

HYDEX[®] 4101L - Stock Shapes

Chemical Designation

PBT (Polybutylene terephthalate)

Colour

white

Density

1.36 g/cm³

Fillers

PTFE, lubricant

Main features

- very good chemical resistance
- resistant to cleaning agents
- low moisture absorption
- good impact strength
- high dimensional stability
- good slide and wear properties
- high stiffness

Target Industries

- food processing
- semiconductor technology
- automotive industry
- packaging and paper machinery
- printing machines
- mechanical engineering

Mechanical properties	condition	value		test method	comment
Modulus of elasticity (tensile test)		380,000	psi	ASTM D 638	(1) per LNP EPALP-TB001 (2) per LNP EPALP-TB001 (3) per LNP EPALP-TB001
Tensile strength		7,200	psi	ASTM D 638	
Elongation at yield		40	%	ASTM D 638	
Modulus of elasticity (flexural test)	@ 73 °F	390,000	psi	ASTM D 790	
Impact strength (Izod)		0.7	ft-lbs/in	ASTM D 256	
Coefficient of friction	Dynamic (vs. steel)	0.11		-	1)
Coefficient of friction	Static (vs. steel)	0.08		-	2)
Wear rate	@ 2000 PV	38*10 ⁻¹⁰	psi-fpm	-	3)
Thermal properties	condition	value		test method	comment
Deflection temperature	@264 psi	195	°F	ASTM D 648	(1) per UL746B
Service temperature	Max Continuous Use	221	°F	-	1)
Other properties	condition	value		test method	comment
Limiting PV	@ 100 fpm	15,700	psi-fpm	-	1) (1) per LNP EPALP-TB003
Moisture absorption	@ 24 hrs, 73 °F	0.07	%	ASTM D 570	

→ Resin specification:
ASTM D5927-09 TPES0100
Shapes specification:
ASTM D6261-10 S-TPES0120

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