



2019
EDITION

DECORATIVE

 **HELIOS** RESINS



HELIOS

RESINS,

HIGH-QUALITY

RESINS FOR

RELIABLE

COATING

SOLUTIONS.

DECORATIVE

OUR RESINS FOR DECORATIVE COATINGS ENSURE BEAUTIFUL COLOURS AND A RELIABLE PROTECTION.

GOLDEN RESINS

Helios Resins is a separate business unit of Helios, now part of Kansai Paint, one of the world's leading paint and coatings producers. Today, Helios Resins produces around 60,000 tons of liquid resins annually, including coating resins, composite resins, and polyester polyols for PU flexible foams. Our coating resin brands – DOMOPOL, DOMACRYL, 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.

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.

DEVELOPED WITH ADVANCED TECHNOLOGIES

Our laboratories and production facilities are fully equipped with the most advanced technologies, which enables the development and production of resins. Our R&D has advanced skills as well as equipment for polyester and acrylic chemistry, including synthesis under pressure. We are constantly upgrading our production lines and increasing our production capacities to meet the highest demands of our customers. In 2018 we introduced a new reactor line for water-based resins.

OUR STRENGTHS

- FLEXIBILITY
- ON-TIME DELIVERY
- HIGH QUALITY



ACRYLIC WATER EMULSIONS

RESIN	DELIVERY FORM	VISCOSITY 23 °C [mPa.s]	pH
DOMEMUL AA 7960	45 Wa	20 – 250	6.0 – 8.0
DOMEMUL AA 9670	40 Wa	100 – 800	7.5 – 9.5
DOMEMUL AA 9672	44 Wa	max. 150	7.5 – 9.5
DOMEMUL AA 9673	42 Wa	20 – 250	7.5 – 8.5
DOMEMUL AA 7760	41 Wa	20 – 500	7.5 – 9.0
DOMEMUL SA 9262	42 Wa	50 – 250	8.0 – 8.5
DOMEMUL SA 9263	40 Wa	20 – 350	8.0 – 8.5
DOMEMUL AA 7601	44 Wa	max. 1000	8.0 – 10.0

ALKYD WATER EMULSIONS

RESIN	DELIVERY FORM	MODIFICATION / OIL LENGHT	VISCOSITY 23 °C [mPa.s]
DOMALKYD 0460	38 Wa / MP	Acrylic modified, 56%	9000 – 15000
DOMALKYD 0461	38 Wa / BG	Acrylic modified, 56%	2000 – 10000
DOMALKYD 0545	40 Wa	PU modified, 44%	50 – 500

POLYURETHANE DISPERSIONS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]
DOMOPUR 0211	36 Wa	20 – 25	20 – 400
DOMOPUR 0231	40 Wa	15 – 20	100 – 1000



MFFT [°C]	DESCRIPTION
0	Core-shell emulsion for wood coatings, joinery, furniture and decorative application. Good anti-blocking. APEO-free is available by request.
0	Core-shell APEO-free acrylic emulsion for interior and exterior coatings, joinery. Good anti-blocking.
0	Acrylic core-shell emulsion designed for industrial and interior and exterior wood coatings. APEO-free is available by request.
7	Self-crosslinking APEO-free acrylic emulsion for interior and exterior coatings, joinery. Fast drying and good anti-blocking.
32	Self-crosslinking APEO-free acrylic emulsion for interior wood finishes. Good chemical and mechanical resistance.
30	Styrene-acrylic emulsion for metal, plastic and wood. Good mechanical and chemical resistance. APEO-free is available by request.
45	Styrene-acrylic APEO-free emulsion for metal, plastic and wood. Harder than DOMEMUL SA 9262.
30	Acrylic emulsion for pigmented paints, fast drying at low temperature and high humidity. Useful also for metal surface.

pH	DESCRIPTION
8.0 – 9.0	Top coats and primers for wood or steel substrates. Fast air drying, high gloss, excellent flow and very low-yellowing. Low VOC content.
7.5 – 9.0	Styrene-free 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	Rapid air drying, high gloss and hardness, good water and chemical resistance. Approx. 1% hydroxyl content on solid resin. Without organic solvent.

pH	DESCRIPTION
7.5 – 9.0	Very flexible, very good adhesion on ABS, PC, PVC, PU, PA and PS, very good pigmentability and a good plasticizer barrier on PVC-foils. Without organic solvents.
7.0 – 8.0	Based on aliphatic polyester-isocyanate. Good anti-blocking and abrasion resistance. Without organic solvents.



ALKYD SOLVENTBORNE RESINS

RESIN	DELIVERY FORM	OIL LENGHT / OIL TYPE	ACID VALUE on solid resin [mg KOH/g]
DOMALKYD 1492	50 D-40	49% Soyabean FA	max. 10
DOMALKYD 1666	75 D-40 / MP	68% Soyabean FA	max. 10
DOMALKYD 1666	75 D-60	68% Soyabean FA	max. 10
DOMALKYD 1673	60 D-60	67% Soyabean oil	max. 10
DOMALKYD 1685	75 D-40	68% Soyabean oil	max. 10
DOMALKYD 1755	70 D-60	75% Soyabean oil	max. 10
DOMALKYD 1755 LV	100%	75% Soyabean oil	max. 10
DOMALKYD 2645	100%	64% Linseed oil	max. 7
DOMALKYD 2755 LV	100%	80% Linseed oil	max. 15
DOMALKYD 7575	55 D-40	57% Soyabean FA	max. 5
DOMALKYD 7625	60 D-40	62% Soyabean oil	max. 5
DOMALKYD 7703	85 D-40	70% Mixed FA	max. 5

ACRYLIC THERMOPLASTIC SOLVENTBORNE RESINS

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]
DOMACRYL 820	58 X	max. 10	20000 – 24000
DOMACRYL 830	50 D-60 / SAB	max. 10	2400 – 3500
DOMACRYL 830	50 W	max. 10	2400 – 3500
DOMACRYL 833	50 D-30	max. 2	2500 – 3500
DOMACRYL 835	50 BAc	5 – 10	3000 – 5000
DOMACRYL 8383	65 D-40	max. 3	2000 – 3000
DOMACRYL 840	50 X / SA	5 – 10	4000 – 6000
DOMACRYL 841	50 BAc	max. 10	3000 – 4000
DOMACRYL 846	50 X / SA	5 – 10	3000 – 4500
DOMACRYL 854	65 BAc	15 – 25	5000 – 9000

APEO = Alkylphenol ethoxylate, BAc = Butyl acetate, BG = Butylglycol, D-30 = Dearomatized white spirit, D-40 = Dearomatized white spirit, D-60 = Dearomatized white diisocyanate, W = White spirit, Wa = Water, X = Xylene.



VISCOSITY 23 °C [mPa.s]	DESCRIPTION
5500 – 7000	Fast drying medium oil alkyd resin for paints for metal work (industrial, machine and radiator paints).
2000 – 3000	Standard resin for high gloss paints and lacquers for wood and metal.
4000 – 6000	Standard resin for high gloss paints and lacquers for wood and metal.
3000 – 4500	Standard resin for decorative paints and lacquers for metal and wood.
5000 – 7000	General purpose binder for paints for metal and wood.
750 – 1000	Standard resin for wood lacquers, stains and paints. Very good weather resistance modified with isophthalic acid.
6000 – 8000	Low VOC lacquers, stains and paints for wood. Very good weather resistance modified with isophthalic acid.
7000 – 11000	Universal binder for pigment pastes used for paints and stains.
2000 - 3000	Low viscosity drying alkyd for production of high solid low VOC paint system.
3000 – 4500	Aliphatic urethane (IPDI) alkyd resin for non-yellowing decorative enamels for wood and metal. Good outdoor durability.
2200 – 2800	Aromatic urethane (TDI) alkyd resin for universal finishes for wood, specially recommended for floors, boats and furniture.
4000 – 6000	Aliphatic urethane (IPDI) alkyd resin used for the preparation of universal pigmented paints and clear finishes for wood.

Tg VALUE (theoretical) [°C]	DESCRIPTION
56	High-grade masonry paints.
-7	Masonry paints, concrete paints. High flexibility.
-7	Masonry paints, concrete paints. High flexibility.
56	Exterior flexible protective coatings. Excellent solubility in aliphatic solvent. Also for aerosols.
41	Universal resin for protective coatings, using alone or in combination with vinyl resins. Good durability and abrasion resistance.
-	As a combination resin for optimization of different characteristics with long oil alkyd resins, air drying resin.
62	Pigmented and transparent paints with good heat stability, hiding power. Hard, tough and flexible. Also for aerosols.
62	Pigmented and transparent paints with good heat stability, hiding power. Hard, tough and flexible. Also for aerosols.
72	Pigmented and transparent paints also for plastic. Gasoline and plasticizers resistant. Also for aerosols.
14	Primers and top coats for nonferrous metals and plastics. Excellent toughness, rapid drying, high gloss and adhesion.

spirit, FA = Fatty acid, IPDI = Isophorone diisocyanate, MP = Methoxypropanol, SA = Aromatic solvent 100, SAB = Aromatic solvent 150 ND, TDI = Toluene



ISO 9001
ISO 14001

BUREAU VERITAS
Certification



European company
Global delivery

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