



2024  
EDITION

# WOOD AND PLASTIC



HIGH-  
QUALITY  
RESINS FOR  
RELIABLE  
COATING  
SOLUTIONS.

# WOOD AND PLASTIC

THESE HIGH-QUALITY RESINS  
HAVE BEEN DEVELOPED TO  
ACHIEVE THE FINEST  
DECORATIVE WOODEN AND  
WOOD-LIKE SURFACES.

## 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 and ATRESIN – 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 tailor-made resins for specific needs and offer support in developing customized applications.

## ACRYLIC WATERBORNE 1K EMULSIONS

RESIN	DELIVERY FORM	VISCOSITY 23 °C [mPa.s]	pH
DOMEMUL AA 9673	42 Wa	20 – 250	7.5 – 8.5
DOMEMUL AA 9672	44 Wa	max. 150	7.5 – 9.5
DOMEMUL AA 9670	40 Wa	100 – 800	7.5 – 9.5
DOMEMUL AA 7962	45 Wa	20 – 250	6.0 – 8.0
DOMEMUL AA 9674	41 Wa	20 – 500	7.0 – 8.0
DOMEMUL AA 9678	41 Wa	20 – 500	7.0 – 8.0
DOMEMUL AA 9679	41 Wa	20 – 500	7.0 – 8.0
DOMEMUL AA 7762	45 Wa	20 – 350	7.5 – 8.5
DOMEMUL AA 7764	45 Wa	20 – 350	7.5 – 8.5
DOMEMUL SA 2900	49 Wa	100 – 1000	7.0 – 9.0

## ACRYLIC WATERBORNE 2K EMULSIONS

RESIN	DELIVERY FORM	HYDROXL CONTENT on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]
DOMEMUL AA 9674	41 Wa	50 – 60	20 – 500
DOMEMUL AA 9678	41 Wa	50 – 60	20 – 500
DOMEMUL OHA 9200	45 Wa	70 – 100	20 – 600
DOMACRYL 0769	45 Wa / BG / SA	100 – 120	200 – 1000

## ALKYD AND POLYURETHANE EMULSIONS




RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]
DOMALKYD 0460	38 Wa / MP		9000 – 15000
DOMALKYD 0545	40 Wa	max. 28	50 – 1000
DOMALKYD 0547	42 Wa	15 – 20	max. 10000
DOMOPUR 0133	36 Wa	30 – 50	2000 – 8000
DOMOPUR 0215	35 Wa		20 – 100
DOMOPUR 0231	40 Wa	15 – 25	100 – 1000

## ACRYLIC SOLVENTBORNE 1K RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]
DOMACRYL 833	50 D-30	max. 2	2500 – 3500
DOMACRYL 840	50 X / SA	5 – 10	4000 – 6000
DOMACRYL 841	50 BAc	max. 10	3000 – 3500
DOMACRYL 846	50 X / SA	5 – 10	3000 – 4500
DOMACRYL 854	65 BAc	15 – 25	5000 – 9000
DOMACRL 872	60 X	8 – 12	10000 – 15000

MFFT [°C]	DESCRIPTION
7	Self-crosslinking acrylic emulsion for interior and exterior wood coatings. Fast drying and good anti-blocking. APEO-free.
0	Core-shell acrylic emulsion for interior and exterior wood coatings. Good gloss. APEO-free.
0	Core-shell acrylic emulsion for interior and exterior wood coatings and joinery. Good anti-blocking. APEO-free.
0	Core-shell acrylic emulsion for industrial waterborne wood coatings, interior and exterior, especially for furniture, joinery, decorative application with good chemical resistance, wetting, low-foaming, flow and transparency. APEO-free.
50	Self-crosslinking acrylic emulsion with OH-functionality for industrial coatings for interior, especially for furniture and joinery non-yellowing enamels with good water, chemical and blocking resistance. APEO-free.
50	Self-crosslinking acrylic emulsion with OH-functionality for industrial waterborne wood coatings for interior, especially for furniture and joinery non-yellowing enamels with good water, chemical and blocking resistance. APEO-free. <b>10% bio-based on solid content.</b>
50	Self-crosslinking acrylic emulsion with OH-functionality for industrial waterborne wood coatings for interior, especially for furniture and joinery non-yellowing enamels with good water, chemical and blocking resistance. APEO-free. <b>30% recycled on solid content.</b>
31	Self-crosslinking acrylic emulsion for waterborne industrial wood finishes, interior. Good chemical and mechanical resistance, wetting, low-foaming, flow and transparency. Hand cream resistance, fast drying and hardness. APEO-free.
31	Self-crosslinking acrylic emulsion for industrial waterborne wood finishes, interior. Good chemical and mechanical resistance, wetting, low-foaming, flow and transparency. Hand cream resistance, fast drying and hardness. APEO-free. <b>20% recycled on solid content.</b>
7	Acrylic emulsion for the preparation of industrial waterborne coatings for walls, pigmented paints and plasters. Good adhesion on different substrates, water resistance. APEO-free.

pH	DESCRIPTION
7.0 – 8.0	Self-crosslinking acrylic emulsion with OH-functionality for industrial coatings for interior, especially for furniture and joinery non-yellowing enamels with good water, chemical and blocking resistance. APEO-free.
7.0 – 8.0	Self-crosslinking acrylic emulsion with OH-functionality for industrial waterborne wood coatings for interior, especially for furniture and joinery non-yellowing enamels with good water, chemical and blocking resistance. APEO-free. <b>10% bio-based on solid content.</b>
7.5 – 9.0	OH-functional styrene-acrylic primary emulsion for low VOC coatings. Tg = 53. Cost-efficient.
7.0 – 8.5	Standard secondary acrylic dispersion for medium OH PUR coatings.

pH	BIO-BASED CONTENT on solid resin [%]	DESCRIPTION
8.0 – 9.0	79 	Acrylic modified alkyd emulsion. Top coats and primers for wood or steel substrates. Fast air drying, high gloss, excellent flow and very low-yellowing. Low VOC content.
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.
7.5 – 8.5	60 	PU modified alkyd emulsion without organic solvents. Very rapid physical drying, high gloss and hardness.
7.0 – 8.5	47	Aqueous polyurethane dispersion modified with unsaturated fatty acids for paints in spray cans.
7.0 – 8.5		Self-crosslinking aliphatic polyurethane dispersion. Non yellowing, high abrasion, chemical, black heel mark, and scratch resistance.
7.0 – 8.0		Solvent-free PU dispersion. Based on aliphatic polyester-isocyanate. Good blocking and abrasion resistance.

Tg [°C]	DESCRIPTION
21	Pigmented and transparent paints for plastics. Rapid drying. Also for aerosols.
69	Pigmented and transparent paints with good heat stability, hiding power. Hard, tough and flexible. Also for aerosols.
69	Pigmented and transparent paints with good heat stability, hiding power. Hard, tough and flexible. Also for aerosols.
79	Pigmented and transparent paints for plastic. Gasoline and plasticizers resistant. Also for aerosols.
23	Primers and top coats for plastics. Excellent toughness, rapid drying, high gloss and adhesion.
56	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]
DOMACRYL 5220	45 Bac / X	6 – 12	30 – 40
DOMACRYL 5213	50 BAc	7 – 10	35 – 45
DOMACRYL 5214	40 BAc	15 – 20	35 – 45
DOMACRYL 540	50 BAc	5 – 10	40 – 50
DOMACRYL 5269	51 MEK	max. 4	44 – 55
DOMACRYL 5269	52 BAc	max. 4	45 – 55
DOMACRYL 505	60 X / BAc	max. 5	45 – 55
DOMACRYL 5353	58 X / BAc	max. 10	50 – 75
DOMACRYL 504	60 X / BAc	max. 10	55 – 65
DOMACRYL 568	60 X / MPA	max. 10	55 – 65
DOMACRYL 568	60 X	max. 10	55 – 65
DOMACRYL 545	50 BAc	6 – 12	55 – 70
DOMACRYL 546	50 X / BAc	6 – 12	55 – 70
DOMACRYL 5359	60 BAc	8 – 12	55 – 70
DOMACRYL 5451	50 BAc	max. 3	55 – 70
DOMACRYL 539	50 BAc	15 – 20	60 – 70
DOMACRYL 5154	80 Bac	max. 10	60 – 80
DOMACRYL 5267	60 MEK	max. 5	90 – 100

## REACTIVE RESINS

RESIN	DELIVERY FORM	VISCOSITY 23 °C [mPa.s]	OIL LENGHT / OIL TYPE	HYDROXYL VALUE on solid resin [mg KOH/g]
DOMALKYD 1435	66 BAc	600 – 1200	43% Tall oil FA	
DOMALKYD 3381	65 X	10000 – 15000	38% DCO	
DOMALKYD 4161	70 BAc	1000 – 1500	16% Saturated FA	260 – 300
DOMALKYD 4333	70 BAc	1400 – 2000	33% Soyabean FA	70 – 110
DOMALKYD 4348	70 BAc	8000 – 10000	34% Vegetable FA	70 – 90
DOMALKYD 4383	70 BAc	3000 – 4500	38% Soyabean oil	120 – 145
DOMALKYD 4402	75 BAc	3000 – 5000	40% Vegetable FA	
DOMALKYD 4411	75 BAc	1800 – 2400	41% Soyabean FA	
DOMALKYD 5254	70 BAc	3000 – 6000	25% Castor oil	160 – 200
DOMALKYD 5331	75 BAc	6000 – 10000	33% Synthetic FA	140 – 160
DOMALKYD 5421	75 BAc	2000 – 3500	42% Coconut FA	150 – 200
DOMOPOL 1352	100 %	9000 – 13000	Polyester polyol	45 – 60
DOMOPOL 6181	75 X	6000 – 9000	Polyester polyol	145 – 180

AC = Acid curing, APEO = Alkylphenol ethoxylate, BAc = Butyl acetate, BG = Butylglycol, D-30 = Dearomatized white spirit, DCO = Dehydrated castor oil, DPM = Dipropylene cellulose, PnB = Propylene glycol monobutyl ether, SA = Aromatic solvent 100, Wa = Water, X = Xylene.

VISCOSITY 23 °C [mPa.s]	DESCRIPTION
2000 – 6000	Very good adhesion on plastic substrates (PP, PE, PVC) with good balance between hardness and flexibility.
3000 – 5000	Very fast drying resin for wood coatings.
1800 – 2400	Very hard, used as additive resin in wood coatings.
3000 – 5000	Self-matting hydroxy acrylic resin for industrial wood two-pack polyurethane furniture and metal finishing. Good balance between hardness and flexibility.
1800 – 3000	Resin for industrial two-pack polyurethane coatings with good adhesion on plastics.
3000 – 5000	Long pot-life.
1400 – 2400	Elastic resin for primers and top coats.
2500 – 5500	Resin for high gloss furniture coatings.
5500 – 7500	Resin for very elastic coatings for plastics. Good compatibility with other OH acrylic resins. Pigment paste resin.
3000 – 5000	Universal resin for industrial paints.
3000 – 5000	Universal resin for industrial paints.
4000 – 5000	Standard resin for wood coatings.
4000 – 5000	Standard resin for wood coatings.
8000 – 10000	Very fast drying varnishes and high solid paints.
4000 – 6000	Fast drying and very long pot-life, based on DOMACRYL 545, for clear and top coats. <b>PATENTED</b>
4000 – 6000	Industrial wood primers.
7000 – 11000	Cost-efficient high-solid two-pack protective systems (top and clear coats) with good mechanical properties and outdoor durability.
3000 – 5000	Resin for industrial two-pack polyurethane coatings with good adhesion on plastics.

ACID VALUE on solid resin [mg KOH/g]	DESCRIPTION
15 – 25	Lacquers and enamels for wood in combination with NC and urea resins. Very fast drying properties.
max. 25	Resin for combination with melamine and alkyd resins. NC and AC lacquers.
max. 4	2K PUR for wood parquet lacquers.
23 – 35	Lacquers and enamels for wood in combination with NC in AC lacquers.
max. 20	Lacquers for wood in combination with NC, forced drying paints in combination with amino resins.
max. 10	Lacquers and enamels for wood in combination with NC.
max. 20	AC lacquers and paints for wood.
max. 10	NC lacquers and enamels for wood, pigment pastes.
max. 17	Fast drying 2K PUR lacquers for wood.
6 – 10	2K PUR coatings for wood.
max. 10	High quality NC and AC lacquers for wood, 2K PUR lacquers for furniture.
0 – 4	Linear hydroxyl-bearing polyester resin used in 2K PUR flexible solvent-free coatings and sealers.
max. 15	2K PUR coatings for wood (parquet, boats). Good pigment wetting and chemical resistant properties.



ISO 9001  
ISO 14001

BUREAU VERITAS  
Certification



**KANSAI HELIOS Slovenija** d.o.o.  
Količevo 65, 1230 Domžale, Slovenia  
T +386 1 722 40 71  
T +386 1 722 43 94  
info@resinshelios.com  
www.resinshelios.com

**ATCOAT** GmbH  
Katharinenstr. 61, 52353 Düren, Germany  
T +49 2421 9999 0  
F +49 2421 9999 233  
info@atcoat.com  
www.atcoat.com