

2023
EDITION



METAL, TRANSPORT AND ACE

 **HELIOS** RESINS

HELIOS RESINS, HIGH-QUALITY RESINS FOR RELIABLE COATING SOLUTIONS.

RESINS SUPPLIER SINCE 1908.

METAL, TRANSPORT AND ACE

THESE RESINS ENSURE
EXCELLENT PROTECTION
COATINGS FOR A BROAD
RANGE OF INDUSTRIAL METAL
COATING APPLICATIONS.

GOLDEN RESINS

Helios Resins is a separate business unit of KANSAI HELIOS, now part of Kansai Paint, one of the world's leading paint and coatings producers. Today, Helios Resins produces around 70,000 tons of liquid resins annually, including coating and composite resins. Our coating resin brands – DOMACRYL, DOMOPOL, DOMALKYD, DOMEMUL and DOMOPUR – have achieved a strong market position and are trusted for their quality and performance. We currently serve more than 50 countries worldwide.

SUSTAINABLE APPROACH

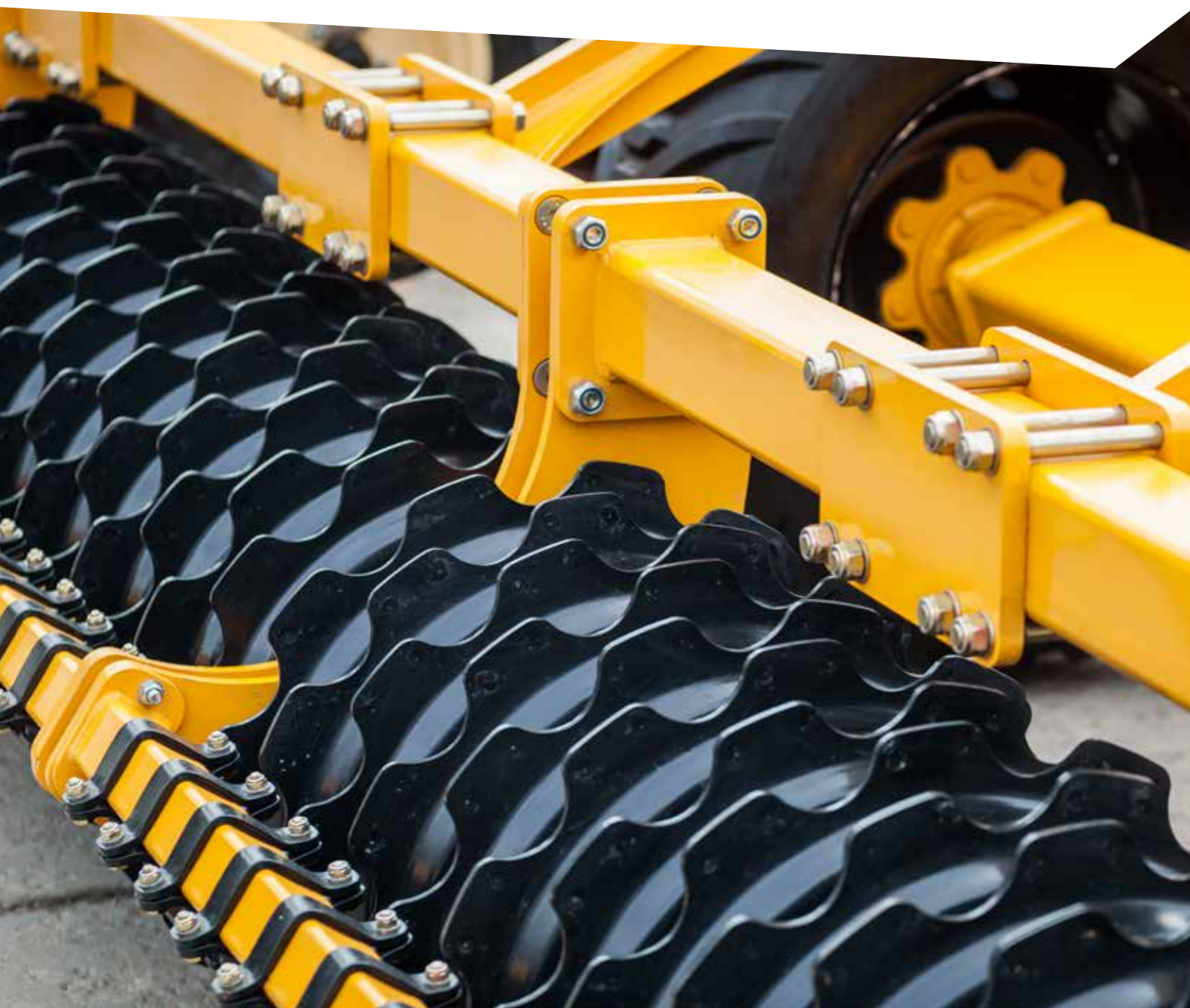
By developing advanced, green, and long-lasting materials, we reduce emissions of hazardous organic solvents, incorporate bio-renewable raw materials and create a potential for energy savings. Our sustainable approach encompasses the production of bio-based materials, water-based resins, high solids, BPA non-intent resins, recycling, and participation in EU initiatives. We are the first in Slovenia to be ISCC Plus certified and offer several products made from sustainable raw materials that are certified in all parts of the value chain back to the point of origin. A sustainable future matters greatly to us, our business, and our customers. We are proud to see this reflected in the EcoVadis Silver Medal we received for our sustainability performance.

DEVELOPED WITH ADVANCED TECHNOLOGIES

Our laboratories and production facilities are fully equipped with the most advanced technologies, which enables the development and production of even the most complex solvent and waterborne resins. Our R&D has advanced skills as well as equipment for polyester and acrylic chemistry, including synthesis under pressure. By continually upgrading our production lines and expanding our production capacities, we are able to meet the most rigorous and complex needs and demands of our customers.

QUALITY OF SERVICE

We are committed to providing a flexible and reliable service while satisfying our customers' specific requests. Helios Resins ensures the quality, stability and reproducibility of every delivery. Our extensive know-how, resulting from more than 100 years of experience, enables us to provide solutions to our customers' challenges. Helios Resins experts produce tailor-made resins for specific needs and offer support in developing customized applications.



ACRYLIC SOLVENTBORNE 1K RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	Tg [°C]	DESCRIPTION
DOMACRYL 285	55 SAB / BG	65 – 75	3500 – 7000	n/a	Adhesion improvement, high gloss and colour retention. Suitable for crosslinking with epoxy resins.
DOMACRYL 835	50 BAc	5 – 10	3000 – 5000	47	Universal resin for protective coatings, used alone or in combination with vinyl resins. Good durability and abrasion resistance.
DOMACRYL 840	50 X / SA	5 – 10	4000 – 6000	62	Pigmented and transparent paints with good heat stability, hiding power. Hard, tough and flexible. Also for aerosols.
DOMACRYL 841	50 BAc	max. 10	3000 – 4000	69	Pigmented and transparent paints with good heat stability, hiding power. Hard, tough and flexible. Also for aerosols.
DOMACRYL 846	50 X / SA	5 – 10	3000 – 4500	72	Pigmented and transparent paints. Gasoline and plasticizers resistant. Also for aerosols.
DOMACRYL 854	65 BAc	15 – 25	5000 – 9000	14	Primers and top coats for nonferrous metals. Excellent toughness, rapid drying, high gloss and adhesion.
DOMACRYL 857	50 BAc	5 – 10	1000 – 2500	63	Pigmented and transparent paints. Also for spray-application paints with rapid drying.
DOMACRYL 857	55 X	5 – 10	2500 – 4500	63	Pigmented and transparent paints. Also for spray-application paints with rapid drying.
DOMACRYL 872	60 X	8 – 12	10000 – 15000	50	Pigmented and transparent paints for plastic. Rapid drying and excellent toughness.

ACRYLIC SOLVENTBORNE 2K RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION
DOMACRYL 5196	60 SA	max. 10	33 – 50	4000 – 5000	Air and forced drying top coats with good lightfastness and chalking resistance. Adhesion on steel and most non-ferrous materials.
DOMACRYL 505	60 X / BAc	max. 5	45 – 55	1400 – 2400	Standard elastic resin for industrial primers and top coats.
DOMACRYL 506	60 SA	max. 10	50 – 65	2000 – 2400	Standard resin for air-drying and stoving.
DOMACRYL 568	60 X / MPA	max. 10	55 – 65	3000 – 5000	Universal resin for industrial paints.
DOMACRYL 568	60 X	max. 10	55 – 65	3000 – 5000	Universal resin for industrial paints.
DOMACRYL 507	50 X / BAc	max. 5	60 – 70	600 – 1200	Fast drying primers and top coats.
DOMACRYL 5154	80 BAc	max. 10	60 – 80	7000 – 11000	Cost-efficient high-solid two-pack protective systems (top and clear coats) with good mechanical properties and outdoor durability.
DOMACRYL 536	60 X	max. 10	75 – 100	1300 – 2300	Standard resin for industrial paints.
DOMACRYL 536	60 SA	max. 10	75 – 100	2300 – 3300	Standard resin for industrial paints.
DOMACRYL 5367	70 BAc	15 – 22	75 – 100	2700 – 4700	Anticorrosion primers, top and clear coats.
DOMACRYL 5427	70 X	max. 10	80 – 100	1500 – 3000	High solid primers and finishes for industrial paints with very good mechanical properties and outdoor durability.
DOMACRYL 5428	70 BAc	max. 15	80 – 100	1500 – 2500	Protective coatings for forced drying paints.
DOMACRYL 5705	60 X	5 – 10	85 – 105	3000 – 4000	Top coats for agricultural machinery and high grade industrial paints.
DOMACRYL 5130	70 BAc	6 – 10	90 – 110	4000 – 6000	Primers and top coats for transportation coatings, machinery and other high quality protective and maintenance coatings.
DOMACRYL 5267	60 BAc	max. 10	90 – 110	4000 – 6000	Universal resin for industrial paints.
DOMACRYL 5267	60 X / MPA	max. 10	90 – 110	4000 – 6000	Universal resin for industrial paints.
DOMACRYL 521	60 X	max. 10	100 – 120	1400 – 1800	Protective coatings.
DOMACRYL 5262	75 BAc / EEP / MPA	max. 13	100 – 120	13000 – 17000	Room temperature drying or forced drying systems with fast build-up of hardness.
DOMACRYL 5210	75 BAc	7 – 11	110 – 130	5000 – 8500	Standard high solid resin for clear and top coats.
DOMACRYL 5437	75 SA	8 – 12	110 – 130	4200 – 7000	High solid stoving finishes in combination with melamine resins. Improvement of appearance of the top coats in a combination with stoving alkyd or thermosetting acrylic resins is possible.
DOMACRYL 547	60 X / SA / BAc	10 – 16	110 – 130	2500 – 3500	Standard resin for high-grade industrial paints with rapid initial drying.
DOMACRYL 5475	65 X / BAc	5 – 12	120 – 140	3500 – 4500	Very fast drying.
DOMACRYL 5187	70 BAc	max. 15	130 – 145	2800 – 4200	Universal resin for industrial paints.
DOMACRYL 5503	75 BAc	max. 12	130 – 145	5000 – 7000	Fast drying. Excellent mechanical properties and superior outdoor durability. 25% bio-based on solid content.
DOMACRYL 5481	75 BAc	max. 12	130 – 150	4500 – 6000	Air and forced drying top coats with excellent outdoor stability, chemical resistance and mechanical properties.
DOMACRYL 5485	75 BAc	max. 12	135 – 155	8000 – 12000	Fast drying. DTM. 10% bio-based on solid content.
DOMACRYL 5500	75 BAc	8 – 12	140 – 160	3500 – 10000	Very good balance between hardness and flexibility. Excellent mechanical properties and superior chemical resistance.
DOMACRYL 522	60 X / MPA	18 – 25	140 – 160	4000 – 5000	Standard resin for industrial paints.
DOMACRYL 522	60 X / SA / BAc	max. 10	140 – 160	4000 – 6000	Fast drying standard resin.
DOMACRYL 526	70 BAc	max. 8	140 – 160	7000 – 11000	Coatings for large machinery, alone or in combination with saturated alkyd resins.
DOMACRYL 544	60 X / SA / BAc	max. 12	140 – 160	3500 – 8000	Fast drying. Also for primers including plastics.
DOMACRYL 543	60 X / MPA	8 – 14	145 – 165	2000 – 2500	Standard high-performance resin.

ACRYLIC SOLVENTBORNE 2K SPECIALTIES

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION	
DOMACRYL 5652	55 BAc	max. 5	200 – 220	25000 – 45000	Epoxy and hydroxy dual functional resin for 2K stoving applications. Epoxy equivalent weight 650 g/mol. Curing with amines, amides, polycarboxylates and polyisocyanates. BPA free coatings.	
DOMACRYL 5109	85 BAc / Ac	max. 10	135 – 155	8000 – 12000	Clear and pigmented top coats. Good balance between hardness and flexibility, with excellent mechanical properties and superior outdoor durability. Suitable for DTM.	
DOMACRYL 5245	75 BAc	max. 3	125 – 145	2000 – 5000	Extremely fast drying and long pot-life. Superior mechanical properties and outdoor durability. <i>17% bio-based on solid content.</i>	PATENT PENDING
DOMACRYL 5270	75 BAc	max. 3	125 – 145	4000 – 6000	Very long pot-life and super-fast hardness development. Very good balance between hardness and flexibility, with excellent mechanical properties and superior outdoor durability.	PATENT PENDING
DOMACRYL 580	67 BAc	4 – 8	110 – 130	3000 – 6000	Clear and top coats with very long pot-life and super-fast hardness development at room temperatures and forced drying.	PATENT PENDING
DOMACRYL 5369	75 BAc	max. 3	80 – 100	6000 – 9000	Fast drying and very long pot-life, for high solid clear and top coats. Good cost-performance ratio.	PATENT PENDING
DOMACRYL 5451	50 BAc	max. 3	55 – 70	4000 – 6000	Fast drying and very long pot-life, based on DOMACRYL 545, for clear and top coats.	PATENT PENDING
DOMACRYL 540	50 BAc	5 – 10	40 – 50	3000 – 5000	Self-matting hydroxy acrylic resin with good balance between hardness and flexibility.	
DOMACRYL 5220	45 Bac / X	6 – 12	30 – 40	2000 – 6000	Very good adhesion on plastic substrates (PP, PE, PVC) with good balance between hardness and flexibility.	

ACRYLIC WATERBORNE RESINS

RESIN	DELIVERY FORM	VISCOSITY 23 °C [mPa.s]	pH	HYDROXYL VALUE on solid resin [mg KOH/g]	ACID VALUE on solid resin [mg KOH/g]	MFFT [°C]	DESCRIPTION
DOMEMUL SA 9262	42 Wa	50 – 250	8.0 – 8.5			30	Styrene-acrylic emulsion. Finishes and anticorrosion primers. APEO-free.
DOMEMUL SA 9263	40 Wa	20 – 350	8.0 – 8.5			45	Styrene-acrylic emulsion. Finishes and anticorrosion primers. APEO-free.
DOMEMUL SA 9270	47 Wa	100 – 1000	7.0 – 9.0			18	Hydrophobic styrene-acrylic dispersion for anti-corrosive applications, stain locking primers and primers for enhanced exterior durability. Especially suitable for DTM. APEO-free.
DOMEMUL AA 7601	44 Wa	max. 1000	8.0 – 10.0			30	Fast drying acrylic emulsion. APEO-free.
DOMEMUL RA 9675	35 Wa	50 – 1000	6.0 – 7.0		20 – 30	0	Acrylic latex resin for effect pigmented based coats (metallic, pearlescent). APEO-free.
DOMEMUL OHA 9200	45 Wa	20 – 600	7.5 – 9.0	70 – 100			OH-functional styrene-acrylic primary emulsion. Good gloss and adhesion to metal, suitable for DTM. Cost-efficient.
DOMACRYL 0769	45 Wa / BG / SA	200 – 1000	7.0 – 8.5	100 – 120	20 – 30		Standard acrylic secondary dispersion for 2K PUR aqueous clear and top coats.
DOMACRYL 0707	43 Wa / DPM	100 – 3000	8.0 – 9.0	100 – 120	35 – 45		Modified acrylic secondary dispersion. Very flexible. Good wet-on-wet application.
DOMACRYL 0768	42 Wa / PnB	200 – 5000	8.0 – 9.0	130 – 150	20 – 30		Acrylic secondary dispersion. Standard resin for 2K PUR systems. High gloss, without aromatic co-solvent.

ALKYD SOLVENTBORNE 1K RESINS

RESIN	DELIVERY FORM	OIL LENGTH / OIL TYPE	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION
DOMALKYD 1261	60 X	26% Soyabean FA	max. 12	2000 – 4000	Standard resin for fast air and forced drying primers and top coats.
DOMALKYD 1272	60 X	27% Soyabean FA	max. 10	2000 – 3000	Standard resin for fast air and forced drying primers and top coats.
DOMALKYD 1351	75 BAc	39% Soyabean FA	max. 8	1000 – 5000	Binder for low-yellowing solvent borne coatings. High solid resin in BAc for baking or NC coatings.
DOMALKYD 1361	60 X	34% Soyabean FA	max. 10	4400 – 5600	Fast air drying primers, putties and industrial finishes.
DOMALKYD 1401	60 X	40% Tall oil FA	max. 12	3000 – 4000	Fast drying anticorrosion paints and industrial finishes.
DOMALKYD 1468	50 Solvent mix	46% Non-yellowing FA	max. 12	660 – 1000	Very fast surface and through drying with high gloss and resistance to yellowing.
DOMALKYD 1482	55 W / X	48% Soyabean FA	max. 12	5000 – 7000	Standard resin for paints, very good overall properties. Air and forced drying.
DOMALKYD 1482	55 D-40 / MP	48% Soyabean FA	max. 12	8000 – 12000	Standard resin with very good overall properties. Due to special fatty acids content very good drying properties, low yellowing by air drying.
DOMALKYD 1526	55 W	52% Soyabean oil	max. 15	2000 – 3000	Pigment pastes for combination with medium oil air-drying alkyd resins. Finishes with excellent weather resistance.
DOMALKYD 3335	60 X / SA / nB	33% DCO	max. 25	750 – 1250	Reactive resin for combination with melamine and alkyd resins. High reactivity.
DOMALKYD 4391	60 X	39% Soyabean FA	max. 15	4000 – 6000	Universal stove drying coatings in combination with melamine resin.
DOMALKYD 5435	60 SA / X	43% Synthetic FA	max. 15	2500 – 3500	Industrial finishes in combination with DCO alkyd and melamine resins. Universal pigment pastes for NC and stoving finishes.








MODIFIED ALKYD SOLVENTBORNE 1K RESINS

RESIN	DELIVERY FORM	OIL LENGTH / OIL TYPE	MODIFICATION	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION
DOMALKYD 6351	60 X	35% Soyabean FA	Epoxy ester	max. 4	8000 – 12000	Anticorrosion primers and finishes.
DOMALKYD 6400	60 X	40% Soyabean FA	Epoxy ester	max. 4	7000 – 10000	Anticorrosion primers, air or stove drying with melamine resins. Fast drying, excellent adhesion and hardness.
DOMALKYD 7351	60 X	35% Soyabean FA	Aromatic urethane	6 – 15	4000 – 7000	Fast drying enamels.
DOMALKYD 7575	55 D-40	57% Soyabean FA	Aliphatic urethane	max.5	3000 – 4500	Non-yellowing enamels. Good outdoor durability.
DOMALKYD 8372	60 X	37% Linseed, tung oil	Phenolic	13 – 25	2500 – 3500	Universal binder for anticorrosion primers. Excellent drying properties and adhesion.
DOMALKYD 8372	70 BAc	37% Linseed, tung oil	Phenolic	13 – 25	5000 – 7000	Universal binder for anticorrosion primers. Excellent drying properties and adhesion.
DOMALKYD 9314	60 X	31% Soyabean FA	Styrene	max. 10	1700 – 2700	Fast drying industrial primers and finishes for metal and radiator enamels, good recoatability.
DOMALKYD 9375	50 X	37% Soyabean FA	Acrylic / Styrene	max. 15	2000 – 3000	Industrial primers and finishes. Very good moisture resistance.





ALKYD SOLVENTBORNE 2K RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION
DOMALKYD 4284	70 X	max. 12	70 – 100	4000 – 6000	Air and forced drying lacquers.
DOMALKYD 5261	70 BAc	max. 20	150 – 175	4000 – 6000	Air and forced drying lacquers, pigment pastes.
DOMALKYD 5331	75 BAc	6 – 10	140 – 160	6000 – 10000	High grade industrial paints.

ALKYD AND POLYESTER WATER REDUCIBLE RESINS

RESIN	DELIVERY FORM	OIL LENGHT / OIL TYPE	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	BIO-BASED CONTENT on solid resin [%]	DESCRIPTION
DOMALKYD 0246	70 BG	Epoxy modified	35 – 65	8000 – 22000	42 	Good pigment wetting, enhanced adhesion, rapid curing, good anticorrosion properties.
DOMALKYD 0261	70 PnB / 2B	29% Soyabean FA	35 – 45	5000 – 15000	61 	Air drying and stoving primers and top coats.
DOMALKYD 0265	70 BG / 2B / PnB	30% Soyabean FA	30 – 35	15000 – 20000	62 	Air and forced drying primers and top coats. High corrosion resistance.
DOMOPOL 5301	60 BG		24 – 28	1300 – 2700		Milling resin. Water-thinnable after neutralization. Good pigment wetting and adhesion.
DOMALKYD 0391	80 Wa / BG	38% Soyabean FA	40 – 50	30000 – 60000	66 	Non-yellowing enamels. Good outdoor durability.
DOMALKYD 0503	80 Wa	33% Mixed FA	40 – 50	5000 – 35000	60 	Excellent pigment wetting and application properties. Without organic solvent.

ALKYD, POLYESTER EMULSIONS AND POLYURETHANE DISPERSIONS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	pH	BIO-BASED CONTENT on solid resin [%]	DESCRIPTION
DOMALKYD 0460	38 Wa / MP		9000 – 15000	8.0 – 9.0	79 	Acrylic modified alkyd emulsion. Fast air drying, high gloss, excellent flow and very low-yellowing. Low VOC content.
DOMALKYD 0545	40 Wa	max. 28	50 – 1000	7.0 – 8.0	60 	PU modified alkyd emulsion without organic solvents. Rapid air drying, high gloss and hardness, good water and chemical resistance. Approx. 1% hydroxyl content on solid resin.
DOMALKYD 0547	42 Wa	15 – 20	max. 10000	7.5 – 8.5	60 	PU modified alkyd emulsion without organic solvents. Very rapid physical drying, high gloss and hardness.
DOMOPOL 8037	35 WA / DMP	65 – 75	500 – 4000	7.0 – 9.0	14 	Acrylic modified saturated polyester emulsion for one-coat finishes or topcoats with good weathering resistance.
DOMOPUR 0133	36 Wa	30 – 50	2000 – 8000	7.0 – 8.5	47	Aqueous polyurethane dispersion modified with unsaturated fatty acids for paints in spray cans.

POLYESTER SOLVENTBORNE RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION
DOMOPOL 6046	100%	7 – 12	250 – 290	750 – 1000	Used with hydroxyl acrylic resins to increase solids content of coatings.
DOMOPOL 7046	100%	7 – 12	250 – 290	750 – 1000	Used with hydroxyl acrylic resins to increase solids content of coatings. 100% bio-based on solid content.
DOMOPOL 6052	80 Bac	max. 3	150 – 200	1000 – 2000	For 2K polyurethane coatings as a combination resin for hydroxyl acrylic resins to increase solids content, improve flexibility and outdoor durability in industrial finishes, protective coatings and coatings for plastics.
DOMOPOL 6067	80 BAc	max. 2	130 – 160	1800 – 2600	2K PUR coatings.
DOMOPOL 6068	60 X	17 – 25	80 – 120	2250 – 3250	Air drying 2K industrial coatings in combination with isocyanates.
DOMOPOL 6115	100%	max. 3	140 – 160	2500 – 4500	Solvent-free polyester and polyether polyol, suitable for use in the formulation of 2K coatings. The coatings are tough and flexible, hard-wearing and chemical resistant.
DOMOPOL 6181	75 X	max. 15	145 – 180	6000 – 9000	2K PUR flexible and chemical resistant coatings, with good pigment wetting properties and high resistance to yellowing.



ADHESION PROMOTORS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	DESCRIPTION
ADDITIVE EP024	73 Wa / BG	40 – 50		5000 – 8000	Epoxy phosphate additive for waterborne stoving enamels. Improves adhesion and corrosion, chemical and stain resistance.
ADDITIVE EP135	65 BG	110 – 140		1500 – 3000	Epoxy phosphate additive for stoving enamels.
DOMOPOL 5100	60 X	20 – 30	~30	300 – 650	Adhesion improvement on aluminium, steel and galvanized steel.
DOMOPOL 5144	60 X / BGAc	15 – 30	~30	1000 – 4500	Adhesion improvement on aluminium and steel; excellent hardness/flexibility ratio.
DOMOPOL 5200	75 BAc	20 – 30	~95	1000 – 2500	Adhesion improvement on aluminium, steel and galvanized steel; suitable for high solids coatings.

2B = 2-Butanol, APEO = Alkylphenol ethoxylate, BAc = Butyl acetate, BG = Butylglycol, BGAc = Butylglycol acetate, D-40 = Dearomatized white spirit, DCO = Dehydrated castor oil, DMM = Dipropylene glycol dimethyl ether, DPM = Dipropylene glycol monomethyl ether, DTM = Direct-to-metal, EEP = Ethyl 3-ethoxypropionate, FA = Fatty acid, ISCC = International Sustainability and Carbon Certification, MP = Methoxypropanol, MPA = Methoxy propyl acetate, nB = n-Butanol, NC = Nitrocellulose, PnB = Propylene glycol monobutyl ether, SA = Aromatic solvent 100, W = White spirit, Wa = Water, X = Xylene.



ISO 9001
ISO 14001
BUREAU VERITAS
Certification



HELIOS RESINS



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