

Polyurethane Resins

Polyurethane Resins	UR5041	UR5048	UR5044	UR5528	UR5562	UR5547	UR5097	UR5604	UR5608
Base Material	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Colour (Mixed System)	Black	Clear	Dark Blue	Black	Water White	Black	Black	Black	Black
Density Part A - Resin (g/ml)	1.17	0.93	1.51	1.02	1.01	1.69	1.53	1.62	1.65
Density Part B - Hardener (g/ml)	1.24	1.24	1.34	1.24	1.06	1.23	1.24	1.21	1.24
Cured Density (g/ml)	1.18	0.95	1.49	1.07	1.02	1.60	1.49	1.54	1.59
Part A Viscosity (mPa s @ 23°C)	9300	1200	10000	3500	1700	24000	30000	20000	20000
Part B Viscosity (mPa s @ 23°C)	55	60	370	150	50	230	50	50	50
Mixed System Viscosity (mPa s @ 23°C)	2500	980	3400	2000	300	4000	6000	2000	2000
Mix Ratio by Weight (by Volume)	3.64:1 (3.85:1)	14.05:1 (18.58:1)	13.44:1 (11.96:1)	2.37:1 (2.87:1)	2.24:1 (2.34:1)	5.52:1 (4.01:1)	7.52:1 (6.07:1)	5.21:1 (3.88:1)	5.18:1 (6.93:1)
Usable Life (Minutes @ 23°C)	20	20	25	20	17	20	20	40	30
Gel Time (Minutes @ 23°C)	60	40	40	35	22	50	80	90	60
Cure Time (Hours @ 23°C/60°C)	24/4	24/4	24/3	24/5	24/4	24/3	24/4	24/3	24/3
Shore Hardness	A85	A12	A40	D57	A95	A85	A85	A75	D50
Thermal Conductivity (W/mK)	0.25	0.20	0.25	0.245	0.20	0.35	0.65	0.45	0.45
Temperature Range (°C)	-60 to +125	-60 to +100	-60 to +120	-50 to +125	-40 to +120	-50 to +120	-40 to +110	-40 to +130	-40 to +100
Max Temperature Range (Short Term °C/Mins)	+130	+100	+130	+130	+130	+125	+130	+155	+110
Dielectric Strength (kV/mm)	20	18	17.7	25	11	14	18	18	18
Volume Resistivity (ohm-cm)	10 ¹⁵	10 ¹⁴	10 ¹⁰	10 ¹⁴	10 ¹⁴	10 ¹⁴	10 ¹⁴	10 ¹⁴	10 ¹⁴
Flame Retardency	No	No	Yes	No	No	No	Yes	Yes	Yes
UL Approval	No	No	UL94 V-0	No	No	No	UL94 V-0	UL94 V-0	UL94 V-0
RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Special Property	Water Resistance	Soft, Low Stress	Soft, Re-enterable	Tough, High Adhesion	Optically Clear	Excellent Adhesion	Thermally Conductive	Tough, Flexible	Tough, Rigid