



Silicone Resins / Release-Liner Applications

PhiChem's portfolio of UV and E-beam curable silicone acrylates resins are ideal for use as release-liner coatings. These resins can be used to create formulations that can be coated on paper or polymer film, to introduce release characteristics for pressure-sensitive adhesive (PSA) label, PSA tape and other applications. The table below provides a list of resins that PhiChem has developed, and their current status. We also work closely with customers to develop resins for customized release-liner applications, or for other applications where UV or E-beam curable silicone acrylate materials are desired.

Product Code	Chemical Classification	Basic Chemical/Physical Properties				Features	Status
		Functional Groups (#)	Molecular Weight, Mw	Viscosity cps (25°C)	Refractive Index (25°C)		
MA6330C	Silicone diacrylate	2	4,300-5,300	10-60	1.418	Strong COF reduction & substrate wetting Increased surface slip and tape release at low dosage	Normal Production
MA6340B	Silicone diacrylate	2	11,000-14,000	80-180	1.408	Remarkable surface smoothness Anti-blocking and mar resistance	Normal Production
MA6309	Silicone diacrylate	2	4,200-4,800	400-560	1.443	High compatibility in clear coat, Increased surface slip Strong COF reduction and substrate wetting	Pilot Production
MA6320	Silicone diacrylate	2	2,600-3,200	80-140	1.426	Increased surface slip and tape release	Lab-scale synthesis
MA6350	Silicone acrylate	4	13,000-16,500	300-500	1.411	Excellent release characteristics	Lab-scale synthesis
MA6355	Silicone acrylate	4	22,000-25,000	700-1,100	1.408	Better release characteristics than MA6350	Lab-scale synthesis
MA6900	Multi-functional acrylate	> 4	5,000-6,300	450-750	1.443	High compatibility in clear coat, Strong COF reduction & substrate wetting, Promotes flow at low dosage	Lab-scale synthesis
MA6910	Multi-functional acrylate	> 4	40,000-50,000	500-1,100	1.409	Fast-curing response Increased surface slip and tape release	Lab-scale synthesis