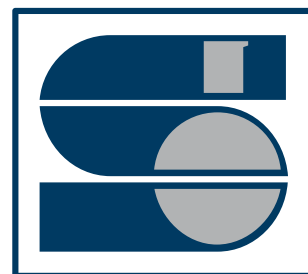


2018



SAPICI



▶▶ **PRODUCT RANGE 2018** ▶▶

high performance polymers technology



PRODUCT RANGE 2018



diluents & notes

contacts

index

▶ POLURGREEN	Low Monomer Content Polyisocyanates	p. 1
▶ POLURGREEN	Ultra Low Monomer Content Aliphatic Polyisocyanates	p. 2
▶ POLURGREEN PRP	Ultra Low Free Monomer Prepolymers	p. 3
▶ POLURENE	Aromatic Adducts	p. 4
▶ POLURENE	Aromatic Isocyanurates	p. 5
▶ POLURENE	Aromatic Polyisocyanates MDI	p. 6
▶ POLURENE	Aliphatic Aromatic Isocyanurates	p. 7
▶ POLURENE	Aliphatic Polyisocyanates	p. 8
▶ POLURENE BK	Blocked Polyisocyanates	p. 9
▶ REXIN	Vegetable Fatty Acids Alkyd Resins	p. 10
▶ REXIN	Castor Oil Alkyd Resins	p. 11
▶ REXIN	Saturated Fatty Acids Alkyd Resins	p. 12
▶ REXIN	Special Alkyd Resins	p. 13
▶ REXIN DP	Saturated Polyesters	p. 14
▶ BLUEPUR	Polyurethane Waterborne Dispersions	p. 15
▶ BLUEPUR T	Polyurethane Waterborne High Elasticity Dispersions	p. 15
▶ BLUECRYL	Acrylic Waterborne Resins	p. 16
▶ HYDRORENE	Hydrodispersible Polyisocyanates	p. 17
▶ UCOPOL	Moisture Curing Polyurethanes	p. 18
▶ UCOPOL OL	Urethane Oil And Urethane Alkyd Resins	p. 19
▶ UCOFLEX	Solvent Based Elastomer	p. 20
▶ POLURENADD	Additives	p. 20
▶ POLURENE TPI	Adhesion Promoter	p. 20
▶ POLURENE LP	Blocked Isocyanates for Industrial Application	p. 21
▶ POLURENE LPI	Industrial Adhesives	p. 22
▶ INKS	Polyisocyanates, Polyesters and Polyurethanes for Inks	p. 23
▶ UNI-DUR	Polyisocyanates for Footwear	p. 24



POLURGREEN

Low Monomer Content Polyisocyanates

The TDI content <0.1% reduces the hazard classification.

product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
POLURGREEN AD 01	75	adduct	EA	TDI	< 0.1	12.5 - 13.5	1200 - 3000	1	Polyurethane adduct for general purposes. Suitable for 2K varnishes and enamels. It imparts good flexibility, fullness, brightness and solvent resistance.
POLURGREEN AD BA 01	67	adduct	BA	TDI	< 0.1	11.5 - 12.1	400 - 800	1	Polyurethane adduct for general purposes. Suitable for 2K varnishes and enamels. It imparts good flexibility, fullness, brightness and solvent resistance.
POLURGREEN HR 01	50	isocyanurate	BA	TDI	< 0.1	7.7 - 8.1	700 - 1400	1	Fast drying hardener for 2K PU system with limited yellowing. Suitable for the formulation of sealers and matt topcoats it gives hardness to the final coating.
POLURGREEN 60T 01	60	adduct	BA	TDI	< 0.1	9.5 - 9.9	1200 - 2000	1	High versatile polyisocyanate used for the formulation of polyurethane sealers and topcoats. It gives the right balance between fast drying and long pot-life.
POLURGREEN OK 01	60	mixed isocyanurate	BA	TDI HDI	< 0.1 < 0.1	9.8 - 10.3	500 - 1100	1	Aromatic-aliphatic hardener with good yellowing resistance. Suitable for polishable varnishes and enamels give to the final coating excellent hardness and good elasticity.
POLURGREEN FP 75 01	75	adduct	EA	TDI	< 0.1	12.5 - 13.5	1200 - 3000	1	Polyurethane adduct version in accordance with EU, BFR and FDA regulations for food packaging.



The free monomer content <0.1 reduces its hazard classification and complies with the European diisocyanates restriction proposal.

product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa·s @ 23°C	max hazen color	characteristics & main applications
POLURGREEN MT 75 01	75	aliphatic polyisocyanate	X PMA	HDI	< 0.1	16.0 - 17.0	50 - 200	< 40	Low monomer version of Polurene MT 75, aliphatic polyisocyanate with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURGREEN MT 100 01	100	HDI trimer	-	HDI	< 0.1	21.5 - 22.5	1800 - 3300	< 40	Low monomer version of Polurene MT 100, aliphatic trimer with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURGREEN MT 100 LV 01	100	HDI trimer	-	HDI	< 0.1	22.0 - 23.0	900 - 1500	< 40	Low monomer version of Polurene MT 100 LV, low viscosity version of the aliphatic trimer. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURGREEN MT 100 LLV 01	100	HDI trimer	-	HDI	< 0.1	22.0 - 24.0	550 - 850	< 60	Low monomer version of Polurene MT 100 LLV, ultra low viscosity version of the aliphatic trimer. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURGREEN MT 90 01	90	HDI trimer	BA N	HDI	< 0.1	19.1 - 20.5	400 - 700	< 40	Low monomer version of Polurene MT 90, aliphatic trimer with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.



POLURGREEN PRP

Ultra Low Free Monomer Prepolymers

The free monomer content <0.1 reduces its hazard classification and complies with the European diisocyanates restriction.

product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa*s	characteristics & main applications
POLURGREEN PRP 450 01*	100	aromatic	-	TDI	< 0.1	4.0 - 5.0	840 - 1050 @ 23°C	Linear prepolymer with high elongation and tensile strength.
POLURGREEN PRP 750 01*	100	aromatic	-	TDI	< 0.1	7.0 - 8.0	6000 - 12000 @ 40°C	Linear prepolymer with high elongation and tensile strength.
POLURGREEN PRP 940 01	100	aromatic	-	TDI	< 0.1	8.9 - 9.7	4000 - 10000 @ 40°C	High NCO, low viscosity linear prepolymer for adhesives, elastomer and sealants formulation.
POLURGREEN PRP F 930 01	100	aromatic	-	TDI	< 0.1	8.8 - 9.7	10000 - 20000 @ 50°C	High NCO prepolymer for foams formulation.
POLURGREEN PRP 6050 01	100	aromatic	-	MDI	< 0.1	4.0 - 6.0	4500 - 10500 @ 40°C	Linear NCO terminated prepolymer for adhesives and sealants formulation.
POLURGREEN PRP 4041 01*	100	aliphatic	-	HDI	< 0.1	9.0 - 10.0	2000 - 4000 @ 23°C	Aliphatic prepolymer for applications where maximum yellowing resistance is needed.
POLURGREEN PRP 5500 01	100	aromatic	-	TDI	< 0.1	2.0 - 3.0	3500 - 8500 @ 23°C	Branched NCO terminated prepolymer for sealants formulation.

* Available also with standard monomer content <0.5



Polyurethane adducts with low free TDI content, for general pupouses:
long pot life, high body filling, high gloss and high flexibility.
High compatibility with nitrocellulose, CAB, saturated polyesters, OH acrylic polyols and vinyl resins.

product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa*s @ 23°C	max gardner color
POLURENE AD	75	adduct	EA	TDI	< 0.5	12.5 - 13.5	1200 - 3000	1
POLURENE FP 75	75	adduct	EA	TDI	< 0.5	12.5 - 13.5	1200 - 3000	1
POLURENE AD 67	67	adduct	X PMA	TDI	< 0.5	10.8 - 11.8	1200 - 3000	2
POLURENE AD 67 BA LV	67	adduct	BA	TDI	< 0.5	11.5 - 12.3	400 - 800	1
POLURENE 60T	60	adduct	BA	TDI	< 0.5	9.5 - 9.9	1200 - 2000	1
POLURENE AD HP	70	adduct	EA	TDI	< 0.5	9.5 - 10.5	2000 - 3000	1

product	reactivity	pot-life	flexibility	yellowing
POLURENE AD	+	+++	+++	+++
POLURENE 60T	++	++	++	+
POLURENE AD HP	+++	+	+	++



POLURENE

Aromatic Isocyanurates

Aromatic isocyanurates with low free TDI content: fast curing, high hardness, limited yellowing.
Suitable for the formulation of high quality sealers and topcoats.

product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa*s @ 23°C	max gardner color
POLURENE IR 51 BA	50	isocyanurate	BA	TDI	< 0.5	7.8 - 8.2	700 - 1200	1
POLURENE IR 51 EA	50	isocyanurate	EA	TDI	< 0.3	7.8 - 8.2	100 - 400	1
POLURENE AC 510	50	isocyanurate	BA	TDI	< 1.0	7.0 - 7.4	50 - 300	1
POLURENE HRBS	50	isocyanurate	BA	TDI	< 0.5	7.0 - 7.4	400 - 800	1
POLURENE SB 50 BA	50	isocyanurate	BA	TDI	< 0.5	8.0 - 8.4	200 - 600	1
POLURENE 3031	50	isocyanurate	BA	TDI	< 0.5	8.5 - 9.0	250 - 650	1
POLURENE 7581	50	isocyanurate	BA	TDI	< 0.5	7.7 - 8.3	200 - 500	1
POLURENE IR 70 BA	70	isocyanurate	BA	TDI	< 0.5	12.5 - 13.5	800 - 2000	1
POLURENE IR 65 EA	65	isocyanurate	EA	TDI	< 0.5	11.1 - 11.15	250 - 450	1
POLURENE KC	50	mixed isocyanurate	BA	TDI MDI	< 0.5	7.8 - 8.0	200 - 400	1

product	NC compatibility	reactivity	pot-life	fullness
POLURENE IR 51 BA	no	+++	-	+
POLURENE AC 510	ok	++	+++	++
POLURENE HRBS	limited	+++	+	++
POLURENE SB 50 BA	ok	++	+++	++
POLURENE 3031	ok	+	+++	+
POLURENE 7581	ok	+++	++	+++
POLURENE KC	ok	+++	++	++



POLURENE

Aromatic Polyisocyanates MDI



product	% NV	type	solvent	type of isocyanate	% NCO	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
POLURENE MD 50 EA	50	prepolymer	EA	MDI	6.8 - 7.4	< 50	1	Polyisocyanate with high penetration on porous substrate, it blocks the substances from the substrate and uniformize the adsorption for the overcoating. It improves adhesion on difficult substrate.
POLURENE MD 60 BA	60	prepolymer	BA	MDI	5.0 - 6.0	200 - 650	1	Polyisocyanate with high penetration on porous substrate, it blocks the substances from the substrate and uniformize the adsorption for the overcoating. It improves adhesion on difficult substrate.
POLURENE MD 1500	100	polyisocyanate	-	MDI	31.7 - 33.3	< 50	18	Polymeric MDI with excellent flexibility. Recommended for solvent free 2K PU coatings like self-levelings, synthetic mortars and adhesives. Fast drying and more flexible than POLURENE MD 1600.
POLURENE MD 1600	100	polyisocyanate	-	MDI	31.0 - 32.0	< 100	18	Polymeric MDI with excellent flexibility. Recommended for solvent free 2K PU coatings like self-levelings, synthetic mortars and adhesives.
UCOPOL M 601	100	prepolymer	-	MDI	22.0 - 24.0	< 200	18	1K Primer for concrete solventless and odourless. Ready to use product with good wettability and penetration into the substrate. Shorter cross-linking time than UCOPOL M 602.
UCOPOL M 602	100	prepolymer	-	MDI	22.0 - 24.0	< 200	18	1K Primer for concrete solventless and odourless. Ready to use product with good wettability and penetration into the substrate.
UCOPOL M 621	100	prepolymer	-	MDI	15.0 - 17.0	4500 - 7500	18	It can be used as impregnating agent of porous substrate as cement screed. It can also be used as a binder in the formulation of solvent-free moisture curing one-component adhesives or in combination with polyols for the formulation of 2K sealants. It has excellent adhesion on different substrate, e.g. wood, metal and plastic.

Aliphatic Aromatic Isocyanurates

product	acrylic compatibility	reactivity	pot-life	fullness
POLURENE 2391	limited	+++	+	+++
POLURENE OKD	no	+++	-	++
POLURENE OKDS	limited	++	+	++
POLURENE OK HP	ok	+	++	++



POLURENE

Aliphatic Polyisocyanates



product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa*s @ 23°C	max hazen color	characteristics & main applications
POLURENE T 70	70	aliphatic polyisocyanate	BA	IPDI	< 0.5	11.8 - 12.2	800 - 1600	<80	Polyisocyanate trimer with high lightfastness and outdoor resistance. Suitable for the formulation of high demanding 2K PU coatings exhibits a good film formation.
POLURENE T 70 EA	70	aliphatic polyisocyanate	EA	IPDI	< 0.5	11.0 - 13.0	200 - 600	<80	Polyisocyanate trimer with high lightfastness and outdoor resistance. Suitable for the formulation of high demanding 2K PU coatings exhibits a good film formation.
POLURENE M 75	75	aliphatic polyisocyanate	X PMA	HDI	< 0.38	16.0 - 17.0	150 - 310	<40	Aliphatic biuret with high flexibility. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE M 75 BA	75	aliphatic polyisocyanate	BA	HDI	< 0.38	16.0 - 17.0	150 - 300	<40	Aliphatic biuret with high flexibility. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE M 75 PMA	75	aliphatic polyisocyanate	PMA	HDI	< 0.38	16.2 - 16.8	175 - 325	<40	Aliphatic biuret with high flexibility. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE MT 75	75	aliphatic polyisocyanate	X PMA	HDI	< 0.15	16.0 - 17.0	50 - 200	<40	Aliphatic polyisocyanate with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE MT 100	100	HDI trymer	-	HDI	< 0.15	21.5 - 22.5	2000 - 3000	<30	Aliphatic trimer with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE MT 100 LV	100	HDI trymer	-	HDI	< 0.15	22.0 - 24.0	900 - 1500	<40	Low viscosity version of the aliphatic trimer. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE MT 100 LLV	100	HDI trymer	-	HDI	< 0.15	22.0 - 24.0	550 - 850	<60	Ultra Low viscosity version of the aliphatic trimer. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE MT 90	90	HDI trymer	BA N	HDI	< 0.15	19.1 - 20.5	400 - 700	<40	Aliphatic trimer with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.
POLURENE MT 90 BA	90	HDI trymer	BA	HDI	< 0.15	19.1 - 20.5	300 - 700	<40	Aliphatic trimer with high toughness. Suitable for the formulation of no yellowing 2K PU coating and stoving enamel.



POLURENE BK

Blocked Polyisocyanates

product	% NV	solvent	type of isocyanate	% free monomer	% blocked NCO	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
POLURENE BK 1175	75	N	HDI	< 0.2	10.6 - 11.6	2500 - 5000	1	Blocked isocyanate suitable for the formulation of non yellowing 1K stoving enamels; it flexibilize and to increase the adhesion.
POLURENE BK 1177	77	N	HDI	< 0.2	10.9 - 11.9	4000 - 10000	1	Low hazardousness blocked polyisocyanate suitable for the formulation of non yellowing 1K stoving enamels; it flexibilize and increase the adhesion.
POLURENE BK 5150 EA	50	EA	TDI	< 0.1	6.0 - 6.5	<100	2	TDI based polymer containing blocked and curable isocyanic groups. Recommended for nonwoven, PVC and fabric laminations.



REXIN

Vegetable Fatty Acids Alkyd Resins



Short oil alkyd resins based on vegetable fatty acids: fast drying, excellent solvent release.
In combination with flexible resins they can improve the sandability of the sealers.
Used alone can improve the surface hardness and the levelling of matt top coats.

product	% NV	solvent	% oil	Vx mPa•s @ 23°C	N.A.max	N° OH	% OH	max gardner color
REXIN 129	60	X	32	11000 - 22000	16	60	1.82	3
REXIN 129 70 BA	70	BA	32	3000 - 7000	18	90	2.70	3
REXIN 129 70 X	70	X	33	45000 - 65000	18	70	2.12	3
REXIN 1561	60	X	39	4500 - 8500	9	80	2.42	3
REXIN 1561 70 BA	70	BA	39	5000 - 9000	9	90	2.73	3
REXIN C760	60	X	35	4000 - 8000	7	80	2.42	3
REXIN 5528	70	X	35	45000 - 65000	15	80	2.42	3
REXIN 139	70	X	35	20000 - 38000	11	85	2.58	3
REXIN 5250	70	X	31	10000 - 20000	13	80	2.42	2
REXIN DS 214 80 BA	80	BA	31	500 - 1000	10	110	3.33	5
REXIN HS 0385 BA	85	BA	33	1000 - 2000	15	150	4.54	3
REXIN HS 0685 BA	85	BA	33	500 - 1000	15	150	4.54	3

product	sandability	matting efficiency	fullness	flexibility	main charateristic
REXIN 129	+++	++	++	-	fast curing
REXIN 1561	+++	++	+	+++	wettability
REXIN C760	++	++	++	++	all purpose
REXIN 5528	++	+	++	+	leveling
REXIN 139	++	+++	+++	++	leveling
REXIN 5250	++	+	++	+++	converter for tintometric system
REXIN DS 214 80 BA	++	+	++	++	high solid
REXIN HS 0385 BA	+++	++	++	-	high solid
REXIN HS 0685 BA	+++	++	++	+	high solid



REXIN

Castor Oil Alkyd Resins

Short oil alkyd resins based on castor oil: good elasticity, low viscosity, good solvent release and fast drying. High wetting properties. For clear and pigmented PU coating.

product	% NV	solvent	% oil	Vx mPa•s @ 23°C	N.A.max	N° OH	% OH	max gardner color
REXIN 1234	60	X	43	1500 - 3500	15	90	2.72	3
REXIN 160	60	X	57	1500 - 2500	9	85	2.58	3
REXIN LS 124	70	X	60	800 - 1600	10	100	3.03	3
REXIN 1543 75 BA	75	BA	52	4000 - 8000	12	130	3.90	3
REXIN 2039	50	X MEK	31	7000 - 13000	20	80	2.42	3
REXIN 141	60	X	40	3000 - 5000	14	90	2.72	3

product	wettability	color retention	chemical - physical resistance
REXIN 1234	++	++	++
REXIN 160	++	++	++
REXIN LS 124	+++	+	++
REXIN 1543 75 BA	++	+	+++
REXIN 2039	++	+++	+++
REXIN 141	++	+++	++



REXIN

Saturated Fatty Acids Alkyd Resins



Short oil alkyd resins based on saturated fatty acids: excellent gloss, excellent hardness and yellowing resistance. For clear and pigmented PU coatings. Stoving enamels with high flexibility, hardness and high solid content.

product	% NV	solvent	% oil	Vx mPa•s @ 23°C	N.A.max	N° OH	% OH	max gardner color
REXIN AP 575	80	X	32	35000 - 45000	20	110	3.33	1
REXIN AP 572	80	X	27	7000 - 12000	12	118	3.56	1
REXIN HG 70	70	X	27	1300 - 3000	12	90	2.73	3
REXIN 1523	70	BA	33	3000 - 6000	10	130	3.94	3
REXIN HG 3	80	X	33	35000 - 45000	15	115	3.48	1
REXIN HG 7	80	X	34	40000 - 50000	12	120	3.63	1

product	polishability	fullness	chemical resistance	main characteristic
REXIN AP 575	+++	++	++	fast curing
REXIN AP 572	++	++	++	low viscosity
REXIN HG 70	+++	+	++	general purpose
REXIN 1523	+++	+++	+++	high performance
REXIN HG 3	+++	+++	++	fast curing
REXIN HG 7	++	+++	++	wood coating



REXIN

Special Alkyd Resins

product	% NV	solvent	% oil	type of oil	Vx mPa•s @ 23°C	N.A. max	N° OH	% OH	max gardner color	characteristics & main applications
REXIN 2268	80	x	27	saturated fatty acids	3000 - 6000	15	110	3.33	2	Special aliphatic resin with excellent yellowing resistance. It is suitable for clear and pigmented non yellowing high gloss top coats with excellent fullness, leveling and pigments wettability. Complete compatibility with acrylic resins.
REXIN 2281 70 X	70	x	40	vegetable fatty acids	800 - 1400	12	85	2.58	5	Binder for universal pigmented paste. Compatible with short - medium - long oil alkyd resins, saturated polyesters, acrylic, epoxy, urea and melamine resins, chetonic and maleic resins. Not compatible with unsaturated polyester and waterborne resins.



REXIN DP

Saturated Polyesters



product	% NV	solvent	Vx mPa*s @ 23°C	N.A. max	N° OH	% OH	max gardner color	characteristics & main applications
REXIN HSP 05100	100	-	24000 - 36000	15	210	6.36	3	Excellent hardness. High chemical resistance. Excellent abrasion resistance. Excellent leveling. High gloss clear and pigmented 2K PU coatings. Product suitable for high solid formulations.
REXIN HSP 411	100	-	20000 - 40000	4	180	5.45	2	Slightly branched solventless polyester resin. Good chemical resistance. Good hardness and excellent flexibility. It is recommended for 2K PU parquet coatings.
REXIN HSP 412	100	-	3500 - 6500	4	185	5.60	2	Slightly branched solventless polyester resin. High chemical resistance. Excellent elasticity. For coatings and enamels for metal, wood, plastic and rubber.
REXIN HSP 417	100	-	10000 - 20000	5	40	1.20	2	Solventless polyester resin. Excellent elasticity. Suitable for coatings and enamels for paper, leather, plastic and rubber. It is used for the formulation of coatings with soft touch effect.
REXIN HSP 50	100	-	500 - 1300	2	160	4.84	4	Saturated polyester resin with high wettability and flexibility. Suitable for high filled two-pack coatings and adhesives formulations.
REXIN DP 127	70	BA	1800 - 3500	15	125	3.79	3	Excellent hardness. Good abrasion resistance. Excellent yellowing resistance. Excellent wetting properties. High gloss and fast drying clear and pigmented 2K PU coatings. It is recommended for pigmented paste.
REXIN DP 328	60	BA	3000 - 5000	13	110	3.33	3	Good hardness and flexibility. Good abrasion resistance. Good filling and solvent release. Good compatibility with Nitrocellulose. It can be used in combination with urea and melamine resins. Clear and pigmented 2K PU coatings.
REXIN DP 390	60	X	2000 - 3500	10	85	2.58	3	Good flexibility and hardness. Fast drying. Long Pot-life. Good overspraying resistance. Suitable for clear and pigmented matt and high gloss 2K PU sealer and top coats.
REXIN DP 390 70 BA	70	BA	2600 - 3600	12	100	3.03	3	Good flexibility and hardness. Fast drying. Long Pot-life. Good overspraying resistance. Suitable for clear and pigmented matt and high gloss 2K PU sealer and top coats.
REXIN DP 408 80 BA	80	BA	1000 - 1800	5	240	7.28	3	Highly branched polyester resin. High chemical resistance. Excellent hardness and abrasion resistance. It is recommended for 2K PU parquet coatings and enamels for metal.
REXIN DP 315	75	X	17000 - 25000	15	125	3.79	3	Saturated polyester resin for pigmented and high gloss topcoat. Fast drying, good levelling, excellent hardness and fullness, especially designed for black finish.
REXIN DP 500	70	N	4000 - 9000	6	55	1.72	1	Saturated polyester resin that exhibits good balance between hardness and flexibility. Can be used in combination with melaminic resins to improve flexibility, adhesion and chip resistance in stoving enamels. Recommended for industrial coatings, baking enamel, and general purpose metal applications with high gloss retention and high scratch resistance.



BLUEPUR

Polyurethane Waterborne Dispersions

product	% NV	type of isocyanate	solvent	Vx mPa•s @ 23°C	pH	characteristics & main applications
BLUEPUR 2937	35.5	aliphatic	coalescent free	250 max	7.0 - 9.0	Resin for application in 1K and 2K waterborne system. This resin have a self crosslinking behaviour that confer high hardness. Very fast drying. It can be used to formulate transparent and pigmented coating.
BLUEPUR 3037	38	aliphatic	coalescent free	500 max	7.0 - 8.0	Resin for application in 1K and 2K waterborne system. This resin have a self crosslinking behaviour that confer high hardness. The high flexibility of the resin let it suitable for the formulation of coating for metal and plastic.
BLUEPUR 3070	40	aliphatic	coalescent free	200 max	7.0 - 9.0	Tough and flexible. Good abrasion resistance. Good adhesion on plastic and metal beside wood and porous substrate. High lightfast resistance. Main application plastic and wood coating.
BLUEPUR 3080	40	aliphatic	coalescent free	500 max	7.0 - 8.0	Resin for application in 1K and 2K waterborne system. It's special structure let the possibility to use this resin for coalescing aid with PUD and acrylic emulsion. The high elasticity let it suitable for the formulation of coating for metal and plastic.



BLUEPUR T

Polyurethane Waterborne High Elasticity Dispersions

product	% NV	type of isocyanate	solvent	tensile strength MPa	% elongation at break	100% elongation modulus MPa	Vx mPa•s @ 23°C	pH	characteristics & main applications
BLUEPUR T 52	50	aliphatic	coalescent free	35	750	2.5	< 200	7.0 - 9.0	PUD with good soft-handle. It exhibits excellent hydrolysis and alkali resistance. It shows good mechanical properties, high tensile strength, high elongation at break and good modulus.
BLUEPUR T 53	43	aliphatic	coalescent free	30	600	3.5	< 500	7.0 - 9.0	Good adhesion on different substrate. It exhibits good rub resistance at low temperature. It shows good mechanical properties, high tensile strength, high elongation at break and good modulus.
BLUEPUR T 71	50	aliphatic	coalescent free	25	700	1.7	< 3000	6.5 - 8.5	PUD with good high gloss film forming properties and full handle. It exhibits excellent hydrolysis and alkali resistance. It shows good mechanical properties, high tensile strength, high elongation at break and good modulus. It can be crosslinked with HYDRORENE, hydro dispersible isocyanate, and also with melaminic resin. If not crosslinked, can be welded.



BLUECRYL

Acrylic Waterborne Resins



Self Crosslinking Emulsions

product	% NV	pH	MFFT °C	Vx mPa•s @ 23°C	characteristics & main applications
BLUECRYL 012	40	7.0 - 9.0	32	10 - 200	Good scratch. Good yellowing resistance. Good water and chemical resistance. Good anti-blocking effect. Good sandability. Main application: decorative.
BLUECRYL 090	40	7.0 - 9.0	42	10 - 200	Clarity and transparency. Fast drying. Fast blocking resistance coatings. Good chemical resistance and flexibility. Main application: general industry.
BLUECRYL 092	40	7.0 - 9.0	44	10 - 200	Fast blocking resistance. Excellent elasticity & flexibility. Excellent chemical resistance. High scratch resistance. Main application: furniture.
BLUECRYL 098	42	7.0 - 9.0	5	10 - 200	Fast drying. Fast blocking resistance. Excellent elasticity & flexibility. Yellowing resistance. Good early water resistance. Low water absorption. Excellent chemical resistance. Main application: joinery.

Special Acrylic Waterborne Resins

product	% NV	pH	MFFT °C	Vx mPa•s @ 23°C	characteristics & main applications
BLUEPUR UV 077	38	6.0 - 8.0	-	10 - 200	Physically drying resin. Good wetting properties. Good adhesion on different wood substrate and metal. Excellent chemical resistance. Excellent flexibility.
BLUECRYL GR 24	45	4.3 - 5.6	10	< 50	Alkaline soluble acrylic emulsion suitable for pigment grinding. Before using dilute and neutralize by adding slowly under stirring on a neutralizing agent solution. Grinding resin, temporary coating with easy peelability, impregnating agent on plaster.

OH Acrylic Dispersions

product	% NV	pH	MFFT °C	% OH	Vx mPa•s @ 23°C	characteristics & main applications
BLUECRYL 213	47	3.5 - 5.5	40 - 42	1.3	< 1000	Good adhesion on different substrate. Good mechanical properties. Good resistance to solvent and water, once crosslinked. High lightfast resistance. Main application: Industrial flooring and general industry.
BLUECRYL 233	46	7.0 - 9.0	-	3.3	< 2000	Good wetting property, is suitable for the formulation of pigmented system. Tough and flexible surface. Good resistance to water and solvent. Main application: industrial flooring and general industry.
BLUECRYL 242	46	7.0 - 9.0	-	4.2	< 3000	Good wetting property, is suitable for the formulation of pigmented system. Tough and flexible surface. Good resistance to water and solvent. Can be formulated in 1K stoving enamel with melamine resin or in combination with blocked isocyanate. Main application: industrial flooring and general industry.



HYDRORENE

Hydrodispersible Polyisocyanates

product	% NV	type of isocyanate	solvent	% NCO	Vx mPa•s @ 23°C	characteristics & main applications
HYDRORENE AW 1	100	aliphatic	free	16.0 - 18.0	2000 - 4000	High dispersibility isocyanate for the formulation of 2K waterborne varnishes with good chemical and abrasion resistance.
HYDRORENE AW 4	100	aliphatic	free	20.0 - 21.0	1000 - 3000	High dispersibility isocyanate for the formulation of 2K waterborne varnishes with good body filling and gloss.
HYDRORENE AW 5	100	aliphatic	free	15.5 - 16.5	5000 - 9000	2K waterborne varnishes with excellent chemical and abrasion resistance. Suitable for acrylic and PU waterborne systems. Recommended in high gloss topcoat.



UCOPOL

Moiusture Curing Polyurethanes



product	% NV	type	solvent	type of isocyanate	% free monomer	% NCO	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
UCOPOL M 505	53	prepolymer	EA BA	TDI	< 0.5	4.4 - 5.2	< 50	1	Ready to use. Excellent flexibility. Coating for wood, plastic, concrete, rubber, textile and leather.
UCOPOL M 33 60	60	prepolymer	X PMA	TDI	< 0.5	5.5 - 6.5	250 - 500	1	Fast curing. Excellent hardness. Coating for parquet.
UCOPOL M 33 60 PMA	60	prepolymer	PMA	TDI	< 0.5	5.5 - 6.5	250 - 450	1	Fast curing. Excellent hardness. Coating for parquet.
UCOPOL M 34 60 LV	60	prepolymer	X PMA	TDI	< 0.3	6.8 - 7.8	800 - 1600	1	Abrasion resistance. Good balance between hardness and flexibility. Coating for parquet.
UCOPOL M 4054	60	prepolymer	X PMA	TDI	< 0.5	6.25 - 6.75	250 - 750	2	Hardness and good brightness. Coating for parquet and plastic.
UCOPOL M 2851	60	prepolymer	X PMA	TDI	< 0.5	5.0 - 6.0	600 - 1200	1	Adhesion. Coating for parquet, metal and plastic.
UCOPOL W 708	65	prepolymer	X PMA N	HDI	< 0.5	10.0 - 11.0	300 - 700	2	Yellowing resistance. High chemical and weather resistance. Coating for wood, plastic, concrete and metal.
UCOPOL M 551	100	prepolymer	-	TDI	< 0.5	4.0 - 5.0	5000 - 9000	2	Prepolymer used to formulate 1K and 2K sealants and industrial adhesives. It can be mixed with UCOPOL M 561, more tough, to adjust final properties and/or drying time.
UCOPOL M 561	100	prepolymer	-	TDI	< 0.7	7.0 - 8.0	6000 - 12000	1	Prepolymer used to formulate 1K and 2K sealants and industrial adhesives. It can be mixed with UCOPOL M 551, more flexible, to adjust final properties and/or drying time.



UCOPOL OL

Urethane Oil And Urethane Alkyd Resins

product	% NV	solvent	type of isocyanate	type of oil	Vx mPa*s @ 23°C	N.A. max	max gardner color	characteristics & main applications
UCOPOL OL 17 60 WD	60	WD	aromatic	drying	3000 - 7000	1	6	Good outdoor and abrasion resistance. Coating for window frames and boats. Impregnating agent for wood, anti corrosive paints. Resin obtained from renewable raw materials.
UCOPOL OL 18 50 X	50	X	aromatic	drying	4000 - 7000	0.3	6	Ggood hardness, fast drying. Outdoor resistance. Easily matting properties. Impregnating agent for wood, anti corrosive paints. Resin obtained from renewable raw materials.
UCOPOL OL 89 55 WD	55	WD	aromatic	special fatty acids	800 - 1600	3	6	Good outdoor and abrasion resistance. Coating for window frames and boats. Impregnating agent for wood, anti corrosive paints. Resin obtained from renewable raw materials.
UCOPOL OL 51 60 WD	60	WD	aromatic	special fatty acids	4000 - 7000	4	6	Good outdoor resistance. Fast drying. For high quality glossy and mat coating. Good overcoating performances. Resin obtained from renewable raw materials.
UCOPOL OL W 41 55 WD	55	WD	aliphatic	special fatty acids	4000 - 7000	4	6	Excellent outdoor resistance and hardness. Good chemical resistance. Suitable for white and light coloured enamels in building and nautical field. Non yellowing enamels with excellent filling power. Resin obtained from renewable raw materials.

product	drying	abrasion resistance	yellowing resistance	hardness	adhesion on metal
UCOPOL OL 17 60 OD	++	+++	++	+++	no
UCOPOL OL 18 50 X	+++	+++	+	+++	no
UCOPOL OL 89 55 OD	+	+	++	+	ok
UCOPOL OL 51 60 OD	+	+	++	++	limited
UCOPOL OL W 41 55 OD	++	++	+++	++	ok



UCOFLEX

Solvent Based Elastomer



product	% NV	type	solvent	type of isocyanate	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
UCOFLEX 630 IB	30	elastomer	IB	IPDI	1000 - 2000	1	Clear and pigmented paints for ABS, PVC, PUR, Polystyrene and Paper. Good yellowing, abrasion and shock resistance.



POLURENADD

Additives

product	characteristics & main applications
POLURENADD S 51	Catalyst to accelerate 2K PU curing, it promotes the reaction between hydroxyl groups and isocyanic groups.
POLURENADD BF 5	Moisture scavenger for 1K and 2K polyurethane coatings, it acts on long term therefore advisable for in can storage
POLURENADD PTSI	Moisture scavenger for 1K and 2K polyurethane coatings, it reacts quickly with residual moisture trapped in formulation step (mixing and filler addition).



POLURENE TPI

Adhesion Promoter

product	% NV	type	solvent	type of isocyanate	% NCO	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
POLURENE TPI 27 EA	27	polyisocyanate	EA	TPTI	7.0 - 7.4	< 50	18	Special polyisocyanate developed for the formulation of products with good adhesion on melamine paper, it can help also on substrate contaminated by residual release agent.



POLURENE LP

Prepolymers for Flexible Sealants

product	% NV	% NCO max	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
POLURENE LP 100 NPF	100	0.2	15000 - 25000	3	PU TDI based polymer containing blocked isocyanic groups. Excellent for improving the flexibility of epoxy systems. Excellent rheology. This product don't release Nonyl Phenol.
POLURENE LP 90 NPF	90	0.2	6000 - 14000	3	PU TDI based polymer in DOA containing blocked isocyanic groups. Excellent for improving the flexibility of epoxy systems. Excellent rheology. This product don't release Nonyl Phenol.
POLURENE LP 80 NPF	80	0.2	3000 - 8000	3	PU TDI based polymer in DOA containing blocked and curable isocyanic groups. Very low viscosity. Excellent for improving the flexibility of epoxy systems for adhesives, sealant and membrane. Excellent rheology. Easy to apply.
POLURENE LP 100 LV	100	0.2	25000 - 45000	1	PU prepolymer TDI based containing blocked isocyanic groups. Excellent for improving the flexibility of epoxy systems. Excellent rheology.
POLURENE LP 90 LV	90	0.2	10000 - 25000	1	PU TDI based polymer in DOA containing blocked and curable isocyanic groups. Very low viscosity. Excellent for improving the flexibility of epoxy systems for adhesives, sealant and membrane. Excellent rheology. Easy to apply.
POLURENE LP 80 LV	80	0.2	7000 - 9000	1	PU TDI based polymer in DOA containing blocked and curable isocyanic groups. Very low viscosity. Excellent for improving the flexibility of epoxy systems for adhesives, sealant and membrane. Excellent rheology. Easy to apply.



product	% NV	% NCO	Vx mPa*s @ 23°C	max gardner color	characteristics & main applications
POLURENE LPI 2572	100	12.5 - 14.5	3000 - 7000	18	Solvent free MDI based 1K PU adhesive. It is recommended for sandwich panels for thermic and acoustic insulation.
POLURENE LPI 34 NT	100	14.0 - 16.0	2000 - 4000	18	1K adhesive for wood D4 approved recommended for finger joint bonding of outdoor furnitures. Highly resistant to acid and alkaline hydrolysis. Short Pot life. Very crystalline adhesive resistant to heatshock.
POLURENE LPI 604	100	9.0 - 10.0	4000 - 8000	3	MDI based 1K PU binder for moulded-on rubber grains, cork and agglomerates in general. Good mechanical and chemical resistance. Fast curing.
POLURENE LPI 3719	68	1.6 - 2.2	6000 - 10000	2	MDI based 1K PU adhesive in ethyl acetate. Excellent initial bond, recommended for PVC, expanded PU and natural and synthetic fabrics.
POLURENE LPI 3719 40 EA	40	1.0 - 1.6	150 - 250	2	MDI based 1K PU adhesive in ethyl acetate. Excellent initial bond, recommended for PVC, expanded PU and natural and synthetic fabrics.



INKS

Polyisocyanates, Polyesters and Polyurethanes for Inks

Over Print Varnishes

product	% NV	solvent	Vx mPa*s @ 23°C	N° OH	characteristics & main applications
REXIN 6302 K	70	EA	100 - 500	100	Aromatic polyester to be used in the formulation of fast drying 2K matt/gloss overprint varnish in combination either with Polurene IR51 K or FP 75 K.
REXIN 6258 K	60	EA	50 - 250	180	Highly branched aliphatic polyester to be used in the formulation of fast drying 2K matt/gloss overprint varnish. It can be used in combination with Polurene IR51 K and FP75 K, or POLURENE OK K to improve UV resistance.
REXIN 1939 K	75	EA	3000 - 4000	165	Saturated aromatic polyester to be used in the formulation of 2K overprint varnish in combination either with Polurene IR51 K or FP 75 K. High compatibility with other polymer resins (Vinyl copolymer, NC, polyesters).

Polyisocyanates

product	% NV	solvent	Vx mPa*s @ 23°C	% NCO	characteristics & main applications
POLURENE FP 75 K	75	EA	1200 - 3000	13.0	Aromatic polyisocyanate to be used in the formulation of several type of inks either as hardener or adhesion promoter. In the formulation of 2K over print varnish, POLURENE FP 75 K is recommended to impart elastomeric properties to the varnish.
POLURGREN FP 75 01 K	75	EA	1200 - 3000	13.0	Low monomer version of POLURENE FP 75K. Due to free TDI content < 0,1% its labelling is less hazardous for human health (H334-free).
POLURENE IR 51 K	50	EA	100 - 400	8.0	Aromatic polyisocyanate to be used as NCO component in the formulation of fast curing 2K overprint varnish. POLURENE IR51 K is recommended to impart crystalline properties to the varnish.
POLURENE OK K	60	EA	100 - 400	10.2	Aliphatic-aromatic polyisocyanate to be used as NCO component into the formulation of fast curing 2K overprint varnish. POLURENE OK K is recommended to limit the yellowing of the varnish induced by UV light.

Inks Modifiers

product	% NV	solvent	Vx mPa*s @ 23°C	characteristics & main applications
POLURENE 5870 K	75	EA	1300 - 2300	Soft polyurethane resin to be used in the formulation of flexo and gravure solvent based NC-PU inks. Characterized by excellent compatibility with pigments and NC resins, good solvent release and jaw properties, good adhesion on polyolefinic substrates and solubility in alcohols and ethyl acetate.
POLURENE 5580 K	75	EA	2200 - 3600	Medium hard polyurethane resin to be used in the formulation of flexo and gravure solvent based NC-PU inks. Characterized by good thermal resistance, adhesion on polyolefinic substrates and solubility in alcohols and ethyl acetate.
POLURENE 5892 K	>99	-	2000 - 4000	Non-yellowing soft polyurethane resin to be used along with hard PU resins in the formulation of flexo and gravure solvent based NC-PU inks or in 1K OPV to impart gloss properties, thermal resistance and jaw release.
POLURENE 0466 K	70	EA	1000 - 2000	Polyurethane resin to be used in the formulation of solvent based NC-PU inks for gravure surface printing. Good blocking resistance, adhesion on clear and pearlized BOPP, PE, CPP. It can be used also for flexo application.



UNI-DUR

Polyisocyanates for Footwear



product	appearance	Vx mPa•s @ 23°C	% NV	solvent	% NCO	max gardner color	characteristics & main applications
UNI - DUR WB 7000	clear	2000 - 4000	100	-	16.0 - 18.0	2	Hardener for high-quality water based polyurethane systems. It can improve the resistance of adhesive bonds towards moisture, heat and solvents. Thanks to its hydrophilic character it is easily dispersible by mechanical stirrer.
UNI - DUR E 2008 RC	clear	< 50	35	EA	5.7 - 6.3	1	Crosslinker for the formulation of adhesives for natural or synthetic rubber, leather and shoes manufacturing. Good drying time and good pot-life; excellent balance between hardness and elasticity of the adhesive; excellent greentack; good yellowing resistance.
UNI - DUR E 1001 RN	clear	< 50	40	EA	7.0 - 7.6	1	Recommended to improve the adhesion, cohesion and heat resistance of the final bond. It yields bonds that undergo to minimal colour modification.
UNI - DUR E 2002 ARFE	clear	< 50	27	EA	7.2 - 8.2	18	Recommended for crosslinking industrial polyurethane adhesives for natural or synthetic rubber. It improves significantly the adhesion, cohesion and mainly the heat resistance of the final bond.
UNI - DUR E 1001	clear	< 50	43	EA	6.8 - 7.2	1	Crosslinker for the formulation of adhesives for natural or synthetic rubber, leather and shoes manufacturing. Good drying time and good pot-life; excellent balance between hardness and elasticity of the adhesive; excellent greentack; good yellowing resistance.

isocyanates

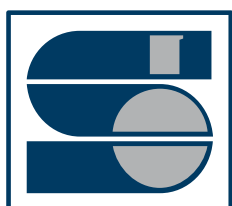
TDI	TOLUENE DIISOCYANATE
MDI	DIPHENYLMETHANE DIISOCYANATE
IPDI	ISOPHORONE DIISOCYANATE
HDI	HEXAMETHYLENE DIISOCYANATE
TPTI	TRIS (P-ISOCYANATOPHENYL) THIOPHOSPHATE

diluent

BA	BUTYL ACETATE
EA	ETHYL ACETATE
DOA	DIOCTYL ADIPATE
IB	iso-BUTANOL
N	SOLVesso 100
PMA	METHOXYPROPYLACETATE
WD	D40 WHITE SPIRIT
X	XYLENE

notes

% NV	Non Volatile
TYPE	Type of Product
% NCO	Nco
Vx mPa*s @ 23 °C	Viscosity at 23°C
N.A. max	Acid Number
N° OH	Hydroxyl Number MG/KOH
% OH	Hydroxyl Percentage
NB: All specifications refer to the delivery form	



SAPICI

Italy

SAPICI S.p.A.

>> **technical information**

e-mail tech@sapici.it
phone **+39 02 921871**

>> **commercial information**

e-mail sales@sapici.it
phone **+39 02 9644621**

>> **editorial information**

e-mail media@sapici.it

China

SAPICI CHEMICAL Zhuhai Co., Ltd.

>> **technical information**

e-mail tech@sapici.net
phone **+86756 7266678**

>> **commercial information**

e-mail sales@sapici.net
phone **+86756 8921364**