

PROPERTIES 特性	STANDARD 标准	UNIT 单位	CONDITION 条件	Non-reinforced 非增强型			Glass Fiber Reinforced 玻璃纤维增强型				Impact Modified 耐冲击改进型				Flme Retardant 阻燃级			
				TechnyⓈ A 205F	TechnyⓈ A 216	TechnyⓈ A 221	TechnyⓈ A 216 V15	TechnyⓈ A 216 V35	TechnyⓈ A 216 V50	TechnyⓈ A 218 V30	TechnyⓈ A 246M	TechnyⓈ PSB 189	TechnyⓈ PSB 197	TechnyⓈ SX216 V60	TechnyⓈ A 50H1	TechnyⓈ B50H1	TechnyⓈ A20V25	TechnyⓈ S60G1V30
PHYSICAL PROPERTIES 物理性能																		
Water absorption 吸水率 (24h in water at 23°C)	ISO 62	%		1.2	1.3	1.1	1.1	0.75	0.6	0.8	1.05			0.55	0.88	1.1	0.75	
Density 密度	ISO 1183	g/cm ³		1.14	1.14	1.14	1.24	1.41	1.57	1.37	1.08	1.31	1.23	1.65	1.16	1.16	1.38	1.43
Moulding shrinkage parallel 平行方向收缩率	RHODIA-EP	%		1.9	1.9	1.2	0.8	0.45	0.3	0.5	1.9				1.4	1.1	0.5	0.4
Moulding shrinkage normal or perpendicular 垂直方向收缩率	RHODIA-EP	%		1.9	1.9	1.2	1.1	0.75	0.5	0.8	1.9				1.1	1	0.9	0.7
MECHANICAL PROPERTIES 机械性能																		
Tensile modulus 拉伸模量	ISO 527 1A	Mpa	d.a.m/cond.*	3200/1600	3000/1500	3700/1600	6200/4300	12000/8700	6200/12500	10000/7500	1900/600	8000/5400	5500/3800	21000/15500	3900/2400	3600/2200	9000/6500	11760/7010
Tensile strength at break 拉伸屈服应力	ISO 527 1A	Mpa	d.a.m/cond.*	85/50	85/60	95/60	125/90	210/150	240/175		47/42				85/50	80/40		147/97
Tensile strain at yield 拉伸屈服伸长率	ISO 527 1A	%	d.a.m/cond.*	4/10	3.9/30	5/25					20/210				4.2/22.3	4/-		2.28/5.27
Tensile strength at break 拉伸断裂应力	ISO 527 1A	Mpa	d.a.m/cond.*	60/40	55/65	85/45	125/90	210/150	240/175	190/135	44/35	125/80	105/84	240/165	85/50	80/45	160/120	243/169
Tensile strain at break 拉伸断裂伸长率	ISO 527 1A	%	d.a.m/cond.*	25/200	30/300	20/160	4/8	3/4	2/2.5	3/4	65/210	4/7	4/10	2.5/3.7	21/140	10/-	2.0/4.1	2.9/4.9
Flexural modulus 弯曲模量	ISO 178	Mpa	d.a.m/cond.*	2900/1300	2900/1300	3300/1600	5300/3500	9500/6800	13500/10000	8400/5900	1800/700	7800/5100	5000/3200	9000/13200	3200/2100	3200/2000	7500/6000	10680/6900
Flexural maximum stress 弯曲强度	ISO 178	Mpa	d.a.m/cond.*	120/50	120/50	137/60	190/115	286/196	350/260	260/175	70/27	200/102	170/105	385/260	125/-	105/70	250/150	
Charpy notched impact strength 悬臂梁冲击强度(有缺口)	ISO 179/1eA	kJ/m2	d.a.m/cond.*	4.5/8	4.5/14	2.5/5	7/7.5	13.5/18.5	16/18	12/16	55/100	20/-	15/-	15/20	3.2/10.1	4.5/12	7/8	9.6/13
Charpy unnotched impact strength 悬臂梁冲击强度(无缺口)	ISO 179/1eU	kJ/m2	d.a.m/cond.*	NB/NB	NB/NB	NB/NB	41/67	90/100	95/97	80/95	NB/NB	87/-	75/-	85/95	130/NB	90/NB	35/40	67/-
Izod notched impact strength 直向冲击强度(有缺口)	ISO 180/1A	kJ/m2	d.a.m/cond.*	4.5/6	4/12	4/12	6/9	13/18	14.5/17	12/16	60/80	20/34	15/25	15.2/22		3.0/10.0	8.0/9.1	9/1 2
Izod unnotched impact strength 直向冲击强度(无缺口)	ISO 180/1U	kJ/m2	d.a.m/cond.*											90/100				54/-
THERMAL PROPERTIES 热性能																		
Melting temperture 熔融温度	ISO 11357	°C		263	263	263	263	263	263	263	263	222	222	222	263	242	263	217
Heat deflection temperature 热变形温度,1.8Mpa	ISO 75/Af	°C		75	75	80	245	255	255	255	65	205	192	215	85	85	250	205
Heat deflection temperature 热变形温度,0.45Mpa	ISO 75/Bf	°C		220	223			255	255		190				237			
Coef.of linear thermal expension parallel 平行方向线性热膨胀系数 (23°C to 85°C)	ISO 11359	E-5/°C		7	7	6.5	3.5	2.2	1.5	2.5	7					6.5	3	
Flammability UL94 阻燃性(1.6mm)	UL94			V-2	V-2	V-2	HB	HB	HB	HB	HB	HB	HB		V-0	V-0	V-0	V-0
Glow Wire Flammability Index 灼热丝燃烧指数 (1.6mm)	IEC 60695-2-12	°C		850	650	700	650	650	650	700					960	960	960	960
Limited Oxygen index 有限供氧指数	ISO 4589	%		28.5	26.5	26	24	23	23	23	24.5				34	33	30.5	35
ELECTRICAL PROPERTIES 电气性能																		
Relative permittivity 相对介电常数	IEC 60250	-	d.a.m/cond.*	2.9/3.2	2.9/3.2	2.9/3.2	3.7/4	3.7/4	3.7/4	3.7/4	3.2/4	3.7/4.5			3.6/4	3.6/4.0	3.4/4.0	3.88/-
Dissipation factor 耗散因素	IEC 60250	-	d.a.m/cond.*	0.03/0.08	0.03/0.08	0.03/0.08	0.01/0.11	0.01/0.11	0.01/0.11	0.01/0.11	0.02/0.06	0.021/0.1			0.02/0.06	0.02/0.06	0.02/0.05	
Volume resistivity 体积电阻率	IEC 60093	E14.Ω.cm	d.a.m/cond.*	10/0.1	40/0.1	10/1	10/0.1	10/0.1	10/0.1	10/0.1	10/0.1	10/0.001			10/-	10/-	10/0.1	
Surface resistivity 表面电阻率	IEC 60093	E14.Ω	d.a.m/cond.*	5/0.1	10/0.1	10/0.1	6/0.01	6/0.01	6/0.01	6/0.01	1/0.1	0.1/0.001			10/0.01	10/0.01	0.1/0.01	1.1/-
Dielectric strength 介电强度	IEC 60243	kV/mm	d.a.m/cond.*	27/26	30/26	27/26	31/30	34/29	35/30	31/30	30/38	- /21			34/30	34/30	25/25	
Comparative tracking index sol.A 相对电弧指数	IEC 60112	V	d.a.m/cond.*	600/600	600/575	600/600	600/600	600/600	600/600	450/325	575/600				600	600	375/350	600/-
Comparative tracking index sol.B 相对电弧指数	IEC 60112	V	d.a.m/cond.*	550/-	525/-	500/-	525/-	475/425	425/-		450/-						350	

* d. a. m=干态 / 湿态=根据测试条件 ISO 1110

All data for reference only 所有数据仅供参考