

## dalcon<sup>TM</sup> 025

Issued 25/09/97		PHYSICAL PROPERTIES (Typical)		Page 1 of 2
<b>Ingredients:</b> 75% Virgin PTFE <b>Filler/Pigment:</b> 25% Glass Fibre, Blue (by weight) <b>Colour:</b> Blue				
MECHANICAL PROPERTIES		Value	Units	Standard
Tensile Strength	(Moulding Direction)	11- 15	MPa	BS2782:Pt3
Elongation at Break	(Moulding Direction)	120 - 270	%	BS2782:Pt3
Density		2.19 - 2.27	g/cc	BS2782:Pt6
Hardness		64 - 68	Shore D	ASTM D2240
Deformation under load	@ 1 Hr , 23°C, 14.2MPa @ 24 Hr , 23°C, 14.2MPa @ Permanent Deformation @ 1Hr, 150°C, 5MPa	9.0 12.4 6.4 9.2	% % % %	ASTM D621
Flexural Yield Strength	@ 0.2% Offset, 23°C	5.5	MPa	ASTM D790
Flexural Modulus	@ 23°C	1000	MPa	ASTM D790
Compressive Strength	@ 0.2% Offset, 23°C @ 0.2% Offset, 150°C	8.64 1.8	MPa MPa	ASTM D695
Gasket Constants	@ 23°C (1.5mm Thick) Gb a Gs	13.97 0.157 1.04	MPa - MPa	Proposed ASTM Draft N°9
Gasket Constants obtained from ROTT test procedure documented in the proposed ASTM Draft N°9 of the "Standard Test Method for Gasket Constants to Bolted Joint Design".				
ELECTRICAL PROPERTIES		Value	Units	Standard
Dielectric Strength	@ Air @ Oil	12.9 34.2	KV/mm KV/mm	ASTM D149
Proof Test	(Dielectric Strength)	-	KV/mm	BS6564 (E)
Dielectric Constant	@ 60 Hz @ 10 <sup>6</sup> Hz	2.63 2.85	- -	ASTM D150
Dissipation factor	@ 60 Hz @ 10 <sup>6</sup> Hz	0.0178 0.0028	- -	ASTM D150
Resistivity	@ Surface @ Volume	10 <sup>16</sup> 10 <sup>17</sup>	Ω Ω cm	ASTM D257
THERMAL PROPERTIES		Value	Units	Standard
Point of Fusion DSC		327	°C	ASTM D3417
Max. Working Temperature		260	°C	-
Max. Working Temperature	@ Short Periods	300	°C	-
Min. Working Temperature		-200	°C	-
Thermal Conductivity	@ Moulding Direction (MD)	0.41	W/(m.K)	ASTM C177
Coefficient of Linear Thermal Expansion TMA(23 - 200°C)	@ Moulding Direction (MD) @ Right Angles to MD	136 84	10 <sup>-6</sup> /°C 10 <sup>-6</sup> /°C	ASTM D696
Flammability		-	-	UL94V(0)
Flash Point		630	°C	ASTM D1929
Limiting Oxygen Index		98 - 100	%	ASTM D2863
WEAR PROPERTIES		Value	Units	Standard
Coefficient of Friction	@ Dry sliding @ Static @ Dynamic	- - -	- - -	ASTM D1894

The above properties are typical and are only intended to be used as a guide

