

RESOMER[®] and LACTEL[®]

PORTFOLIO OF EXCIPIENTS FOR PARENTERAL CONTROLLED RELEASE



The RESOMER[®] and LACTEL[®] portfolios provide an industry-leading selection of functional excipients for parenteral controlled release.

Both portfolios are 100% bioabsorbable, completely metabolized by the body, and ideal for terminal sterilization. Both RESOMER[®] and LACTEL[®] have long stability supported by data and are highly suitable for use with small molecules, peptides, proteins and other substances. Both are supplied from modern, established manufacturing sites in the U.S. and Germany – ensuring extensive options for dual sourcing and supply security.

LACTEL[®] catalog of non-solvent purified bioabsorbable polymers

The standard LACTEL[®] portfolio boasts of a broad catalog of standard polymers available as a cost effective supply due to streamlined manufacturing processes. Common application areas for LACTEL[®] standard polymers include veterinary medicine, where bioresorbable polymers are used in long-acting injectable formulations, and human generic drug formulations, which require price-sensitive planning and quick shipment to support demanding, fast-paced markets.

LACTEL[®] standard products

LACTEL PART NO.	POLYMER NAME	ABBREV	INHERENT VISCOSITY (IV) dL/g		END GROUP	DEGRADATION TIME
B6017-1	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.15 - 0.25	value measured in HFIP	Ester	< 3 months
B6010-1	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.26 - 0.54		Ester	< 3 months
B6010-2	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.55 - 0.75		Ester	< 3 months
B6010-3	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.76 - 0.94		Ester	< 3 months
B6010-4	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.95 - 1.20		Ester	< 6 months
B6001-1	65:35 Poly(DL-lactide-co-glycolide)	65:35 DL-PLG	0.55 - 0.75		Ester	< 4 months
B6001-2	65:35 Poly(DL-lactide-co-glycolide)	65:35 DL-PLG	0.83 - 0.93		Ester	< 4 months
B6013-1	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.15 - 0.25		Acid	< 3 months
B6013-2	50:50 Poly(DL-lactide-co-glycolide)	50:50 DL-PLG	0.55 - 0.75		Acid	< 3 months
B6007-1	75:25 Poly(DL-lactide-co-glycolide)	75:25 DL-PLG	0.55 - 0.75		value measured in chloroform	Ester
B6007-2	75:25 Poly(DL-lactide-co-glycolide)	75:25 DL-PLG	0.80 - 1.20	Ester		< 6 months
B6006-1	85:15 Poly(DL-lactide-co-glycolide)	85:15 DL-PLG	0.55 - 0.75	Ester		< 9 months
B6006-2	85:15 Poly(DL-lactide-co-glycolide)	85:15 DL-PLG	0.76 - 0.85	Ester		< 12 months
B6005-1	Poly(DL-lactide)	DL-PL	0.26 - 0.54	Ester		< 12 months
B6005-2	Poly(DL-lactide)	DL-PL	0.55 - 0.75	Ester		< 18 months
B6012-4	75:25 Poly(DL-lactide-co-glycolide)	75:25 DL-PLG	0.70 - 0.90	Acid		< 6 months
B6014-1	Poly(DL-lactide)	DL-PL	0.16 - 0.25	Acid		< 6 months

Further LACTEL[®] polymers are available upon request

Glucose star polymer for highly sensitive or reactive APIs

The Glucose Star Polymer is a branched 55:45 DL-PLG that is highly purified to achieve nearly undetectable levels of residuals including tin and monomer. Developed specifically for the formulation of

microspheres with octreotide, its branched nature provides unique drug delivery characteristics and may be beneficial for use in applications involving highly sensitive or reactive APIs.

GLUCOSE STAR POLYMER

PRODUCT NO.	POLYMER NAME	ABBREV	IV (dL/g)	END GROUP
B6131-1	55:45 Poly(DL-lactide-co-glycolide), Glucose initiated	55:45 DL-PLG-Glu	0.40 - 0.60 in chloroform	Hydroxyl

RESOMER® - your brand of choice for customization

The RESOMER® standard catalog of parenteral excipients includes Poly (lactide) and Poly (lactide-co-glycolide) polymers with a variety of high and low molecular weights and polymer compositions which can be selected to help tune degradation times over durations of up

to 18 months. RESOMER® polymers are solvent-purified to achieve lower residual monomer levels, and the portfolio includes a selection of customizable options.

POLY (D,L-LACTIDE) RESOMER® R STANDARD POLYMERS

POLYMER NAME	INHERENT VISCOSITY (dl/g)	COMPOSITION	END GROUP	DEGRADATION TIME
RESOMER® R 202 H	0.16 - 0.24	Poly(D,L-lactide)	Acid	< 6 months
RESOMER® R 202 S	0.16 - 0.24	Poly(D,L-lactide)	Ester	< 9 months
RESOMER® R 203 H	0.25 - 0.35	Poly(D,L-lactide)	Acid	< 6 months
RESOMER® R 203 S	0.25 - 0.35	Poly(D,L-lactide)	Ester	< 12 months
RESOMER® R 205 S	0.55 - 0.75	Poly(D,L-lactide)	Ester	< 18 months

POLY(D,L-LACTIDE-CO-GLYCOLIDE) RESOMER® RG STANDARD POLYMERS

POLYMER NAME	INHERENT VISCOSITY (dl/g)	COMPOSITION	END GROUP	DEGRADATION TIME
RESOMER® RG 501 H	0.08 - 0.16	Poly(D,L-lactide-co-glycolide) 50:50	Acid	< 3 months
RESOMER® RG 502	0.16 - 0.24	Poly(D,L-lactide-co-glycolide) 50:50	Ester	< 3 months
RESOMER® RG 502 H	0.16 - 0.24	Poly(D,L-lactide-co-glycolide) 50:50	Acid	< 3 months
RESOMER® RG 503	0.32 - 0.44	Poly(D,L-lactide-co-glycolide) 50:50	Ester	< 3 months
RESOMER® RG 503 H	0.32 - 0.44	Poly(D,L-lactide-co-glycolide) 50:50	Acid	< 3 months
RESOMER® RG 504	0.45 - 0.60	Poly(D,L-lactide-co-glycolide) 50:50	Ester	< 3 months
RESOMER® RG 504 H	0.45 - 0.60	Poly(D,L-lactide-co-glycolide) 50:50	Acid	< 3 months
RESOMER® RG 505	0.61 - 0.74	Poly(D,L-lactide-co-glycolide) 50:50	Ester	< 3 months
RESOMER® RG 653 H	0.32 - 0.44	Poly(D,L-lactide-co-glycolide) 65:35	Acid	< 3 months
RESOMER® RG 750 S	0.8 - 1.2	Poly(D,L-lactide-co-glycolide) 75:25	Ester	< 6 months
RESOMER® RG 752 H	0.14 - 0.22	Poly(D,L-lactide-co-glycolide) 75:25	Acid	< 6 months
RESOMER® RG 752 S	0.16 - 0.24	Poly(D,L-lactide-co-glycolide) 75:25	Ester	< 6 months
RESOMER® RG 753 H	0.32 - 0.44	Poly(D,L-lactide-co-glycolide) 75:25	Acid	< 6 months
RESOMER® RG 753 S	0.32 - 0.44	Poly(D,L-lactide-co-glycolide) 75:25	Ester	< 6 months
RESOMER® RG 755 S	0.50 - 0.70	Poly(D,L-lactide-co-glycolide) 75:25	Ester	< 6 months
RESOMER® RG 756 S	0.71 - 1.0	Poly(D,L-lactide-co-glycolide) 75:25	Ester	< 6 months
RESOMER® RG 757 S	0.9 - 1.3	Poly(D,L-lactide-co-glycolide) 75:25	Ester	< 6 months
RESOMER® RG 858 S	1.3 - 1.7	Poly(D,L-lactide-co-glycolide) 85:15	Ester	< 9 months

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LACTEL® – reg. trademark of Evonik Industries AG and its subsidiaries.

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