical properties.
ADICROL S 170	Aliphatic modified	DEG	Branched	Liquid	160 - 180	≤1	1000 - 1700 (25°C)	≤ 0,1	≤ 8 (Gardner)	Adicrol S 170 is a BIO-based renewable polyol for use in the polyurethane industry. The BIO-based content is around 60%. slightly branched with a functionality of 2.3
ADICROL FR 500	Aromatic modified	DEG	Branched	Liquid	480 - 520	≤ 2	9500 - 12500 (25°C)	≤ 0,10	-	Indicated for the production of rigid foam (Spray, PIR, PUR applications). Good compatibility with isocyanates. It allows to obtain foams with high stability and good fire resistance.
ADICROL PAR 400	Aromatic	DEG	Branched	Liquid	360 - 430	2,0 - 2,6	4500 - 6000 (25°C)	≤ 0,1	-	Adicrol PAR 400 is an aromatic polyester polyol based on recycled PET. PET content > 31%. The polymer is branched with a functionality around 2.8. The product is certified Remade in Italy
ADICROL PDR 500	Aromatic	DEG	Branched	Liquid	490 - 530	1,8 - 2,4	4000 - 6000 (25°C)	≤ 0,1	-	Adicrol PDR 500 is an aromatic polyester polyol based on recycled PET. PET content > 31%. The polymer is branched with a functionality around 2.7. The product is certified Remade in Italy
ADICROL FDFR 240 ADICROL S 170 ADICROL FR 500 ADICROL PAR 400	Aromatic Aliphatic modified Aromatic modified Aromatic	DEG DEG DEG	Linear Branched Branched Branched	Liquid Liquid Liquid Liquid	230 - 250 160 - 180 480 - 520 360 - 430	≤ 3 ≤ 1 ≤ 2 2,0 - 2,6	(25°C) 14000 - 18000 (25°C) 1000 - 1700 (25°C) 9500 - 12500 (25°C) 4500 - 6000 (25°C)	≤ 0,1 ≤ 0,1 ≤ 0,10 ≤ 0,10	(Gardner) ≤ 4 (Gardner) ≤ 8 (Gardner)	by good fire resistance and good mechanical properties. Recycled PET content > 28%. Aromatic acid based polyester for the product rigid foam with enhanced fire resistance. Indie for the production of rigid foam in CASE applic Alogen free. Good mechanical properties. Adicrol S 170 is a BIO-based renewable pol use in the polyurethane industry. The BIO-b content is around 60%. slightly branched v functionality of 2.3 Indicated for the production of rigid foam (S PIR , PUR applications). Good compatibility isocyanates. It allows to obtain foams with stability and good fire resistance. Adicrol PAR 400 is an aromatic polyester pc based on recycled PET. PET content > 31% polymer is branched with a functionality ard 2.8. The product is certified Remade in Italy Adicrol PDR 500 is an aromatic polyester pc based on recycled PET. PET content > 31% polymer is branched with a functionality ard



Application: CASTING ELASTOMERS AND TPU

	Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfield viscosity (temperature)	Water content	Hazen colour	
Code					mg KOH/g	mg KOH/g	mPa-s	%		Field of use
ADICROL BM 38	Aliphatic	1,4-BDO, MEG	Linear	Solid	37 - 40	≤ 1,0	7500 - 8500 (35°C)	≤ 0,1	≤ 75	Very good physical and mechanical properties. It
ADICROL BM 56	Aliphatic	1,4-BDO, MEG	Linear	Solid	54 - 58	≤ 0,5	4400 - 5200 (35°C)	≤ 0,05	≤ 100	can be used to produce cast elastomers and TPU.
ADICROL LM 56	Aliphatic	MEG	Linear	Solid	54 - 58	≤ 0,7	460 - 600 (75°C)	≤ 0,1	≤ 100	Good general properties. These products combine competitive prices and good performances. They
ADICROL LM 112	Aliphatic	MEG	Linear	Solid	108 - 116	≤ 0,7	450 - 650 (50°C)	≤ 0,08	≤ 100	can be used with NDI or MDI to produce cast elastomers or with MDI in the production of TPU.
ADICROL B 38	Aliphatic	1,4-BD0	Linear	Solid	37 - 40	≤ 0,5	2500 - 4000 (60°C)	≤ 0,1	≤ 60	
ADICROL B 55	Aliphatic	1,4-BD0	Linear	Solid	54 - 58	≤ 0,7	1300 - 1500 (60°C)	≤ 0,1	≤ 60	Very good physical and mechanical properties. Good hydrolysis resistance. They can be used to produce cast elastomers and TPU.
ADICROL B 112	Aliphatic	1,4-BD0	Linear	Solid	108 - 116	≤ 0,7	300 - 500 (60°C)	≤ 0,05	≤ 50	
ADICROL E 37	Aliphatic	1,6- hexanediol	Linear	Solid	35 - 39	≤ 0,7	2800 - 3100 (60°C)	≤ 0,1	≤ 100	Excellent physical and mechanical properties,
ADICROL E 56	Aliphatic	1,6- hexanediol	Linear	Solid	54 - 58	≤ 0,5	570 - 870 (70°C)	≤ 0,03	≤ 100	especially at low temperature. Good hydrolysis resistance. Mainly used in the production of TPU.
ADICROL LK 56	Aliphatic	Special glycols	Linear	Liquid	55 - 59	≤ 0,7	6000 - 8000 (25°C)	≤ 0,1	≤ 60	Linear aliphatic polyester resin. The product is colourless and it is a clear liquid at room temperature. Adicrol LK 56 is recommended for the production of cast elastomers and production of water-based PU
ADICROL BIO SPD 56	Bio succinic acid	Renewable glycols	Linear	Solid	54 - 58	≤ 0,3	2700 - 3700 (60°C)	≤ 0,1	≤ 150	100% based on renewable raw material. Applications: particularly recommended for the
ADICROL BIO SPD 112	Bio succinic acid	Renewable glycols	Linear	Solid	108 - 116	≤ 0,3	700 - 850 (60°C)	≤ 0,1	≤ 150	production of thermoplastic polyurethanes.
ADICROL BIO LM 58	Dicarboxylic	MEG	Linear	Liquid	55 - 61	≤1	800 - 1200 (70°C)	≤ 0,08	≤ 250	30% based on renewable raw material. Applications: recommended for the production of cast elastomers.
ADICROL BIO SEP 55	Aliphatic	Renewable glycols	Linear	Solid	54 - 58	≤ 0,4	1500 - 1800 (60°C)	≤ 0,1	≤ 150	100% based on renewable raw material. Applications: particularly recommended for the production of thermoplastic polyurethanes.
ADICROL BIO SPD 57	Aliphatic	Renewable glycols	Linear	Solid	54 - 58	≤ 1,5	2700 - 3700 (60°C)	≤ 0,1	≤ 150	Linear aliphatic polyester resin, based on renewable raw material of vegetable origin. Renewable raw material > 75%. Recommended for the production of thermoplastic polyurethanes.



Application: POLYURETHANE COATING

Application: F										
	Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfied viscosity (temperature)	Water content	Hazen colour	
Code					mg KOH/g	mg KOH/g	mPa-s	%		Field of use
ADICROL BM 56	Aliphatic	1,4-BDO, MEG	Linear	Solid	54 - 58	≤ 0,5	4400 - 5200 (35°C)	≤ 0,05	≤ 100	Mainly used in the production of PU in solution for coating and coagulation. Very good physical and
ADICROL BM 140	Aliphatic	1,4-BDO, MEG	Linear	Solid	134 - 146	≤ 0,6	1400 - 1600 (25°C)	≤ 0,1	≤ 150	mechanical properties
ADICROL B 38	Aliphatic	1,4-BDO	Linear	Solid	37 - 40	≤ 0,5	2500 - 4000 (60°C)	≤ 0,1	≤ 60	Head in the anadustion of DU in colution and in
ADICROL B 55	Aliphatic	1,4-BDO	Linear	Solid	54 - 58	≤ 0,7	1300 - 1500 (60°C)	≤ 0,1	≤ 60	Used in the production of PU in solution and in granules. Excellent physical and mechanical properties and flexing resistance even at low temperature.
ADICROL B 112	Aliphatic	1,4-BDO	Linear	Solid	108 - 116	≤ 0,7	300 - 500 (60°C)	≤ 0,05	≤ 50	
ADICROL BN 56	Aliphatic	1,4-BDO, NPG	Linear	Liquid	54 - 58	≤ 0,5	8200 - 9800 (35°C)	≤ 0,1	≤ 100	Very good physical and mechanical properties. Good hydrolysis resistance. They can be used to
ADICROL BN 112	Aliphatic	1,4-BDO, NPG	Linear	Liquid	108 - 116	≤ 0,5	1800 - 2600 (35°C)	≤ 0,05	≤ 100	produce cast elastomers and TPU.
ADICROL AIB 40	Aromatic / Aliphatic	1,4-BDO	Linear	Solid	36 - 40	<1	6500 - 7500 (60°C)	< 0,1	< 100	Characterized by a good flexibility and a good hydrolysis resistance. Applications: particularly recommended for the production of water-based PU for coating in leather and wood finishing.
ADICROL AIE 56	Aromatic / Aliphatic	1,6- hexanediol	Linear	Solid	54 - 58	≤ 0,8	900 - 1300 (75°C)	≤ 0,08	≤ 150	
ADICROL AIE 70	Aromatic / Aliphatic	1,6- hexanediol	Linear	Solid	70 - 74	≤ 0,5	3000 - 4000 (40°C)	≤ 0,1	≤ 200	Used in the production of water-based PU dispersions for leather finishing. Excellent
ADICROL AIE 72	Aromatic / Aliphatic	1,6- hexanediol	Linear	Solid	70 - 74	≤ 1,0	5500 - 6500 (35°C)	≤ 0,1	≤ 120	physical and mechanical properties; high hydrolysis resistance.
ADICROL AIE 120	Aromatic / Aliphatic	1,6- hexanediol	Linear	Solid	116 - 124	≤ 0,5	250 - 350 (70°C)	≤ 0,08	≤ 150	
ADICROL EN 56	Aliphatic	1,6- hexanediol, NPG	Linear	Solid	54 - 58	< 1,0	800 - 900 (70°C)	< 0,1	< 100	Excellent hydrolysis resistance and good flexibility
ADICROL EN 120	Aliphatic	1,6- hexanediol, NPG	Linear	Solid	116 - 124	< 0,6	300 - 400 (60°C)	< 0,1	< 100	in a wide temperature range.
ADICROL LD 40	Aliphatic	DEG	Linear	Liquid	38 - 42	≤ 0,8	7000 - 8000 (35°C)	≤ 0,08	≤ 100	Mainly used in the production of PU in solution
ADICROL LD 56	Aliphatic	DEG	Linear	Liquid	54 - 58	≤ 0,7	3700 - 4000 (35°C)	≤ 0,08	≤ 150	for coating. Excellent elastomeric properties and average general features.
ADICROL BIO SPD 56	Bio succinic acid	Renewable glycols	Linear	Solid	54 - 58	≤ 0,3	2700 - 3700 (60°C)	≤ 0,1	≤ 150	100% based on renewable raw material. Applications: recommended for the production of
ADICROL BIO SPD 112	Bio succinic acid	Renewable glycols	Linear	Solid	108 - 116	≤ 0,3	700 - 850 (60°C)	≤ 0,1	≤ 150	water-based PU for coating in leather and wood finishing.



Application: POLYURETHANE ADHESIVES FOR FOOTWEAR

	Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfield viscosity (temperature)	Water content	Hazen colour
Code					mg KOH/g	mg KOH/g	mPa-s	%	
ADICROL B 38	Aliphatic	1,4-BD0	Linear	Solid	37 - 40	≤ 0,5	2500 - 4000 (60°C)	≤ 0,1	≤ 60
ADICROL B 55	Aliphatic	1,4-BD0	Linear	Solid	54 - 58	≤ 0,7	1300 - 1500 (60°C)	≤ 0,1	≤ 60
ADICROL B 112	Aliphatic	1,4-BD0	Linear	Solid	108 - 116	≤ 0,7	300 - 500 (60°C)	≤ 0,05	≤ 50
ADICROL E 37	Aliphatic	1,6- hexanediol	Linear	Solid	35 - 39	≤ 0,7	2800 - 3100 (60°C)	≤ 0,1	≤ 100
ADICROL E 56	Aliphatic	1,6- hexanediol	Linear	Solid	54 - 58	≤ 0,5	570 - 870 (70°C)	≤ 0,03	≤ 100



Field of use

Good physical and mechanical properties. Good hydrolysis resistance. Used in the production of granules and solvent based polyurethane adhesives.

Excellent physical and mechanical properties, especially at low temperature. High hydrolysis resistance. Used in the production of granules and solvent based polyurethane adhesives.

Application: POLYURETHANE ADHESIVES FOR FLEXIBLE PACKAGING

Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfield viscosity (temperature)	Water content	Hazen colour	1
				mg KOH/g	mg KOH/g	mPa-s	%		Fie
Aliphatic	1,6- hexanediol, NPG	Linear	Solid	54 - 58	≤1	800 - 900 (70°C)	≤ 0,10	≤ 100	Exc at an
Aliphatic	DEG	Linear	Liquid	38 - 42	≤ 0,8	7000 - 8000 (35°C)	≤ 0,08	≤ 100	Go for
Aliphatic	DEG	Linear	Liquid	54 - 58	≤ 0,7	3700 - 4000 (35°C)	≤ 0,08	≤ 150	sol
Aromatic / Aliphatic	DEG	Linear	Liquid	55 - 61	1 - 3	3600 - 4100 (70°C)	≤ 0,10	≤ 3 (Gardner)	Ing fle
Aromatic modified	DEG	-	Liquid	230 - 270	≤ 1,5	2100 - 2600 (25°C)	≤ 0,10	≤ 4 (Gardner)	Ard Ing
Aromatic	DEG	Linear	Liquid	300 - 330	≤ 3,0	2000 - 3000 (25°C)	≤ 0,10	≤ 250	Pa Ian
Aromatic / Aliphatic	MPG, 1,4-BD0	Branched	Liquid	70 - 80	≤8	3000 - 4000 (25°C)	≤ 0,1	≤ 250	Ing
Aliphatic	Special glycols	Branched	Liquid	30 - 35	23 - 27	R - S (Gardner, 25°C)	≤ 0,1	≤ 150	Ing
Aromatic / Aliphatic	DEG, 1,4-BDO	Linear	Liquid	30 - 34	≤1	900 - 1400 (25°C)	≤ 0,1	≤ 2 (Gardner)	Ing Ian
	Aliphatic Aliphatic Aliphatic Aromatic / Aliphatic Aromatic Aromatic Aromatic Aromatic / Aliphatic Aromatic / Aliphatic Aromatic / Aliphatic	Aliphatic DEG Aliphatic DEG Aliphatic DEG Aromatic / Aliphatic DEG Aromatic / Special glycols Aromatic / DEG,	Aliphatic DEG Linear Aromatic DEG Linear Aromatic DEG Linear Aromatic DEG DEG DEG Aliphatic DEG DEG DEG Aliphatic DEG DEG DEG Aliphatic DEG DEG DEG Aromatic DEG DEG DEG Aromatic DEG DEG DEG	Aliphatic DEG Linear Liquid Aromatic Branched Liquid Aliphatic Special glycols Branched Liquid Aromatic DEG, Linear Liquid	Aliphatic hexanediol, NPG Linear Solid 54 - 58 Aliphatic DEG Linear Liquid 38 - 42 Aliphatic DEG Linear Liquid 54 - 58 Aromatic / DEG Linear Liquid 55 - 61 Aromatic DEG Linear Liquid 230 - 270 Aromatic DEG Linear Liquid 300 - 330 Aromatic / MPG, Aliphatic I,4-BDO Branched Liquid 70 - 80 Aromatic / DEG, Linear Liquid 30 - 35 Aromatic / DEG, Linear Liquid 30 - 34	Aliphatic hexanediol, NPG Linear Solid $54 - 58$ ≤ 1 Aliphatic DEG Linear Liquid $38 - 42$ ≤ 0,8 Aliphatic DEG Linear Liquid $54 - 58$ ≤ 0,7 Aromatic DEG Linear Liquid $55 - 61$ $1 - 3$ Aromatic DEG Linear Liquid $230 - 270$ ≤ 1,5 Aromatic DEG Linear Liquid $300 - 330$ ≤ 3,0 Aromatic DEG Linear Liquid $300 - 330$ ≤ 3,0 Aromatic DEG Linear Liquid $300 - 330$ ≤ 3,0 Aromatic 100 MPG, Aliphatic 100 Branched Liquid 100 100 100 Special glycols Branched Liquid 100 1	Aliphatic 1.6-hexanediol, NPG Linear Solid 54 - 58 ≤ 1 800 - 900 (70°C) Aliphatic DEG Linear Liquid 38 - 42 ≤ 0,8 7000 - 8000 (70°C) Aliphatic DEG Linear Liquid 54 - 58 ≤ 0,7 3700 - 4000 (35°C) Aromatic / Aliphatic DEG Linear Liquid 55 - 61 1 - 3 3600 - 4100 (70°C) Aromatic modified DEG Linear Liquid 230 - 270 ≤ 1,5 2100 - 2600 (25°C) Aromatic DEG Linear Liquid 300 - 330 ≤ 3,0 2000 - 3000 (25°C) Aromatic / Aliphatic MPG, Aliphatic Branched Liquid 70 - 80 ≤ 8 3000 - 4000 (25°C) Aromatic / DEG Linear Liquid 30 - 35 23 - 27 R - S (Gardner, 25°C) Aromatic / DEG Linear Liquid 30 - 34 ≤ 1 900 - 1400	Aliphatic 1.6-hexanediol, NPG Linear Solid 54 - 58 ≤ 1 800 - 900 (70°C) ≤ 0,10 Aliphatic DEG Linear Liquid 38 - 42 ≤ 0,8 7000 - 8000 (35°C) ≤ 0,08 Aliphatic DEG Linear Liquid 54 - 58 ≤ 0,7 3700 - 4000 (35°C) ≤ 0,08 Aromatic / Aliphatic DEG Linear Liquid 55 - 61 1 - 3 3600 - 4100 (70°C) ≤ 0,10 Aromatic modified DEG Linear Liquid 230 - 270 ≤ 1,5 2100 - 2600 (25°C) ≤ 0,10 Aromatic / Aliphatic DEG Linear Liquid 300 - 330 ≤ 3,0 2000 - 3000 (25°C) ≤ 0,10 Aliphatic MPG, Aliphatic Branched Liquid 70 - 80 ≤ 8 3000 - 4000 (25°C) ≤ 0,1 Aliphatic Special glycols Branched Liquid 30 - 34 ≤ 1 900 - 1400 ≤ 0,1	Aliphatic Linear NPG Solid 54 - 58 ≤ 1 800 - 900 (70°C) ≤ 0,10 ≤ 100 Aliphatic DEG Linear Liquid 38 - 42 ≤ 0,8 7000 - 8000 (35°C) ≤ 0,08 ≤ 100 Aliphatic DEG Linear Liquid 54 - 58 ≤ 0,7 3700 - 4000 (35°C) ≤ 0,08 ≤ 150 Aromatic / Aliphatic DEG Linear Liquid 55 - 61 1 - 3 3600 - 4100 (70°C) ≤ 0,10 ≤ 3 (Gardner) Aromatic / modified DEG Linear Liquid 230 - 270 ≤ 1,5 2100 - 2600 (25°C) ≤ 0,10 ≤ 4 (Gardner) Aromatic / DEG Linear Liquid 300 - 330 ≤ 3,0 2000 - 3000 (25°C) ≤ 0,10 ≤ 250 Aromatic / Aliphatic MPG, Aliphatic Inched Liquid 70 - 80 ≤ 8 3000 - 4000 (25°C) ≤ 0,1 ≤ 250 Aliphatic Special glycols Branched Liquid 30 - 35 23 - 27 8 - 8 (Gardner, 25°C) ≤ 0,1 ≤ 150 Aromatic / DE



Field of use

Excellent hydrolysis resistance and good flexibility at a wide range of temperatures. Used for oneand two- component adhesives, usually in ethyl acetate solutions.

Good flexibility in a wide temperature range. Used for one- and two-component adhesives, both solvent- or water-based.

ngredient for adhesives formulation with good lexibility in a wide temperature range.

Aromatic acid based polyester, modified. Ingredient for adhesives formulation for lamination

Particularly indicated for the production of lamination adhesives.

Ingredient for adhesives formulation.

Ingredient for adhesives formulation.

Ingredient for adhesives formulation for lamination.





Application: POLYESTER POLYOLS FOR PIGMENT PASTE

	Acids/Anhydrides	Main glycols	Structure	Appearance	OH number	Acid number	Brookfield viscosity (temperature)	Water content	Hazen colour	
Code					mg KOH/g	mg KOH/g	mPa-s	%		Field of use
ADICROL AP 210	Aliphatic	MPG	Linear	Liquid	200 - 220	≤ 0,5	190 - 210 (50°C)	≤ 0,4	≤ 150	Recommended for the manufacturing of pigment paste.
ADICROL S 56	Aliphatic	DEG	Linear	Liquid	52 - 60	≤1	4000 - 5000 (25°C)	≤ 0,1	≤ 8 (Gardner)	65% based on renewable raw material. Characterized by primary hydroxyl groups, difunctional. Particularly recommended for the production of dark pigment paste.



CERTIFIED POLYESTER POLYOLS OBTAINED USING RECYCLED PLASTICS





CERTIFICATO / CERTIFICATE N. **P5210**

SI CERTIFICA CHE IL PRODOTTO / WE HEREBY CERTIFY THAT THE PRODUCT

PRODOTTI REALIZZATI IN MATERIALE RICICLATO

DELL'ORGANIZZAZIONE / OF THE ORGANIZATION

NORD COMPOSITES ITALIA SRL VIA VIA TIMAVO 61 - 37074 MONFALCONE (GO)

È CONFORME A / COMPLIES WITH

DISCIPLINARE TECNICO REMADE IN ITALY® VERS 05_2020

"Requisiti per la certificazione Remade in Italy®" certificazione "system 6" secondo uni cei en iso/iec 17067:2013

IL PRESENTE CERTIFICATO NON È DA RITENERSI VALIDO SE NON ACCOMPAGNATO DAL RELATIVO ALLEGATO 1
THIS CERTIFICATE IS NOT VALID WITHOUT THE RELATIVE ANNEX 1

Emissione corrente /Current issue 22/11/2023





C RII - ED 05 011021

CERTIQUALITY S.r.l.

Via G. Giardino, 4 - 20123 Milano - Tel. 02/8069171 Fax. 02/86465295 certiquality@certiquality.it - www.certiquality.it



ALLEGATO AL CERTIFICATO / ENCLOSURE TO CERTIFICATE N. P5210

UNITÀ OPERATIVA / OPERATIVE UNIT VIA VIA TIMAVO 61 - 37074 MONFALCONE (GO)

Adicrol PAR 400 - Poliolo Poliestere per l'industria del poliuretano	Materiali recuperati/ricidati componenti il prodotto Recovered/recycled materials composing the product	% di materiale recuperato/riciclato presente % of recovered/recycled material	Classe/Rating
	PET da riciclo		L_ /
dicrol PDR 500 - Poliolo Poliestere r l'industria del poliuretano		31,3	В
	PET da riciclo		_
		31,6	В

IL PRESENTE ALLEGATO I NON È DA RITENERSI VALIDO SE MON ACCOMPAGNATO DAL RELATIVO CERTIFICATO.

THIS ANNEX I IS NOT VALID WITHOUT THE RELEVANT CERTIFICATE.



Prima emissione /First issue Emissione corrente /Current issue Data di scadenza /Expiry Date

22/11/2023 22/11/2023 21/11/2026

Cesare Puccioni - II Presidente

ALL 1 C RII - ED 05 011021

Via G. Giardino, 4 - 20123 Milano - Tel. 02/8069171 Fax. 02/86465295 certiquality@certiquality.it - www.certi



CERTIFIED QUALITY AND ENVIRONMENTAL MANAGEMENT SYSTEMS



Building trust together

Certificate

 $\textbf{CISQ/CERTIQUALITY S.r.l.} \ \text{has issued an IQNET} \ \text{recognized certificate that the organization:} \\$

NORD COMPOSITES ITALIA SRL

IT-37074 MONFALCONE (GO) - VIA TIMAVO 61

has implemented and maintains a/an **Quality Management System**

for the following scope:

Research and development, production and sale of alkyds and saturated and unsaturated polyesters.

which fulfils the requirements of the following standard:

ISO 9001:2015

Issued on: 22/05/2023 First issued on: 29/07/2008 Expires on: 06/07/2026

Registration Number: IT- 55405 - 13201





Building trust together

Certificate

CISQ/CERTIQUALITY S.r.L. has issued an IQNET recognized certificate that the organization: NORD COMPOSITES ITALIA SRL

IT-37074 MONFALCONE (GO) - VIA TIMAVO 61

has implemented and maintains a/an Environmental Management System

for the following scope:

for the following scope:

trading of alkyd resins and polyester. which fulfils the requirements of the following **standard**:

ISO 14001:2015

Issued on:
First issued on:
Expires on:

05/06/2023
05/06/2020
03/06/2026

Registration Number: IT- 119160 - 28474 SPRES











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