

# RenLam<sup>®</sup> Epoxy Laminating Resins Specifications

Product Number	Mix Ratio Resin to Hrd'nr (by wt.)	Mix Ratio Resin to Hrd'nr (by vol.)	Gel Time (min)	Mixed Viscosity Brookfield (cps.)	Density (g/cc)	Volumetric Yield (in. <sup>3</sup> /lb.)	Hardness (Shore D)	Compressive Strength (psi)	Ultimate Flexural Strength (psi)	Ultimate Tensile Strength (psi)	Coefficient Of Thermal Expansion (in./in./°F)	Tg (°F)
<b>Room Temperature Laminating Resins</b>												
RenLam 286	100:18	100:26	20-30	2,400	–	19.6	90	40,400	35,300	26,500	–	–
RenLam 1135/Ren 1135	100:33	100:40	7	3,250	1.23	22.5	90	-	-	-	-	-
RenLam 1700-1/1700-1	100:26	100:28	20	2,000	1.13	18.5	90	28,100	37,000	26,000	1.00 x 10 <sup>-5</sup>	164
RenLam 1700-1/956	100:23	100:25	36	2,000	1.13	18.5	89	24,700	40,700	34,900	0.97 x 10 <sup>-5</sup>	164
RenLam 1710/1710	100:16	100:23	22	3,500	1.35	18.8	90	23,000	30,000	25,000	1.20 x 10 <sup>-5</sup>	164
RenLam 1710/956	100:16	100:23	35	2,000	–	–	–	26,900	32,900	25,000	0.81 x 10 <sup>-5</sup>	–
RenLam 1720/956	100:15	–	40	–	1.34	20.5	90	–	36,000	–	1.02 x 10 <sup>-5</sup>	–
RenLam 3270	100:14	100:20	28	3,600	1.70	16.3	84	23,000	30,000	28,000	1.10 x 10 <sup>-5</sup>	171
RenLam 177-114/Ren 956	100:24	-	38	800	1.15	24.1	90	26,000	39,000	36,000	0.93 x 10 <sup>-5</sup>	-
<b>High Temperature Laminating Resins</b>												
RenLam 4005/1500	100:14	100:15	50	1,900	1.19	23.3	90	28,000	35,000	26,000	0.85 x 10 <sup>-5</sup>	338
RenLam 4014/1500	100:11	100:14	55	4,000	1.34	20.8	90	28,000	34,000	24,000	1.41 x 10 <sup>-5</sup>	340
RenLam 4017/1510	100:15	–	90	8,000	1.42	19.6	93	44,000	77,000	80,000	3.4 x 10 <sup>-5</sup>	385
RenLam 188-10 / Ren 188-10	100:11	100:14	55	4,000	1.33	20.8	90	25,000	30,000	22,000	1.1 x 10 <sup>-5</sup>	290
RenLam 8105/Med Hardener	100:28	100:32	120	3,400	–	–	91	29,500	37,400	23,100	2.5 x 10 <sup>-5</sup>	294
RenLam 8105/Slow Hardener	100:29	100:32	3 hrs	5,500	–	–	90	30,900	40,200	22,200	3.4 x 10 <sup>-5</sup>	295
RenLam 1310/1520	100:32	–	16 hrs	7,700	1.25	22.3	91	45,000	78,000	100,000	3.4 x 10 <sup>-5</sup>	446
ASTM			D2471	D2393	D792	D792	D2240	D695	D790	D638	D3386	D4065