

TECHNICAL DATA SHEET

Polyurethane

(PU or PUR)

Polyurethane is a unique material that offers the elasticity of rubber combined with the toughness and durability of metal. Polyurethane or Urethane has better abrasion and tear resistance than rubber, while offering a higher load bearing capacity. Urethane offers superior impact resistance, provides excellent abrasion and wear properties, while maintaining elastic memory. Polyurethane can easily replace metal in sleeve bearings, wear plates, sprockets, rollers and various other parts, with benefits such as weight reduction, noise attenuation providing reduced wear.

Typical Properties of Polyurethane

Hardness - Shore A	35	45	60	70	80	90	95
Tensile Strength - MN/m ²	16	20	24	28	34	34	30
Angle Tear Strength - KN/m	20	26	40	58	70	105	90
Elongation at Break - %	750	700	600	500	500	480	450
Resilience - %	-	65	55	50	45	35	35
Compression Set at 70°C - %	20	10	40	45	45	40	40
Taber Abrasion (H22) - mg loss	<15	<10	<10	<10	<10	<20	<30

Benefits

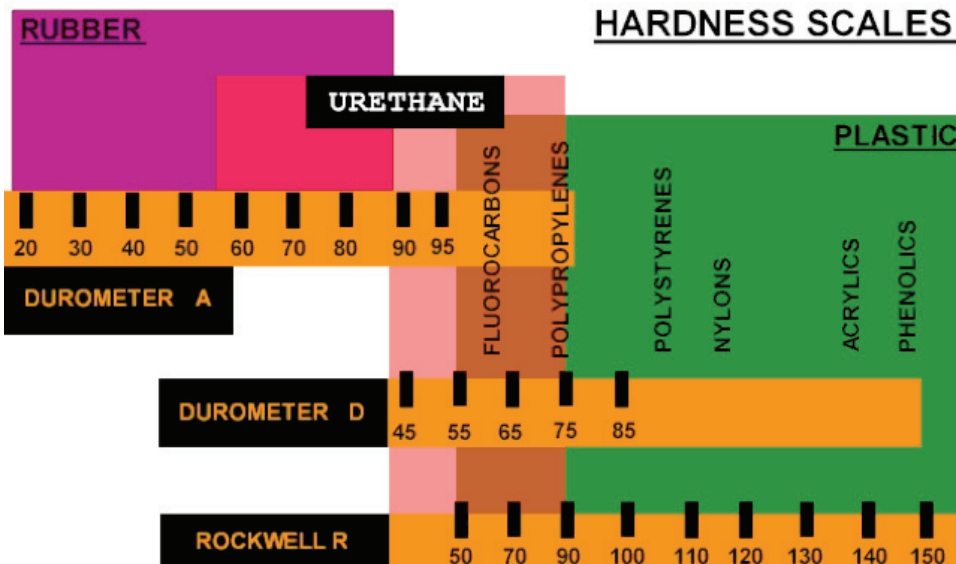
- Abrasion resistant
- Oil and solvent resistant
- Long service life
- Tear strength
- Resistance to weathering
- Noise reduction
- Flexibility

Applications

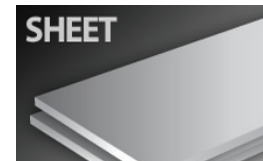
Medical: compression dressings, pressure infuser bags, ergonomic hand held, transdermal patches, orthodontic bands, shoe insoles, tubing

Industrial: drive belts, hoses, rollers, bellows

Consumer: Sports equipment, keyboard covers, flotation devices, headphone ear cushions, buoyancy compensators, packaging



SHAPE AVAILABLE



NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.