

Polyurethane Specialty Products Group

AIRTHANE® PET-95A

TDI-Polyether Prepolymer

Prepolymer Properties

		Specifications	Typical
NCO (%)		6.0 - 6.5	6.25
Viscosity (cPs)	- 40 °C	-	1,800 - 2,200
	- 70 °C	≤ 500	375 - 475
Specific Gravity	- 70 °C	-	1.03
Residual TDI (%)		< 0.1	-

Processing and Elastomer Properties for Multiple Curatives

MBOCA Cured

Processing Conditions

MBOCA Level, 95% Stoichiometry (%)	18.4
Airthane Temperature (°C)	70
Pot Life (Min.) - 75 °C	6
Mold Temperature (°C)	100
Demold Time (Min.)	15
Post Cure (Hrs./Temp. °C)	15/100

Typical Elastomer Properties

Hardness (A)	95
Modulus psi (MPa)	
100% Elongation	2,400 (16.5)
200% Elongation	3,100 (21.4)
300% Elongation	5,100 (35.2)
Tensile Strength psi (MPa)	7,200 (49.6)
Elongation (%)	350
Tear Resistance PLI (N/mm)	
Die C	650 (114)
Split	100 (18)
Compression Set (%), Method B:	
25% deflection, 22 hrs at 70 °C	25
Compression Set (%), Method A:	
1,350 psi (9.3 MPa), 22 hrs. at 70 °C	5.4
Rebound (%)	46
NBS Abrasion Index	280
Brittleness Temperature (°C)	- 105
Specific Gravity	1.13
Linear Shrinkage (%)	1.6
Linear Coefficient of Thermal (μM/M/°C)	229.2
Expansion at 25 °C	
Electrical Properties	
Breakdown Voltage (KV)	37.8
Dielectric Strength V/mil (kv/MM)	317 (12.5)
Dielectric Constant at 1,000 Hz	5.58
Volume Resistivity (Ohms-Cm)	8.4 x 10 ¹²
Power Factor	0.0442

Ethacure[®] 300 Cured

Processing Conditions

Ethacure 300 Level, 95% Stoichiometry (%)	15.3
Airthane Temperature (°C)	75
Pot Life (Min.) - 75 °C	5
Mold Temperature (°C)	100
Demold Time (Min.)	15
Post Cure (Hrs./Temp. °C)	18/130

Typical Elastomer Properties

Hardness (A)	95
Modulus psi (MPa)	
100% Elongation	2,000 (13.8)
200% Elongation	2,700 (18.6)
300% Elongation	3,900 (26.9)
Tensile Strength psi (MPa)	6,800 (46.9)
Elongation (%)	350
Tear Resistance PLI (N/mm)	
Die C	560 (98)
Split	100 (18)
Compression Set (%), Method B:	
25% deflection , 22 hrs. at 70 °C	45
Rebound (%)	48
NBS Abrasion Index	240

Versalink[®] 740M Cured

Processing Conditions

Versalink 740M Level, 95% Stoichiometry (%)	21.7
Airthane Temperature (°C)	70
Pot Life (Min.) - 75 °C	5
Mold Temperature (°C)	100
Demold Time (Min.)	15
Post Cure (Hrs./Temp. °C)	4/100

Typical Elastomer Properties

Hardness (D)	54
Modulus psi (MPa)	
100% Elongation	2,000 (13.8)
200% Elongation	2,400 (16.5)
300% Elongation	3,200 (22.1)
Tensile Strength psi (MPa)	7,000 (48.3)
Elongation (%)	400
Tear Resistance PLI (N/mm)	
Die C	650 (114)
Split	190 (33)
Compression Set (%), Method B:	
25% deflection , 22 hrs. at 70 °C	35
Rebound (%)	46

Versalink[®] MCDEA Cured

Processing Conditions

Versalink MCDEA Level, 95% Stoichiometry (%)	26.6
Airthane Temperature (°C)	55
Pot Life (Min.) - 55 °C	2
Mold Temperature (°C)	100
Demold Time (Min.)	15
Post Cure (Hrs./Temp. °C)	16/100

Typical Elastomer Properties

Hardness (D)	60
Modulus psi (MPa)	
100% Elongation	3,065 (21.1)
200% Elongation	5,410 (37.3)
Tensile Strength psi (MPa)	6,710 (46.3)
Elongation (%)	209
Tear Resistance PLI (N/mm)	
Die C	562 (98)
Split	69 (12)
Rebound (%)	59

Trademarks and Suppliers

Ethacure Albemarle Corporation



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.

Corporate Headquarters

Air Products and Chemicals, Inc.
7201 Hamilton Boulevard
Allentown, PA 18195-1501 USA

Tel: (800) 345-3107

Tel: (610) 481-7064

Fax: (610) 481-4184

www.airproducts.com/psp

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