

Polikim EFALON® C-25 PTFE, 25% Glass Filled

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE , Polytetrafluoroethylene (PTFE), Glass Filled, Molded

Material Notes:

C15 and C25 have less thermal expansion, higher wear resistance and less deformation under load compared to virgin Eفالon® (PTFE).

Applications: Seals, Seal rings, gaskets, valve sets, piston rings, bearings. Information provided by Polikim Polimer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Polikim-EFALON-C-25-PTFE-25-Glass-Filled.php

Physical Properties	Metric	English	Comments
Density	2.20 - 2.30 g/cc	0.0795 - 0.0831 lb/in ³	ASTM D792
Deformation	2.6 - 2.8 %	2.6 - 2.8 %	total
	@Temperature 150 °C, Time 86400 sec, Pressure 0.981 MPa	@Temperature 302 °F, Time 24.0 hour, Pressure 142 psi	
	4.0 - 8.0 %	4.0 - 8.0 %	permanent; ASTM D621
@Temperature 23.0 °C, Time 86400 sec, Pressure 13.7 MPa	@Temperature 73.4 °F, Time 24.0 hour, Pressure 1990 psi		
	9.5 - 13.5 %	9.5 - 13.5 %	total; ASTM D621
	@Temperature 23.0 °C, Time 86400 sec, Pressure 13.7 MPa	@Temperature 73.4 °F, Time 24.0 hour, Pressure 1990 psi	
	15 - 16 %	15 - 16 %	total
	@Temperature 150 °C, Time 86400 sec, Pressure 4.90 MPa	@Temperature 302 °F, Time 24.0 hour, Pressure 711 psi	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	64 - 68	64 - 68	ASTM D2240
Tensile Strength, Ultimate	14.7 - 23.5 MPa	2130 - 3410 psi	ASTM D638
Elongation at Break	200 - 270 %	200 - 270 %	ASTM D638
Compressive Strength	6.37 - 6.86 MPa	925 - 996 psi	1% Deformation; ASTM D695
Izod Impact, Notched (ISO)	12.0 - 15.0 kJ/m ²	5.71 - 7.14 ft-lb/in ²	ASTM D256
Coefficient of Friction	0.090	0.090	
Coefficient of Friction, Static	0.070	0.070	
Limiting Pressure Velocity	0.00351 - 0.00360 MPa-m/sec	100 - 103 psi-ft/min	3 m/min

Mechanical Properties	Metric	English	Comments
	0.00491 - 0.00491 MPa-m/sec	128 - 140 psi-ft/min	30 m/min
	0.00540 - 0.00556 MPa-m/sec	154 - 159 psi-ft/min	300 m/min

Thermal Properties	Metric	English	Comments
CTE, linear	70.0 - 115 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	38.9 - 63.9 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ASTM D696
	@Temperature 25.0 - 100 $^\circ\text{C}$	@Temperature 77.0 - 212 $^\circ\text{F}$	
	75.0 - 140 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	41.7 - 77.8 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	
	@Temperature 25.0 - 200 $^\circ\text{C}$	@Temperature 77.0 - 392 $^\circ\text{F}$	ASTM D696
	85.0 - 180 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	47.2 - 100 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ASTM D696
	@Temperature 25.0 - 300 $^\circ\text{C}$	@Temperature 77.0 - 572 $^\circ\text{F}$	
Thermal Conductivity	0.418 - 0.460 W/m-K	2.90 - 3.19 BTU-in/hr-ft ² - $^\circ\text{F}$	
Maximum Service Temperature, Air	270 $^\circ\text{C}$	518 $^\circ\text{F}$	continuous
Minimum Service Temperature, Air	-260 $^\circ\text{C}$	-436 $^\circ\text{F}$	

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+13$ ohm-cm	$\geq 1.00\text{e}+13$ ohm-cm	ASTM D257
Surface Resistance	$\geq 1.00\text{e}+15$ ohm	$\geq 1.00\text{e}+15$ ohm	50% rel. humidity; ASTM D257
Dielectric Constant	2.5 - 2.8	2.5 - 2.8	ASTM D150
	@Frequency 50.0 - 1.00e+7 Hz	@Frequency 50.0 - 1.00e+7 Hz	
Dielectric Strength	13.0 - 16.0 kV/mm	330 - 406 kV/in	short term; ASTM D149
	@Thickness 0.100 mm	@Thickness 0.00394 in	
Dielectric Loss Index	0.00070	0.00070	dry
	@Frequency 50.0 Hz	@Frequency 50.0 Hz	

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