



**TSE Industries, Inc.**

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Formula ID 623 Compound No. V7242E Cure: P  
 Color: B Type: Polyester

Application: 91 Shore A Black Millathane® 5004 Compound

Millathane® 5004	100.00	Durometer, Shore A	91	
Stearic Acid	0.25	Durometer, Shore D		
N330 Black	30.00	100% Modulus, psi	1940	13.4 MPa
Fumed Silica	2.50	200% Modulus, psi		MPa
Saret 515	20.00	300% Modulus, psi		MPa
DiCup 40C	5.00	Tensile Strength, psi	3740	25.8 MPa
Struktol WB-222	1.00	Elongation, %	210	
		Tear Die C, lb/sq. in.	320	56.0 kN/m
		Specific Gravity, g/cc		
		CureTime, minutes	20	
		Cure Temp°F	320	160 °C
		Mooney Viscosity, ML4/100°C	51	
		Bashore Resilience, %		
		Brittle Point, °C		
		Compression Set 22h/70°C, %	19	
		Compression Set 70h/70°C, %		
		Compression Set 22h/100°C, %		
		Compression Set 70h/100°C, %		
		Compression Set 22h/125°C, %	77	
		Compression Set 22h/150°C, %		
		Compression Set - Other Conditions:		
		<input type="text"/> Hrs <input type="text"/> °C <input type="text"/> %Set		
		<b>Heat Aging</b> 70 Hrs at 150 °C		
		Hardness Change, pts.	2	
		Tensile Change, %	-24	
		Elongation Change, %	-43	
		<b>Fluid Aging</b> ASTM #3 Oil 70 Hrs at 150 °C		
		Hardness Change, pts.	-8	
		Tensile Change, %	-83	
		Elongation Change, %	-67	
		Volume Change, %	6.0	
Surface Resistivity, ohm/cm <sup>2</sup>	<input type="text"/>			
Volume Resistivity, ohm-cm	<input type="text"/>			
DIN Abrasion, mm <sup>3</sup> loss	<input type="text"/>			
UL 94 Rating:	<input type="text"/>			
Total		158.75		

Other Tests and Info:

Sample was post-cured 30/135C; Tear C after oven aging 70h/150C = -44%; Mooney Scorch: MS/121C, t5=38', MDR/160C: ts2=1.0', t90=12.3' Note: Results are for compound WITHOUT Struktol WB222; Struktol addition is recommended to prevent sticking during processing

3/23/2005

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