

Polyurethane Specialty Products Group

VERSATHANE® 2070

TDI-Polyether Prepolymer

Prepolymer Properties

		Typical
NCO (%)		2.4
Viscosity (cPs)	- 70 °C	3,600 - 4,000
Specific Gravity	- 100 °C	1.01
Appearance		Viscous Liquid
Residual TDI (%)		< 0.5

Processing and Elastomer Properties for Multiple Curatives

MBOCA Cured

Processing Conditions

Stoichiometry (%)	95
Versathane Temperature (°C)	70 - 85
MBOCA Temperature (°C)	100 - 115
Mold Temperature (°C)	93 - 100
Pot Life (Min.) - 100 °C	8 - 12
Gel Time (Min.)	17 - 22
Demold Time (Min.)	60
Post Cure (Hrs./Temp. °C)	16/100

Typical Elastomer Properties

Stoichiometry (%)	90	95
MBOCA Level (PPH)	6.9	7.3
Hardness (A)	73	74
Modulus psi (MPa)		
50% Elongation	355 (2.4)	405 (2.8)
100% Elongation	490 (3.4)	510 (3.5)
200% Elongation	610 (4.2)	650 (4.5)
300% Elongation	800 (5.5)	860 (5.9)
Tensile Strength psi (MPa)	3,940 (27.2)	4,720 (32.5)
Elongation (%)	570	615
Tear Resistance PLI (N/mm)		
Die C	280 (49)	287 (50)
Split	65 (11)	67 (12)
Compression Set (%), Method B:		
25% deflection, 22 hrs. at 70 °C	18	21
Rebound (%)	65	63
Solenoid Brittleness Point (°C)	- 62	- 62
Compression Modulus psi (MPa)		
5%	100 (0.69)	105 (0.72)
10%	180 (1.24)	185 (1.28)
25%	490 (3.38)	495 (3.41)
Specific Gravity		1.04

Ethacure® 300 Cured

Processing Conditions

Ethacure 300 Level, 95% Stoichiometry (%)	5.8
Versathane Temperature (°C)	85
Ethacure 300 Temperature (°C)	25
Mold Temperature (°C)	100
Pot Life (Min.) - 75 °C	12
Demold Time (Min.)	60
Post Cure (Hrs./Temp. °C)	16/100

Typical Elastomer Properties

Hardness (A)	70
Modulus psi (MPa)	
100% Elongation	550 (3.8)
200% Elongation	730 (5.0)
300% Elongation	920 (6.3)
Tensile Strength psi (MPa)	6,000 (41.4)
Elongation (%)	610
Tear Resistance PLI (N/mm)	
Die C	342 (60)
Split	80 (14)
Compression Set (%), Method B:	
25% deflection, 22 hrs. at 70 °C	26
Rebound (%)	62
NBS Abrasion Index	340

Versalink® MCDEA Cured

Processing Conditions

Versalink MCDEA Level, 95% Stoichiometry (%)	10.2
Versathane Temperature (°C)	80
Mold Temperature (°C)	100
Pot Life (Min.) - 80 °C	5
Demold Time (Min.)	60
Post Cure (Hrs./Temp. °C)	48/130

Typical Elastomer Properties

Hardness (A)	85
Modulus psi (MPa)	
100% Elongation	700 (4.8)
200% Elongation	900 (6.2)
300% Elongation	1,300 (9.0)
Tensile Strength psi (MPa)	3,400 (23.4)
Elongation (%)	460
Tear Resistance PLI (N/mm)	
Die C	350 (61)
Split	55 (10)
Rebound (%)	66
NBS Abrasion Index	210

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.

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