



2019
EDITION

CAN AND COIL

 **HELIOS** RESINS



HELIOS

RESINS,

HIGH-QUALITY

RESINS FOR

RELIABLE

COATING

SOLUTIONS.

CAN AND COIL

A BROAD PORTFOLIO OF MODERN RESINS FOR ADVANCED CAN AND COIL COATING APPLICATIONS.

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

CAN COATING / SATURATED 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]	FDA 175.300
DOMOPOL 5102	55 SAB / BG	max. 3	~20	2500 – 5500	-
DOMOPOL 5108	50 SAB / BG	max. 5	~50	2000 – 2800	-
DOMOPOL 5110	50 SAB / SN / MP	8 – 10	16 – 24	4700 – 6000	-
DOMOPOL 5117	60 SAB	5 – 10	22 – 30	14000 – 18000	-
DOMOPOL 5118	55 SAB	3 – 5	18 – 26	4000 – 5000	-
DOMOPOL 5128	60 SAB	2 – 10	~50	2500 – 4000	-
DOMOPOL 5132	60 SAB / MPA	4 – 7	45 – 55	4500 – 6500	(+)
DOMOPOL 5138	55 SAB / BDGA	6 – 9	~60	2300 – 2900	-
DOMOPOL 5142	60 SAB / DBE	max. 6	15 – 25	9500 – 13500	(+)
DOMOPOL 5147	55 SAB	max. 3	~20	3500 – 4500	-
DOMOPOL 5148	55 MP / DPM	max. 3	~40	3600 – 4400	(+)
DOMOPOL 5155	55 SA / MPA	max. 5	~70	2000 – 3000	+
DOMOPOL 5158	50 SAB / DBE / BDG	max. 8	15 – 30	3000 – 4500	(+)
DOMOPOL 5158	50 SAB / DBE	max. 8	15 – 30	1500 – 3000	(+)
DOMOPOL 5176	60 SA	max. 10	~100	3500 – 5500	+
DOMOPOL 5181	60 SA	max. 5	~40	4000 – 5500	(+)
DOMOPOL 5187	60 SAB / BG	max. 8	~45	4500 – 6500	+
DOMOPOL 5201	55 SA / MPA	max. 5	~70	2000 – 3000	+
DOMOPOL 5224	60 SAB	5 – 10	22 – 30	11000 – 15000	-
DOMOPOL 8101	65 SAB / BG	40 - 50	~17	7000 – 9000	-
DOMOPOL 9010	40 SAB / DBE	max. 4	5 – 10	3500 – 4500	(+)
DOMOPOL 9020	40 SA / DBE	8 – 10	5 – 10	3800 – 4700	(+)
DOMOPOL 9030	35 SAB / DBE / X / BG	max. 5	5 – 10	800 – 1500	(+)
DOMOPOL 9040	40 SA / MPA	max. 3	5 – 10	2000 – 4000	(+)
DOMOPOL 9050	40 SA	max. 3	5 – 10	1800 – 3500	(+)
DOMOPOL 9070	40 SAB / MPA	max. 4	5 – 10	2000 – 4000	(+)
DOMOPOL 9090	40 SA / MPA	max. 3	~9	1500 – 3000	+

CAN COATING / WATERBORNE 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]	FDA 175.300
DOMOPOL 5125	70 BG	40 – 50	~50	4000 – 6500	(+)
DOMOPOL 5160	75 BG	50 – 60	~100	6500 – 8500	(+)
DOMOPOL 8260	65 BG	~60	~40	7000 – 11000	(+)
DOMOPOL 0194	45 Wa	50 – 60	~120	300 – 1500	(+)
DOMALKYD 0391	80 Wa / BG	40 – 50	~200	30000 – 60000	+

FDA 175.300: + full compliance; (+) limited compliance (non-alcoholic food content); - no compliance

Tg [°C]	Mn	DESCRIPTION
30	6000	Metal decorating enamels.
24	7000	General line, white base coat.
50	6000	Aerosol cans, adhesion on aluminium.
25	5500	General line, twist off closures, excellent flexibility.
32	6000	Twist off closures, general purpose.
15	4500	Overprint varnish, flexibility.
23	4500	General line and tube coating, white base coat.
22	4000	B&B cans exterior.
51	5000	White base coat, good adhesion on aluminium.
15	6000	General line, flexibility.
20	4000	Overprint varnish, wet-on-wet, deep drawable.
80	5500	BPA-NI interior and exterior coatings.
62	5000	Aerosol cans, adhesion on aluminium, clear coat and white base coat.
62	5000	Aerosol cans, adhesion on aluminium, clear coat and white base coat.
13	4000	Overprint varnish, wet-on-wet, hardness.
25	5000	General line.
23	4500	BPA-NI interior and exterior coatings, flexibility.
65	5500	BPA-NI interior and exterior coatings.
25	5500	General line, flexibility.
20	2500	Acrylated polyester resin for 2-piece cans; adhesion on aluminium and tinplate.
67	15000	Metal decorating enamels, good compatibility.
65	18000	Interior coatings, good reactivity.
47	15000	Interior coatings, elastification resin, adhesion promotion.
70	18000	BPA-NI interior coatings, improves blocking resistance.
105	15000	BPA-NI interior coatings, chemical resistance.
40	15000	BPA-NI interior coatings, adhesion promotion.
40	15000	BPA-NI interior, tube and aerosol coatings.

Tg [°C]	Mn	DESCRIPTION
12	1000	White base coat.
20	2000	Metal decoration enamels.
31	3000	Acrylated polyester resin for B&B; base and clear coat.
33	1000	Metal decoration enamels, solvent free, pH 7 – 9.
11	1000	Metal decoration enamels, pH 7 – 9.

COIL COATING / SATURATED POLYESTER 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]	STRUCTURE
DOMOPOL 5102	50 SAB / SN	max. 3	~20	2000 – 4000	L
DOMOPOL 5106	60 SAB / BG	3 – 6	28 – 35	4000 – 5000	L
DOMOPOL 5111	65 SAB / BG	7 – 12	95 – 105	1500 – 2000	B
DOMOPOL 5112	60 SAB / BG	max. 3	30 – 40	2500 – 4000	B
DOMOPOL 5118	55 SAB	3 – 5	18 – 26	4000 – 5000	L
DOMOPOL 5119	65 SAB / BG	max. 3	50 – 58	1800 – 2800	B
DOMOPOL 5120	55 SAB / MPA / MP	max. 5	20 – 28	3000 – 5000	L
DOMOPOL 5130	65 SAB / BG	max. 8	28 – 36	1500 – 3000	L
DOMOPOL 5131	65 SAB / BG	max. 8	33 – 40	1500 – 3500	B
DOMOPOL 5140	60 SAB / BG	max. 5	28 – 36	2700 – 3600	L
DOMOPOL 5157	65 SA / X	max. 3	40 – 50	1500 – 3000	B
DOMOPOL 5169	50 SAB / DBE	max. 3	~35	3000 – 5000	B
DOMOPOL 5172	55 SAB / MPA	max. 3	~30	2000 – 4000	L
DOMOPOL 5174	60 SAB / MPA	max. 5	20 – 28	5500 – 7500	L
DOMOPOL 5178	70 SA / BG	max. 5	~50	2000 – 4000	L
DOMOPOL 5206	65 SA / BG	max. 10	~60	2200 – 3600	B
DOMOPOL 5207	62 SA / BG	max. 5	30 – 40	3000 – 4000	L
DOMOPOL 9010	40 SAB / DBE	max. 4	5 – 10	3500 – 4500	L
DOMOPOL 9020	40 SA / DBE	8 – 10	5 – 10	3800 – 4700	B
DOMOPOL 9030	35 SAB / DBE / X / BG	max. 5	5 – 10	800 – 1500	L
DOMOPOL 9040	40 SA / MPA	max. 3	5 – 10	2000 – 4000	L

L - linear, B - branched

SPECIALITIES

RESIN	DELIVERY FORM	ACID VALUE on solid resin [mg KOH/g]	HYDROXYL VALUE on solid resin [mg KOH/g]	VISCOSITY 23 °C [mPa.s]	FDA 175.300
DOMOPOL 5100	60 X	20 – 30	~30	300 – 650	(+)
DOMOPOL 5103	60 X / SA	12 – 20	~30	600 – 1500	(+)
DOMOPOL 5144	60 X / BGAc	15 – 30	~30	1000 – 4500	+
DOMOPOL 5101	60 SAB / DBE	max. 3	15 – 22	3500 – 5500	(+)
ADDITIVE EP024	73 Wa / BG	40 – 50		5000 – 8000	+
ADDITIVE EP135	65 BG	110 – 140		1500 – 3000	+
DOMACRYL 285	55 SAB / BG	65 – 75		3500 – 7000	+
DOMACRYL 5350	50 X / BG	14 – 18		1500 – 3500	
DOMACRYL 844	30 DBE			2500 – 4000	

B&B = Beer and Beverage, BDGA = Butildiglycol acetate, BG = Butylglycol, BGAc = Butylglycol acetate, BPA-NI = Bisphenol A non-intent, DBE = Dibasic esters, DPM = fluoride, QUV-A = Laboratory ultraviolet testing with UVA-340 lamps, QUV-B = Laboratory ultraviolet testing with UVB-313 lamps, SA = Aromatic solvent 100, SAB = Aromatic

Tg [°C]	Mn	DESCRIPTION
30	6000	Interior architectural coatings, appliance finishing, aluminium primers.
26	4500	Domestic appliances, outdoor durable systems, good flexibility, ageing resistant coatings.
10	2000	Back coatings, infrared cured coatings.
20	4000	Exterior and interior architecture.
32	6000	Domestic appliances, high flexibility, ageing resistant coatings.
15	4000	Top coats, UV-absorption free, high durability.
55	5000	HDG steel and aluminium primers, onecoat systems.
10	3500	Interior and exterior architecture.
20	3000	QUV-B resistant, exterior architecture, high durability.
20	4000	Exterior and interior architecture.
25	5000	QUV-A stability, exterior coatings, high durability.
55	4000	Primers for HDG steel and aluminium, onecoat systems.
30	6000	Interior architecture, appliance finishing.
50	5000	HDG steel primers.
10	2000	Onecoat systems for exterior and interior architecture; paints with higher solid content. Very reactive.
7	2500	High reactivity top coats, NIR curing.
31	3000	HDG steel primers.
67	15000	HDG primers, corrosion resistance.
65	18000	Adhesion on HDG steel, hot laminating adhesives.
47	15000	Primers for HDG and aluminium, elastification resin.
70	18000	Appliance finishing.

Tg [°C]	Mn	DESCRIPTION
20	3000	Adhesion improvement on aluminium, steel and galvanized steel.
70	3000	Adhesion improvement on aluminium and steel; improves hardness.
50	2000	Adhesion improvement on aluminium and steel; excellent hardness / flexibility ratio.
-5	7000	Flexibilizer resin.
		Epoxy phosphate additive for waterborne stoving enamels.
		Epoxy phosphate additive for stoving enamels.
		Adhesion improvement; CAN coating.
		Thermosetting acrylic resin for PVDF application; COIL coating.
70		Thermoplastic acrylic resin for PVDF systems and plastics; COIL coating.

Dipropylene glycol monomethyl ether, HDG = Hot dip galvanised, MP = Methoxypropanol, MPA = Methoxy propyl acetate, NIR = Near infrared, PVDF = Polyvinylidene solvent 150 ND, SN = Aromatic solvent 200 ND, Wa = Water, X = Xylene.



ISO 9001
ISO 14001

BUREAU VERITAS
Certification



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