

# AUSTANE® (Premium & Standard grade polyurethane)

## 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

- Unsurpassed mechanical properties
- Low compression set
- Self-lubricating
- Excellent impact resistance
- Exceptional resistance to abrasion & tear propagation
- Extreme resilience
- High in durability
- Low in tooling costs
- Exceptional machinability
- Light weight

### PROPERTIES

Hardness, Shore A		92-94
Modulus MPa (psi)	100% 300%	8.0 (1160) 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

# AUSTANE® (PREMIUM & STANDARD GRADE POLYURETHANE) (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 <sup>3</sup> )	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.\*