



2023  
EDITION

# CAR REFINISHING

 **HELIOS** RESINS

The background is a warm, golden-yellow color. It features several large, overlapping circles of varying sizes, some of which are slightly darker or have a gradient, giving them a three-dimensional appearance. There are also many smaller, faint circles scattered throughout the background, creating a textured, organic feel.

HELIOS

RESINS,

HIGH-QUALITY

RESINS FOR

RELIABLE

COATING

SOLUTIONS.

# CAR REFINISHING

EXCELLENT MECHANICAL  
PROPERTIES, SUPERIOR  
OUTDOOR DURABILITY, AND  
OUTSTANDING APPEARANCE  
ARE GUARANTEED.

## 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 2K RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]
DOMACRYL 503	55 X / BAc / nB	10 – 15	
DOMACRYL 504	60 X / BAc	max. 10	55 – 65
DOMACRYL 536	60 X	max. 10	75 – 100
DOMACRYL 5705	60 X	5 – 10	85 – 105
DOMACRYL 5130	70 BAc	6 – 10	90 – 110
DOMACRYL 521	60 X	max. 10	100 – 120
DOMACRYL 5210	75 BAc	7 – 11	110 – 130
DOMACRYL 547	60 X / SA / BAc	10 – 16	110 – 130
DOMACRYL 5475	65 X / BAc	5 – 12	120 – 140
DOMACRYL 5187	70 BAc	max. 15	130 – 145
DOMACRYL 5503	75 BAc	max. 12	130 – 145
DOMACRYL 5108	80 BAc	max. 16	130 – 150
DOMACRYL 5155	60 X / SA / BAc	max. 10	130 – 150
DOMACRYL 5481	75 BAc	max. 12	130 – 150
DOMACRYL 549	70 X / BAc	9 – 15	130 – 150
DOMACRYL 5485	75 BAc	max. 12	135 – 155
DOMACRYL 5495	70 X / BAc	5 – 13	135 – 155
DOMACRYL 5500	75 BAc	8 – 12	140 – 160
DOMACRYL 522	60 X / MPA	18 – 25	140 – 160
DOMACRYL 522	60 X / SA / BAc	max. 10	140 – 160
DOMACRYL 526	70 BAc	max. 8	140 – 160
DOMACRYL 5415	70 BAc	max. 12	140 – 160
DOMACRYL 544	60 X / SA / BAc	max. 12	140 – 160
DOMACRYL 543	60 X / SA / BAc	8 – 14	145 – 165
DOMACRYL 543	60 X / MPA	8 – 14	145 – 165
DOMACRYL 5150	75 BAc	2 – 15	145 – 170

VISCOSITY 23 °C [mPa.s]	DESCRIPTION
1700 – 2600	Basecoat resin.
5500 – 7500	Resin for very elastic basecoat and pigment paste. Good compatibility with other OH acrylic resins.
1300 – 2300	Standard resin for clear and top coats. Available also in BAc and SA.
3000 – 4000	Standard resin. Good adhesion, hardness, gloss and elasticity.
4000 – 6000	Broad compatibility with similar acrylic resins. Good balance between hardness and flexibility.
1400 – 1600	Standard high gloss resin. Good adhesion on different substrates.
5000 – 8500	High solid top and clear coats.
2500 – 3500	Rapid initial drying.
3500 – 4500	Fast drying.
2800 – 4200	Broad compatibility with similar acrylic resins. Good balance between hardness and flexibility, with excellent mechanical properties and superior outdoor durability and solvent resistance.
5000 – 7000	Fast drying. Excellent mechanical properties and superior outdoor durability. 25% bio-based on solid content.
4000 – 8000	Very high solid.
3000 – 4000	High abrasion resistance, high resistance to chemicals and water.
4500 – 6000	Excellent pigment wetting. CAB compatible.
2500 – 4000	Fast drying.
8000 – 12000	Excellent resistance and weather stability. CAB compatible. 10% bio-based on solid content.
1200 – 2400	Good balance between hardness and flexibility. Excellent mechanical properties and superior outdoor durability.
3500 – 10000	Very good balance between hardness and flexibility. Excellent mechanical properties and superior chemical resistance.
4000 – 5000	Very good gloss retention and superior outdoor durability.
4000 – 6000	Standard high-performance resin.
7000 – 11000	Standard high-performance resin.
3600 – 6000	Top performance resin.
3500 – 8000	Fast drying. Also for primers including plastics.
2300 – 2800	Standard high-performance resin.
2000 – 2500	Standard high-performance resin.
3500 – 6500	Excellent chemical and petrol resistance, good weathering and yellowing resistance.

## ACRYLIC SOLVENTBORNE SPECIALITIES

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]
DOMACRYL 5109	85 BAc / Ac	max. 10	135 – 155
DOMACRYL 5270	75 BAc	max. 3	125 – 145
DOMACRYL 5245	75 BAc	max. 3	125 – 145
DOMACRYL 580	67 BAc	4 – 8	110 – 130
DOMACRYL 5451	50 BAc	max. 3	55 – 70
DOMACRYL 5220	45 BAc / X	6 – 12	30 – 40
DOMACRYL 872	60 X	8 – 12	

## ALKYD SOLVENTBORNE RESINS

RESIN	DELIVERY FORM	OIL LENGHT / OIL TYPE	ACID VALUE on solid resin [mg KOH/g]
DOMALKYD 1468	50 Solvent mix	46% Non-yellowing FA	max. 12
DOMALKYD 1482	55 W / X	48% Soyabean FA	max. 12
DOMALKYD 1526	55 W	52% Soyabean oil	max. 15

## POLYESTER SOLVENTBORNE RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]
DOMOPOL 5193	70 X	max. 12	95 – 105
DOMOPOL 6028	78 BAc	20 – 25	220 – 250
DOMOPOL 6052	80 Bac	max. 3	150 – 200
DOMOPOL 6067	80 BAc	max. 2	130 – 160

## ACRYLIC AND POLYESTER WATERBORNE RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]
DOMACRYL 0768	42 Wa / PnB	20 – 30	130 – 150
DOMEMUL RA 9675	35 Wa	20 – 30	
DOMOPOL 5301	60 BG	24 – 28	85 – 95

Ac = Acetone, APEO = Alkylphenol ethoxylate, BAc = Butyl acetate, BG = Butylglycol, CAB = Cellulose acetate butyrate, DTM = Direct-to-metal, FA = Fatty acid, MPA

VISCOSITY 23 °C [mPa.s]	DESCRIPTION
8000 – 12000	Clear and pigmented top coats. Good balance between hardness and flexibility, with excellent mechanical properties and superior outdoor durability. Suitable for DTM.
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. <span>PATENT PENDING</span>
2000 – 5000	Extremely fast drying and long pot-life. Superior mechanical properties and outdoor durability. <span>PATENT PENDING</span> <i>17% bio-based on solid content.</i>
3000 – 6000	Clear and top coats with very long pot-life and super-fast hardness development at room temperatures and forced drying. <span>PATENT PENDING</span>
4000 – 6000	Extremely fast drying fillers. <span>PATENT PENDING</span>
2000 – 6000	Very good adhesion on plastic substrates (PP, PE, PVC) with good balance between hardness and flexibility.
10000 – 15000	Pigmented and transparent paints for plastic. Rapid drying and excellent toughness. Tg = 50 °C.

VISCOSITY 23 °C [mPa.s]	DESCRIPTION
660 – 1000	Very fast surface and through-drying with high gloss and resistance to yellowing.
5000 – 7000	Standard resin with very good overall properties. Air and forced drying.
2000 – 3000	Pigment pastes for combination with medium oil air-drying alkyd resins with excellent weather resistance.

VISCOSITY 23 °C [mPa.s]	DESCRIPTION
2000 – 3000	Primer surfacers and metallic base coats.
8000 – 13000	Clear and pigmented top coats with high hardness and excellent solvent and chemical resistance.
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.
1800 – 2600	Can be added to 2K PUR systems to improve their flexibility.

VISCOSITY 23 °C [mPa.s]	pH	DESCRIPTION
200 – 5000	8.0 – 9.0	Acrylic secondary dispersion. Standard resin for 2K PUR systems. High gloss, without aromatic co-solvent.
50 – 1000	6.0 – 7.0	Acrylic APEO-free latex resin for effect pigmented coatings (metallic, pearlescent). Basecoat resin.
1300 – 2700		Milling resin. Water-thinnable after neutralization. Good pigment wetting and adhesion.

= Methoxy propyl acetate, nB = n-Butanol, PnB = Propylene glycol monobutyl ether, SA = Aromatic solvent 100, W = White spirit, Wa = Water, X = Xylene.



ISO 9001  
ISO 14001  
BUREAU VERITAS  
Certification



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