

POLYURETHANE (AUSTANE®)

SPECIFICATIONS SHEET

DETAILS

Chemical Name: Polyurethane

Common/Trade Names: Austane®, Urethane®, Lurathane®

Abbreviation: PUR

Properties (Colour): Typical colours range from black, red, greens, yellows and blues to name a few. Colours will determine a hardness grade with most manufacturers.

Properties (Form): Rod, Sheet, Tube, Custom

Machining: Can be difficult to machine. Hardnesses above 80 Duro are more readily machined; below this hardness parts are usually cast to shape or rough machined. Closer tolerances are achieved by grinding.

Types: Polyester base. Urethanes mostly for dynamic applications. Polyether base Urethanes for moist environments. Hardness range from 40 Duro 'A' to 75 Duro 'D'. Cellular foam.

Chemical Resistance: Resists water, oils, chemicals and solvents.

KEY BENEFITS

- Can be cast with low cost moulds
- High impact resistance
- Good abrasion & tear resistance
- Resilient
- Good load-bearing capacity

PROPERTIES

Hardness, Shore A		92-94
Modulus MPa (psi)	100%	8.0 (1160)
	300%	11.4 (1650)
Elongation, %		520%
Split Tear Strength, D470, kN/m (pli)		24.5 (140)
Trouser Tear Strength, D1938 kN/m (pli)		44.9 (256)
Compression Set % (method B) 22hrs@70°C		27%
Bashore Rebound %		52

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(CONT.)

PROPERTIES

Compressive Modulus, MPa	5%	1.72
	10%	3.24
	15%	4.83
	20%	5.00
	25%	6.72
Tangent Delta, 30°C (86 °F)		0.040
Tangent Delta, 120°C (302 °F)		0.026
DIN Abrasion	Relative volume loss (mm ³)	29
	Abrasive Index	498
NBS Abrasive Index %		1955

Whilst all care has been taken to provide accurate & up to date information, we cannot provide legal certification of properties. We recommend that this information be used as a design guide only. Actual testing should be undertaken to confirm data if certification is required.