

Polyurethane Specialty Products Group

AIRTHANE® PET-90A

TDI-Polyether Prepolymer

Prepolymer Properties

		Specifications	Typical
NCO (%)		3.45 - 3.85	3.65
Viscosity (cPs)	- 40 °C	-	3,700 - 4,200
	- 70 °C	≤ 1,400	900 - 1,100
Specific Gravity	- 70 °C	-	1.00
Residual TDI (%)		< 0.1	-

Processing Conditions

MBOCA Level, 95% Stoichiometry (%)	11.0
Airthane Temperature (°C)	80
Pot Life (Min.) - 75 °C	11
Mold Temperature (°C)	100
Demold Time (Min.)	30
Post Cure (Hrs./Temp. °C)	15/100

Typical Elastomer Properties (MBOCA Cured)

Hardness (A)	89 - 90
Modulus psi (MPa)	
100% Elongation	1,100 (7.6)
300% Elongation	1,300 (9.0)
Tensile Strength psi (MPa)	3,000 (20.7)
Elongation (%)	530
Tear Resistance PLI (N/mm)	
Die C	450 (79)
Split	70 (12)
Compression Set (%), Method B:	
25% deflection, 22 hrs at 70 °C	19
Rebound (%)	59
NBS Abrasion Index	165
Brittleness Temperature (°C)	- 105
Specific Gravity	1.06
Linear Shrinkage (%)	1.2
Linear Coefficient of Thermal (μM/M/°C)	181.4
Expansion at 25 °C	
Electrical Properties	
Breakdown Voltage (KV)	35.3
Dielectric Strength V/mil (KV/mm)	282 (11.1)
Dielectric Constant at 1,000 Hz	5.99
Volume Resistivity (Ohms-Cm)	1.4 x 10 ¹¹
Power Factor	0.0425



To Order or Obtain More Information

If you would like to place an order or receive additional information, please write or call Air Products at the following location.

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