

Carbotex® Polycarbonate

特性	测定方法	测定标准	单位	· 标准 · 易脱模 · UV 标准 · UV 标准 + 易脱模					· 标准 · 易脱模 · UV 标准 · UV 标准 + 易脱模					阻燃 (非溴化 & 非氯化)					食物接触					板材					玻纤加强级					玻纤加强级 + 阻燃 (非溴化 & 非氯化)					耐磨损 玻纤加强级		耐磨损 玻纤加强级		耐磨损		导电	
				K-20T30 K-20MRA30 K-20UV30 K-20UVR30	K-20 K-20MRA K-20UV K-20UVR	K-30 K-30MRA K-30UV K-30UVR	K-40 K-40MRA K-40UV K-40UVR	K-50 K-50MRA K-50UV K-50UVR	K-30FR	K-30FRT12	KFR-30	KFR-30T12	KV-20FD	KV-30FD	KV-40FD	KV-75FD	K-75E	K-75EUV	KG-10MRA	KG-15MRA	KG-20MRA	KG-30MRA	KG-10MRA	KG-15MRA	KG-20MRA	KG-30MRA	KG-20F10	KG-30F15	K-30F5	K-30CF10																
机械特性																																														
冲击强度	ASTM D256	V-Notched 1/8" 23	J/m kgf·cm/cm ft·lbf/in	690 70 13	740 75 14	780 80 15	830 85 16	830 85 16	780 80 15	830 85 16	780 80 15	830 85 16	740 75 14	780 80 15	830 85 16	880 90 17	880 90 17	69 7 1.3	78 8 1.5	90 9 1.6	100 10 1.8	69 7 1.3	78 8 1.5	90 9 1.6	100 10 1.8	78 8 1.5	78 8 1.5	150 15 2.8	120 12 2.2																	
拉伸强度	ASTM D638	---	MPa kgf/cm ² lbf/in ²	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	63 640 9100	74 750 11000	98 1000 14200	108 1100 15600	127 1300 18500	74 750 11000	98 1000 14200	108 1100 15600	127 1300 18500	118 1200 17100	120 1220 17400	62 630 9000	108 1100 15600																	
断裂伸长率	ASTM D638	---	%	120	120	120	120	120	120	120	120	120	120	120	120	120	120	5	4.5	4	3	5	4.5	4	3	4	3	100	118																	
弯曲强度	ASTM D790	---	MPa kgf/cm ² lbf/in ²	85 870 12400	85 870 12400	85 870 12400	85 870 12400	84 860 12200	84 860 12200	84 860 12200	84 860 12200	84 860 12200	85 870 12400	85 870 12400	85 870 12400	88 900 12800	88 900 12800	118 1200 17100	132 13500 19200	152 1550 22000	162 1650 23400	118 1200 17100	132 1350 19200	152 1550 22000	162 1650 23400	132 1350 19200	142 1450 20600	84 860 12200	160 1650 23400																	
弯曲模量	ASTM D790	---	MPa kgf/cm ² lbf/in ²	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2160 22000 313000	2280 23000 327000	2280 23000 327000	3530 36000 512000	4410 45000 639000	5690 58000 824000	7550 77000 1090000	3530 36000 512000	4410 45000 639000	5690 58000 824000	7550 77000 1090000	5390 55000 782000	5800 59000 847000	2100 21500 306000	6000 61000 867000																	
洛氏硬度	R scale	---	---	120	120	120	120	120	120	120	120	120	120	120	120	120	120	---	---	---	---	---	---	---	---	---	---	---	---	---																
热特性																																														
燃烧性	UL-94	---	---	V-2 (1.6mm)	V-2 (1.6mm)	V-2 (1.6mm)	V-2 (1.6mm)	V-2 (1.6mm)	V-0 (3.0mm)	V-0 (3.0mm)	V-0 (1.6mm)	V-0 (1.6mm)	---	---	---	V-2 (1.6mm)	V-2 (1.6mm)	V-0 (3.0mm)	V-0 (3.0mm)	V-0 (3.0mm)	V-0 (3.0mm)	V-0 (1.7mm)	V-0 (1.7mm)	V-0 (1.7mm)	V-0 (1.7mm)	V-0 (1.7mm)	V-0 (1.7mm)	(Equiv. V-0) (1.7mm)	(Equiv. V-0) (1.7mm)	(Equiv. V-2) (1.6mm)	(Equiv. V-2) (1.6mm)															
热变形温度	ASTM D648	---	---	129	131	132	133	134	132	133	132	133	131	132	134	135	135	140	143	145	146	140	143	145	146	146	145	145	145	147																
熔体流动率	ASTM D1238	300 1.2 kgf	g/10 min.	30	20	15	12	9	15	12	15	12	20	15	10	4	4	5	---	---	---	---	---	---	---	---	---	---	---	---																
光学特性																																														
透光系数	ASTM D1003	3.0mm	%	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89														
光折射率	ASTM D542	---	---	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58														
模糊	ASTM D1003	3.0mm	%	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1														
物理特性																																														
比重	ASTM D792	---	---	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.27	1.30	1.35	1.43	1.27	1.30	1.35	1.43	1.41	1.57	1.22	1.24																	
吸水性	ASTM D570	24 hrs at 23 浸水	%	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2															
模具收缩	ASTM D995	Parallel Across	%	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.5 ~ 0.7	0.6 ~ 0.8	0.6 ~ 0.8	0.6 ~ 0.8	0.3 ~ 0.5	0.3 ~ 0.5	0.3 ~ 0.4	0.2 ~ 0.4	0.3 ~ 0.5	0.3 ~ 0.5	0.3 ~ 0.4	0.2 ~ 0.4	0.3 ~ 0.4	0.3 ~ 0.4	0.5 ~ 0.7	0.3 ~ 0.5																
电力特性																																														
绝缘强度	ASTM D149	---	kV/mm	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20															
电容率	ASTM D150	10 ⁶ Hz	---	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2															
介电损耗因子	ASTM D150	10 ⁶ Hz	---	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008															
弧阻	ASTM D495	---	sec.	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110															
体积电阻率	ASTM D257	---	Ω·cm	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶	10 ¹⁶															

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