RESINS FOR CAR REFINISHING COATINGS

HELIOS RESINS | ATCOAT

HIGH-QUALITY RESINS FOR SUSTAINABLE COATING SOLUTIONS.

CAR REFINISHING

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

GOLDEN RESINS

We produce around 70,000 tons of liquid resins annually, including coating and composite resins. Our coating resin brands – DOMACRYL, DOMOPOL, DOMALKYD, DOMEMUL, DOMOPUR, ATRESIN, ATRELUX and ATRETHIX – have achieved a strong market position and are trusted for their quality and performance. With the combined strength of two strong production companies, ATCOAT and Helios Resins, we serve more than 50 countries worldwide. Our production sites in Germany and Slovenia allow us to deliver our quality resins throughout Europe and beyond. A broad product portfolio, intensive R&D and innovation capabilities, high production flexibility, and superior customer service are the strengths of Helios Resins and ATCOAT as a joint specialist for synthetic resins.

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 Gold 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 can 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 and ATCOAT ensure 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. We produce tailormade 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 5124	75 BAc	5 – 10	120 – 145
DOMACRYL 5187	70 BAc	max. 15	130 – 145
DOMACRYL 5108	80 BAc	max. 16	130 – 150
DOMACRYL 5481	75 BAc	max. 12	130 – 150
DOMACRYL 549	70 X / BAc	9 – 15	130 – 150
DOMACRYL 5485	75 BAc / MAK	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 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

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.
3500 – 6000	Standard resin for top coats with VOC <420 g/L. 7% bio-based on solid content.
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.
4000 – 8000	Very high solid.
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.
3500 – 8000	Fast drying. Also for primers including plastics.
2300 – 2800	Standard high-performance resin.
2000 – 2500	Standard high-performance resin.

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 5248	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

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 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 0724	45 Wa / PnB / SA	24 – 30	125 – 145
DOMACRYL 0769	45 Wa / BG / SA	20 - 30	100 - 120
DOMOPOL 5301	60 BG	24 – 28	85 – 95
DOMOPUR 0235	40 Wa		

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

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. PATENTED
2000 – 5000	Extremely fast drying and long pot-life. Superior mechanical properties and outdoor durability. 17% bio-based on solid content. PATENTED
2000 – 5000	Extremely fast drying and long pot-life. High dry-film-hardness. 17% bio-based on solid content. PATENTED
3000 – 6000	Clear and top coats with very long pot-life and super-fast hardness development at room temperatures and forced drying. PATENTED
4000 – 6000	Extremely fast drying fillers. PATENTED
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 = 56 °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.

VISCOSITY 23 °C [mPa.s]	DESCRIPTION
2000 – 3000	Primer surfacers and metallic base coats.
1000 – 2000	For 2K PU 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 PU systems to improve their flexibility. TIN-free version is available.

VISCOSITY 23 °C [mPa.s]	pH	DESCRIPTION
200 – 1000	7.0 – 8.0	Acrylic secondary dispersion for 2K PU aq. systems. Excellent applicability, resistance and appearance in combination with water-emulsifiable polyisocyanates. 12% bio-based on solid content.
200 - 1000	7.0 - 8.5	Standard acrylic secondary dispersion for 2K PU aqueous clear and top coats.
1300 – 2700		Milling resin. Water-thinnable after neutralization. Good pigment wetting and adhesion.
20 - 180	7.0 – 8.5	PU dispersion compatible with acrylic polyols to boost performance of 2K PU aq. systems. Offers higher gloss, chemical and UV resistance.

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

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