

Dalau Dalcon 086 100% Virgin PTFE modified polymer

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE

Material Notes:

Applications & Industries: General: The static and dynamic friction coefficient are numerically equal, consequently no 'Stick Slip' occurs. **Modified PTFE** has an advantage over Homopolymer (Normal PTFE), in that it has the following features: Lower deformation under load and permanent deformation. Higher elongation at break. Higher flex life. Higher dielectric strength. Higher transparency. Lower permeability. Better heat sealability. **Chemical:** Dynamic & shaft seals; Pipes & tubing for carrying chemicals; and Seals & gaskets. Flat gaskets are used to seal flanges in pipelines. **Construction:** Bridge bearings. Slide bearings. **Electrical:** Communications, radio & television engineering, cable insulation; Electrical plant construction & electronics industry (connectors & terminals); General electrical equipment (P.T.F.E. excellent electrical insulating material); and Power plant installations (switchgear). **Engineering:** Anti - friction bearing cages & bearing plates; Bearings and bushes; Diaphragm pumps. Film bearings. Multi - layer composite bearings. Fabric bearings; Laboratory equipment. Measuring & control technology; Pipe supports. Expansion bellows. Glandless valves & pumps, valve seats; Piston rings in hydraulic systems; and Piston rod packings used in compressor plunger pumps & valves. **Food:** Dynamic & shaft seals (used in the food processing industry) and Linings & coatings (fertilizer plant & food industry line equipment). **CHEMICAL RESISTANCE:** The strength of the carbon – fluorine bond and the shielding of the carbon chains by the fluorine atoms result in a chemical inertness which is virtually universal, except alkali metals, fluorine under certain conditions, and some fluorine compounds at elevated temperatures. Some Fluorinated Hydrocarbons (refrigerants) cause reversible swelling i.e. Tetrafluorodichloroethane Frigen 21, giving a 9.6% weight increase. For specific data on chemical resistance of this material we have a computer database with all the information covering over 90% of all known chemicals. Information provided by Dalau

Order this product through the following link:

http://www.lookpolymers.com/polymer_Dalau-Dalcon-086-100-Virgin-PTFE-modified-polymer.php

Physical Properties	Metric	English	Comments
Density	2.15 - 2.19 g/cc	0.0777 - 0.0791 lb/in ³	BS2782:Pt6
Deformation	1.5 - 2.0 %	1.5 - 2.0 %	Permanent Deformation; ASTM D621
	3.1 - 3.6 % @Pressure 5.00 MPa, Time 86400 sec	3.1 - 3.6 % @Pressure 725 psi, Time 24.0 hour	100°C; ASTM D621
Deformation	4.5 - 6.5 %	4.5 - 6.5 %	ASTM D621
	@Pressure 13.7 MPa, Time 86400 sec	@Pressure 1990 psi, Time 24.0 hour	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	57 - 64	57 - 64	ASTM D2240
Tensile Strength	25.0 - 35.0 MPa	3630 - 5080 psi	Moulding Direction; BS2782:Pt3
Elongation at Break	345 - 505 %	345 - 505 %	Moulding Direction; BS2782:Pt3

Flexural Modulus Mechanical Properties	0.700 GPa Metric	102 ksi English	Transverse Direct Comments
Compressive Modulus	0.650 - 0.750 GPa @Strain 0.200 %	94.3 - 109 ksi @Strain 0.200 %	ASTM D621
Coefficient of Friction, Dynamic	0.060	0.060	ASTM D1894
Coefficient of Friction, Static	0.080	0.080	ASTM D1894

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	142 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ @Temperature 23.0 - 200 $^{\circ}\text{C}$	78.9 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ @Temperature 73.4 - 392 $^{\circ}\text{F}$	ASTM D696
CTE, linear, Transverse to Flow	142 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ @Temperature 23.0 - 200 $^{\circ}\text{C}$	78.9 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ @Temperature 73.4 - 392 $^{\circ}\text{F}$	ASTM D696
Thermal Conductivity	0.350 W/m-K	2.43 BTU-in/hr-ft ² - $^{\circ}\text{F}$	Moulding Direction; ASTM C177
Melting Point	327 $^{\circ}\text{C}$	621 $^{\circ}\text{F}$	ASTM D3417
Maximum Service Temperature, Air	260 $^{\circ}\text{C}$	500 $^{\circ}\text{F}$	
	300 $^{\circ}\text{C}$	572 $^{\circ}\text{F}$	Short Periods
Minimum Service Temperature, Air	-200 $^{\circ}\text{C}$	-328 $^{\circ}\text{F}$	
Oxygen Index	$\geq 95\%$	$\geq 95\%$	ASTM D2863

Optical Properties	Metric	English	Comments
Haze	60 - 75 % @Thickness 0.125 mm	60 - 75 % @Thickness 0.00492 in	ASTM D1003
Transmission, Visible	90 - 94 % @Thickness 0.125 mm	90 - 94 % @Thickness 0.00492 in	ASTM D791

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+18 ohm-cm	1.00e+18 ohm-cm	ASTM D257
Surface Resistance	1.00e+17 ohm	1.00e+17 ohm	ASTM D257
Dielectric Constant	2.014 @Frequency 60.0 Hz	2.014 @Frequency 60.0 Hz	ASTM D150
	2.1	2.1	

Electrical Properties	@Frequency 1.00e+6 Metric Hz	@Frequency 1.00e+6 English Hz	ASTM D150 Comments
Dielectric Strength	90.0 - 105 kV/mm	2290 - 2670 kV/in	Air, 0.125mm Thk Tape; ASTM D149
	110 - 130 kV/mm	2790 - 3300 kV/in	Oil, 0.125mm Thk Tape; ASTM D149
Dissipation Factor	<= 0.00010	<= 0.00010	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
	<= 0.00050	<= 0.00050	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Descriptive Properties	Value	Comments
Coefficient of Wear	2.2e-4 cm ³ min/(kg m h)	
Color	White	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China