

## Polyurethane Specialty Products Group

# VERSATHANE® D-6

## TDI-Polyester Prepolymer

### Prepolymer Properties

		Specifications	Typical
NCO (%)		5.7 - 6.1	5.9
Viscosity (cPs)	- 70 °C	≤ 3,100	2,300 - 3,100
	- 100 °C	-	500
Specific Gravity	- 100 °C	-	1.18
Appearance		-	White, Waxy Solid
Residual TDI (%)		< 0.7	< 0.5

### Processing Conditions

Stoichiometry (%)	95
Versathane Temperature (°C)	100
MBOCA Temperature (°C)	110 - 115
Mold Temperature (°C)	100
Pot Life (Min.) – 100 °C	3 - 5
Gel Time (Min.)	5 - 9
Demold Time (Min.)	30
Post Cure (Hrs./Temp. °C)	16/100

### Typical Elastomer Properties (MBOCA Cured)

	85	90	95	100
Stoichiometry (%)	85	90	95	100
MBOCA Level (PPH)	15.7	16.6	17.5	18.5
Hardness (D)	60	60	60	59
Modulus psi (MPa)				
100% Elongation	2,800 (19.3)	2,850 (19.7)	2,900 (20.0)	2,850 (19.7)
300% Elongation	4,500 (31.0)	4,400 (30.3)	4,400 (30.3)	4,300 (29.6)
Tensile Strength psi (MPa)	7,200 (49.6)	7,300 (50.3)	7,400 (51.0)	7,450 (51.4)
Elongation (%)	400	410	415	425
Tear Resistance PLI (N/mm)				
Die C	650 (114)	680 (119)	720 (126)	710 (124)
Split	370 (65)	420 (74)	450 (79)	410 (72)
Compression Set (%), Method B:				
25% deflection, 22 hrs. at 70°C	28	29	34	40
Rebound (%)	30	33	33	33
Compression Modulus psi (MPa)				
10%	1,300 (9.0)	1,350 (9.3)	1,350 (9.3)	1,275 (8.8)
25%	2,790 (19.2)	2,800 (19.3)	2,850 (19.7)	2,750 (19.0)
Specific Gravity	1.29	1.29	1.29	1.29
NBS Abrasion	-	230	-	-
Taber Abrasion	-	56	-	-
Tg, glass transition (°C)	-	- 16	-	-



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## ***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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