

# Lubring Slideways

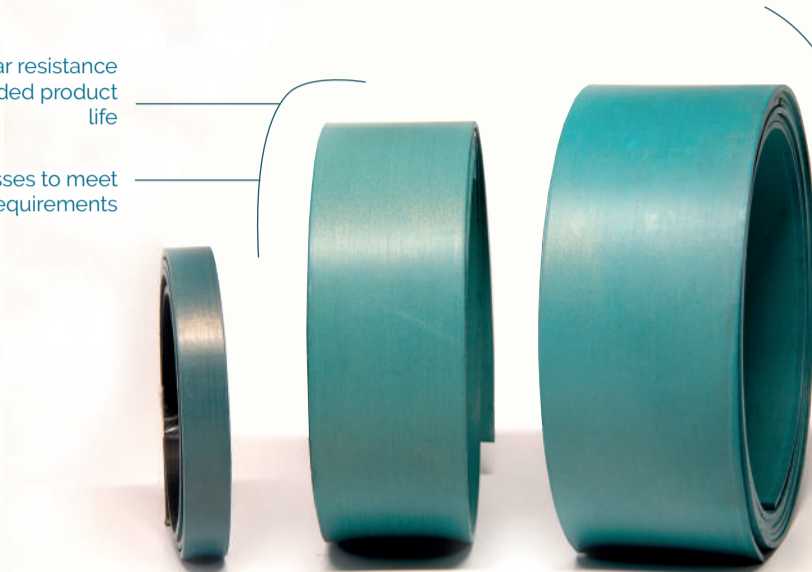
Lubring Slideways from Poly Fluoro Ltd. is a polytetrafluoroethylene (PTFE) based bearing material with low friction for machine tool industry linear bearing applications. It is identical to Turcite B.

Testing has shown that PTFE based compounds are resistant to virtually all media, cutting fluids and slideway oils. Additionally, these compounds feature outstanding wear resistance and friction characteristics.

Head-to-head material testing has shown that Lubring outperforms key competitive materials for **low friction**. Lubring was developed to meet the needs of machine tool manufacturers looking to improve **machine tool efficiencies** through low friction material technology, reduce stick-slip effect in machine transitions while still maintaining positioning accuracy and vibration damping.

High wear resistance for extended product life

Thicknesses to meet design requirements



Low friction without stick slip for positional accuracy at different velocities, especially at low speeds

Low coefficient of friction in intermittent lack of lubrications

Chemical resistant to a broad range of lubricants for extended product life

Reduces machine tool vibration through damping characteristics

Minimal abrasion of hardware, preventing damage to counter surfaces

Lubring - Typical Properties	Standard	Value
SPECIFIC GRAVITY	ASTM D792	3.0-3.5
TENSILE STRENGTH	ASTM D4745	13.8 MPa
TENSILE ELONGATION AT BREAK	ASTM D4745	100%
HARDNESS	ASTM D2240	50-60 Type D
PEEL STRENGTH	PFL INTERNAL	178 N/mm
COMPRESSIVE STRENGTH	ASTM D695	
0.2% OFFSET		7.6 MPa
1% STRAIN		6.1 MPa
5% STRAIN		13.2 MPa
YOUNGS MODULUS		722 MPa
DEFORMATION UNDER LOAD	PFL INTERNAL	
2 kg/cm <sup>2</sup> @ 0.203 mm/min		0.016 mm
4 kg/cm <sup>2</sup> @ 0.203 mm/min		0.030 mm
6 kg/cm <sup>2</sup> @ 0.203 mm/min		0.043 mm
THERMAL PROPERTIES		
COEFFICIENT OF LINEAR THERMAL EXPANSION	ASTM E831	
25°C TO 100°C		103.5 µm/m°C
100°C TO 150°C		135.7 µm/m°C
THERMAL CONDUCTIVITY	TGI THERMAL ANALYZER	
23°C		0.36 W/m-K
TRIBOLOGICAL PROPERTIES		
WEAR FACTOR, K: LUBRICATED, TONNA V68 WAY OIL	PFL INTERNAL	3.57 E-08 mm <sup>3</sup> /Nm
FRICTION COEFFICIENT: LUBRICATED, TONNA V68 WAY OIL	PFL INTERNAL	0.034
COLOR DESCRIPTION		TURQUOISE BRONZE

