



THERMOSET RESINS FOR COMPOSITES



HELIOS
RESINS FOR
COMPOSITES
OFFER
FLEXIBLE
HIGH-QUALITY
RELIABLE
COMPOSITE
SOLUTIONS.



RESINS SUPPLIER SINCE 1908

Composite resins since 1964

GOLDEN RESINS

Helios Resins is a separate business unit of the Helios Group producing the highest quality liquid resins for advanced coating and composite manufacturers globally. Today, Helios Resins produces over 60,000 tons of liquid resins annually, including coating resins, composite resins, and polyester polyols for PU flexible foams. In addition to our coating resin brands, the composite resin brands - COLPOLY and COLVINYL - have achieved a strong market position and are trusted for their quality and reliable service. We currently serve over 50 countries worldwide, including Germany, Italy, France, Poland, Switzerland, Russia, the South African Republic, Morocco, Turkey, the UAE, Saudi Arabia, Thailand, and many others.

QUALITY OF SERVICE

We are committed to providing flexible and reliable service while satisfying your specific requests. Helios Resins ensures quality, stability and reproducibility of every delivery. With the know-how, resulting from over 100 years of experience in synthetic resins and over 50 years in composite resins, together as partners we can solve your challenges. Our experts produce tailor-made resins for your particular needs and offer support in developing your applications.

DEVELOPED BY ADVANCED TECHNOLOGY

Our laboratories and production facilities are fully equipped with the most advanced technology enabling 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. Our production lines were upgraded in 2014 with a new pilot and large-scale reactor, resulting in new types of environmentally-friendly resins, as well as increased production capacities.

OUR STRENGTHS

- FLEXIBILITY TO MEET CUSTOMER'S REQUIREMENTS
- ON-TIME DELIVERY
- HIGH QUALITY OF EVERY ORDER

COLPOLY

Unsaturated polyesters

COLVINYL

Vinyl esters



I. GENERAL PURPOSE RESINS

GENERAL PURPOSE LAMINATING RESINS FOR
HAND LAY-UP AND SPRAY-UP APPLICATIONS

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/1%MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7233	DCPD	38	900	30 (0/1)	1.5	55	80	Preaccelerated, thixotropic, (possible LSE version on request)
COLPOLY 7243	OPA	42	1100	30 (0/1)	1.5	60	65	Preaccelerated, thixotropic, LSE, low peak temperature, promoted
COLPOLY 7246	OPA	43	1800	28 (0/2)	1.5	60	65	Preaccelerated, thixotropic, LSE, low peak temperature, Lloyd's approval
COLPOLY 733-10	DCPD	38	1000	30 (0/1)	2.5	65	65	Preaccelerated, thixotropic, LSE, low peak temperature, Lloyd's approval (without LSE additive version COLPOLY 733-15)
COLPOLY 738-95	Hybrid VE/DCPD	39	1200	40 (0/1)	3.0	70	105	Preaccelerated, thixotropic, barrier coat
COLPOLY 7528	OPA	42	1000	20 (0/2)	2.5	85	105	Preaccelerated, thixotropic, LSE, low peak temperature, promoted
COLPOLY 7805	IPA	44	900	Various (0/1.5)	3.5	85	85	Preaccelerated, thixotropic, medium thix index, chemical resistant, (possible LSE version on request), Lloyd's approval
COLVINYL VE 101 AT	VE	46	1200	18 (0/2)	4.5	80	105	Preaccelerated, thixotropic, barrier coat

HIGH PERFORMANCE LAMINATING RESINS FOR
HAND LAY-UP AND SPRAY-UP APPLICATIONS

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/1%MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7227	OPA	43	1450	35 (0/1)	2.5	70	75	Preaccelerated, thixotropic, LSE, low peak temperature, Lloyd's approval
COLPOLY 7815	IPA/NPG	41	1400	15 (0/2)	3.0	65	80	Preaccelerated, thixotropic, LSE, low peak temperature, Lloyd's approval



II. CASTING AND CLOSED MOULDING RESINS

CASTING RESINS

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7321	DCPD	27	1400	45 (1/1)	3.0	70	80	Artificial marble and onyx
COLPOLY 732-D3	DCPD	35	380	15 (1/1)	3.0	70	80	Artificial marble and onyx
COLPOLY 733-90 M	DCPD	34	420	20 (1/1)	2.5	60	100	Artificial marble and onyx
COLPOLY 733-90	DCPD	32	320	8 (0.5/2)	2.5	60	100	Polymer concrete, low viscosity, high reactivity
COLPOLY 7525	OPA	34	420	8 (0.5/2)	2.5	80	105	Polymer concrete, high reactivity
COLPOLY 7524 AM-GS	OPA	36	400	14 (0/1)*	3.5	75	90	Resin is designed and recommended for use with Gruber Systems' composites manufacturing equipment , where quartz filler is utilised to manufacture cast polymer sanitaryware, kitchen sinks and other architectural surfacing products, * AAP curing
COLPOLY 7167	IPA/NPG	33	1100	10 (1/2)	2.0	90	105	Solid surface, contain acrylic (possible preaccelerated and different viscosity)

RESIN TRANSFER MOULDING (RTM)

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7524-03	DCPD	37	220	9 (0.8/1)*	4.0	75	85	Excellent impregnation * AAP curing
COLPOLY 7524/8	OPA	37	220	9 (0.8/1)*	3.5	80	90	Excellent impregnation * AAP curing
COLPOLY 7608	DCPD	32	300	15 (0/2)	3.0	70	75	Fire retardant, halogenated

SHEET MOULDING COMPOUND (SMC), BULK MOULDING COMPOUND (BMC)

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 757	OPA	36	1200	n.m.	2.0	40	115	High resistance to heat deformation, compatible with LP additives
COLPOLY 768	Maleic	32	3000	n.m.	1.5	60	120	Low shrink SMC/BMC application
COLPOLY 783-02	IPA	33	3800	n.m.	3.0	70	105	High crack resistance, high resistance to heat deformation, high viscosity and high reactivity
COLPOLY 7572	OPA	35	1400	n.m.	1.5	70	120	High resistance to heat deformation, compatible with LP additives
COLPOLY 7795	Maleic	35	180	n.m.	2.0	40	130	Basic resin for LS formulation
COLPOLY LPA 2600	Saturated polyester	30	1400	n.m.	n.m.	n.m.	n.m.	LPA additive

III. RESINS ARRANGING FOR TYPICAL APPLICATIONS

SPRAY-UP LAMINATING RESINS FOR ACRYLICS AND/OR ABS

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 724 A LSE	DCPD	40	200	10 (0/2)	1.5	55	70	Formulated to be filled with mineral fillers, preaccelerated, LSE (possible non LSE version on request), good adhesion on ABS
COLPOLY 7331 LV	DCPD	37	150	8 (0/2)	2.5	65	70	Formulated to be filled with mineral fillers, preaccelerated, LSE (possible non LSE version on request), good adhesion on PMMA
COLPOLY 736 WAT	DCPD	38	200	14 (0/2)	2.5	60	85	White pigmented, accelerated, thixotropic, LSE, formulated to be filled with mineral fillers, good adhesion on ABS and PMMA

CONTINUOUS LAMINATING

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 721 S	DCPD	36	250	18 (1/1)	3.5	60	80	Low viscosity, UV stabilised, good glass wetting, continuous sheet curing with MIBK, discontinuous laminating with MEKP or AAP
COLPOLY 736 S	DCPD	30	280	18 (1/1)	2.5	65	85	Low viscosity, low styrene contain, UV stabilised, good glass wetting, continuous sheet curing with MIBK, discontinuous laminating with MEKP or AAP
COLPOLY 739 S	DCPD	32	240	18 (1/1)	2.5	60	95	Low viscosity, UV stabilised, good glass wetting, continuous sheet curing with MIBK, discontinuous laminating with MEKP or AAP

PULTRUSION

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY RP 7015/8	DCPD	35	350	8 (2 BP)	2.5	60	95	Medium reactive resin, good mechanical properties, good glass wetting
COLPOLY 7558-02	OPA	35	700	9 (2 BP)	3.0	70	100	Excellent mechanical properties, high impact strength, high HDT
COLPOLY 779	Maleic	36	1800	8	1.5	35	130	High resistance to heat deformation, high reactivity
COLPOLY 7800	IPA	35	950	(2 BP) Various	4.5	90	100	Fast through cure (possible different viscosity and solids content modified with LS additives etc.)
COLVINYL VE 105 LV	VE	34	500	10 (2 BP)	5.5	85	105	Optimal wetting of the glass fiber, good mechanical properties and excellent corrosion resistant, high HDT

VACUUM INFUSION

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7810 AI	IPA/NPG	41	250	90 (0/1.5)	3.0	65	80	Rapid fill times, resistance to print-through, preaccelerated, Lloyd's approval

FILAMENT WINDING

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY RP 7015/9	DCPD	30	430	Various	2.5	70	85	Chemical resistance, low styrene content
COLPOLY 7166	IPA/NPG	40	600	Various	4.5	60	90	Excellent mechanical properties, high HDT, liner, adhesion on PVC
COLPOLY 7524	OPA	35	750	14 (0.8/1)	2.5	80	105	Chemical resistance
COLPOLY 7543	OPA	35	850	10 (1.5/2)	3.5	75	90	Excellent mechanical properties, outstanding durability, chemical resistance
COLPOLY 7854	IPA/TPA	40	400	Various	4.0	90	100	Chemical resistance



IV. SPECIALITY RESINS

BASE RESINS FOR GEL COATS, TOP COATS AND
PIGMENT CONCENTRATES

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/1%MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7100	Maleic	free	350					Grinding medium for pigment concentrates
COLPOLY 7220	OPA	36	500	10 (1/2)	2.5	70	80	Base resin for gel coats, Lloyd's approval
COLPOLY 7160	IPA/NPG	40	550	6 (1/2)	4.0	85	100	Base resin for gel coats, UV stabilised, Lloyd's approval
COLPOLY 7172	IPA	33	1250	8 (1/2)	5.0	85	95	Base resin for gel coats, Lloyd's approval

RESINS FOR PUTTIES

PRODUCT	CHEMICAL NATURE	REACTIVE MONOMER CONTENT (%)	VISCOSITY AT 25°C (Brookfield, #2/10 rpm) (mPa.s)	GEL TIME AT 25°C (MIN) CURING SYSTEM (% Co Acc. 1%/1%MEKP-50)	ELONGATION AT BREAK (%)	TENSILE STRENGTH (MPa)	HDT (°C)	REMARKS
COLPOLY 7281	DCPD	37	380	8.5 (2 BP)	n.m.	n.m.	n.m.	Pre-accelerated with amines, for use in the manufacture of car body fillers and putties for BPO cure
COLPOLY 7284	DCPD	35	550	8 (2 BP)	n.m.	n.m.	n.m.	Pre-accelerated with amines, for use in the manufacture of car body fillers and putties for BPO cure
COLPOLY 7291	DCPD	35	750	12 (2 BP)	n.m.	n.m.	n.m.	Pre-accelerated with amines, for use in the manufacture of car body fillers and putties for BPO cure, high flexibility
COLPOLY 7294	THPA	36	800	5 (2 BP)	n.m.	n.m.	n.m.	Pre-accelerated with amines, for use in the manufacture of car body fillers and putties for BPO cure, can be combined with other Colpoly grades (7281, 7284, 7291, 7296) to increase their hardness
COLPOLY 7296	THPA	33	700	8.5 (2 BP)	n.m.	n.m.	n.m.	Pre-accelerated with amines, for use in the manufacture of car body fillers and putties for BPO cure



ISO 9001
ISO 14001

BUREAU VERITAS
Certification



European company
Global delivery

Helios TBLUS 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

A member of the KANSAI PAINT Group.