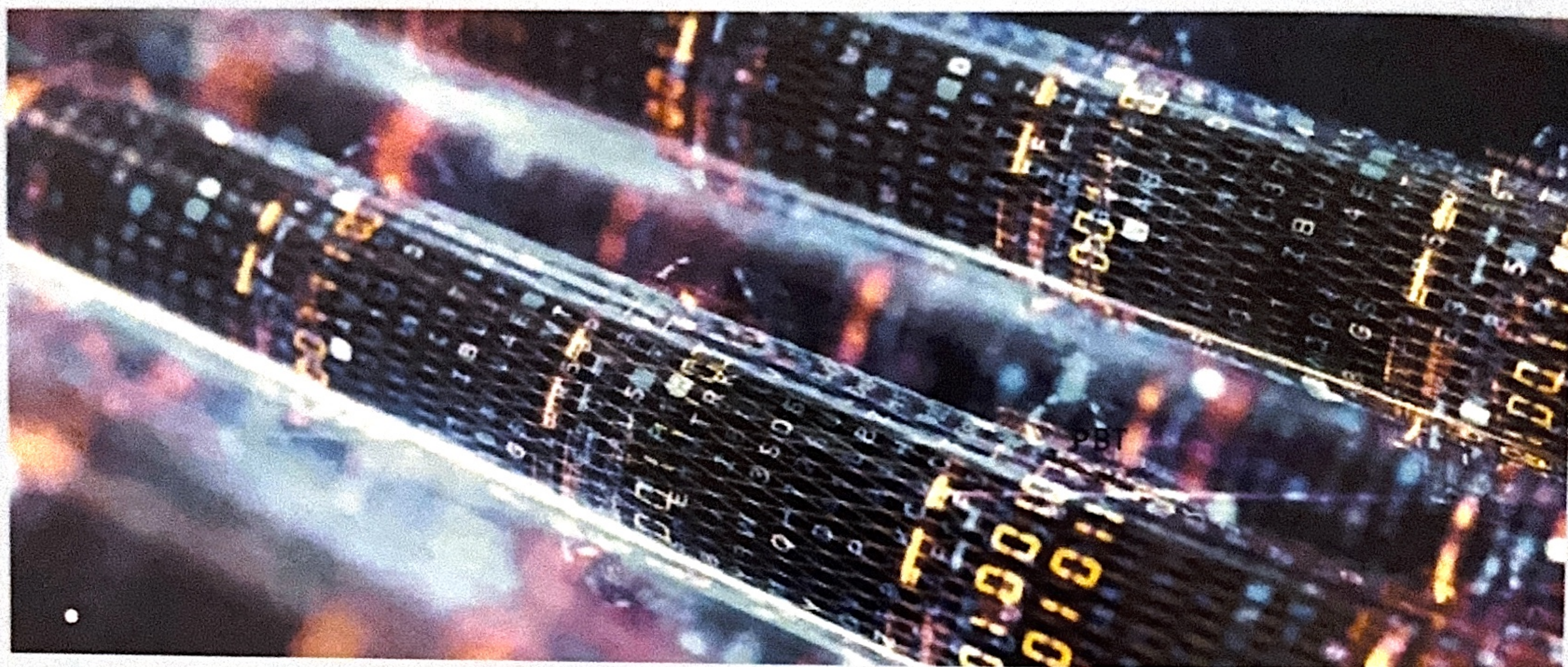


Grade: MY12 Series

Application: Optics Speciality Fibers, Chemical Fiber.

Performance Characteristics: Hydrolysis Resistance, Good Surface Quality, High Roundness, High-Pressure Resistance, High Elongation At Break.



TDS OF PBT RESIN

ITEM	UNIT	TEST METHOD	MY12	MY12H
Intrinsic Viscosity	DI/g	GB/T14190-2017	1.2±0.015	1.25±0.015
Melting Point	°C	ASTM D3418-08	≥222	≥222
Carboxyl End Group	mol/t	GB/T14190-2017	≤30	≤30
Color (L)	-	GB/T14190-2017	≥90	≥90
Color (B)	-	GB/T14190-2017	4.0±2	4.0±2
Water content	%	GB/T14190-2017	≤0.4	≤0.4
Ash content	mg/kg	GB/T14190-2017	≤300	≤300
Weight of 100 particals	g	GB/T14190-2017	2.2±0.2	2.2±0.2
Density	g/cm3	ASTM D792-08 B	1.30-1.32	1.30-1.32
Melt Flow Index	g/10min	ASTM D1238-10 A	13-18	10-15
Tensile Strength	Mpa	ASTM D638-10	55±5	55±5
Tensile Elongation at Break	%	ASTM D638-10	≥250	≥250
Izod ImpactStrength-Notched	J/m	ASTM D256-10 A	≥45	≥45
Dielectric Strength (2mm)	KV/cm	ASTM D149-09	≥20	≥20

Owing to its transparency and UV resistance, PBT resin is extensively preferred in the production of optical components, such as optical lenses and displays, among other applications. Its notable strength and hardness render it an optimal material for specialty fibers, which find widespread utilization in aerospace, automotive manufacturing, and various industries. Moreover, PBT resin's thermal and chemical stability endow it with extensive application potential in chemical fiber production. This facilitates flexible and efficient processing while simultaneously enhancing product stability and durability.

TDS OF PBT RESIN

ITEM	UNIT	TEST METHOD	PBT Grade								
			MY08	MY08H	MY09	MY09H	MY10	MY10H	MY12	MY12H	MYC10GF30
Intrinsic Viscosity	DI/g	GB/T14190-2017	0.830±0.015	0.850±0.015	0.900±0.015	0.950±0.015	1.050±0.015	1.100±0.015	1.2±0.015	1.25±0.015	-
Melting Point	°C	ASTM D3418-08	224±2.0	224±2.0	224±2.0	224±2.0	224±2.0	224±2.0	224±2.0	224±2.0	250±5.0
Carboxyl End Group	mol/t	GB/T14190-2017	≤25	≤25	≤28	≤28	≤28	≤30	≤30	≤30	-
Color (L)	-	GB/T14190-2017	≥88	≥88	≥88	≥88	≥88	≥88	≥88	≥88	-
Color (B)	-	GB/T14190-2017	4.0±2	4.0±2	4.0±2	4.0±2	4.0±2	4.0±2	4.0±2	4.0±2	-
Water content	%	GB/T14190-2017	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.3
Ash content	mg/kg	GB/T14190-2017	≤300	≤300	≤300	≤300	≤300	≤300	≤300	≤300	30000-32000
Weight of 100 particals	g	GB/T14190-2017	2.2±0.2	2.2±0.2	2.2±0.2	2.2±0.2	2.2±0.2	2.2±0.2	2.2±0.2	2.2±0.2	-
Density	g/cm3	ASTM D792-08 B	1.30-1.32	1.30-1.32	1.30-1.32	1.30-1.32	1.30-1.32	1.30-1.32	1.30-1.32	1.30-1.32	1.50-1.55
Melt Flow Index	g/10min	235 °C /2160g	52-62	46-55	35-42	27-32	16-20	12-16	8-11	7-9	21
Tensile Strength	Mpa	ASTM D638-10	50±5	50±5	50±5	50±5	50±5	50±5	50±5	50±5	118
Tensile Elongation at Break	%	ASTM D638-10	≥60	≥100	≥100	≥100	≥200	≥200	≥250	≥250	7±2
Izod Impact Strength-Notched	J/ m	ASTM D256-10 A	≥40	≥40	≥40	≥40	≥45	≥45	≥45	≥45	95
Dielectric Strength(2mm)	KV/cm	ASTM D149-09	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥20	≥15

Specific PBT upon request, further information please contact via info@amerisource.com.cn