

## 3M Dyneon™ Fluorel™ FC-2180 Fluoroelastomer VF2 + HFP Dipolymer (discontinued \*\*)

Category : Polymer , Thermoset , Fluoropolymer, TS , Thermoset Fluoroelastomer , Rubber or Thermoset Elastomer (TSE)

### Material Notes:

Data provided by the manufacturer, Dyneon LLC. Incorporated cure polymer, 65.9%F in polymer with 22% Medium Thermal Carbon Black (N990), 2% MgO, and 4% Ca(OH)<sub>2</sub>. Lower mold shrinkage and excellent compression set resistance. Used in O-Ring Applications.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_3M-Dyneon-Fluorel-FC-2180-Fluoroelastomer-VF2-HFP-Dipolymer-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_3M-Dyneon-Fluorel-FC-2180-Fluoroelastomer-VF2-HFP-Dipolymer-nbspdiscontinued-.php)

Physical Properties	Metric	English	Comments
Density	1.80 g/cc	0.0650 lb/in <sup>3</sup>	
Oxygen Transmission	98.0 cc-mm/m <sup>2</sup> -24hr-atm	249 cc-mil/100 in <sup>2</sup> -24hr-atm	
Mooney Viscosity	40 @Temperature 121 °C	40 @Temperature 250 °F	ML1+10

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	75	75	
Tensile Strength, Ultimate	16.0 MPa	2320 psi	
Tensile Strength, Yield	7.10 MPa	1030 psi	M100
Elongation at Break	180 %	180 %	
Coefficient of Friction, Dynamic	0.80	0.80	
Compression Set	12 % @Temperature 200 °C	12 % @Temperature 392 °F	70 hr; ASTM D395B

Thermal Properties	Metric	English	Comments
CTE, linear	200 μm/m-°C @Temperature 20.0 °C	111 μin/in-°F @Temperature 68.0 °F	
Specific Heat Capacity	1.65 J/g-°C	0.394 BTU/lb-°F	
Thermal Conductivity	0.240 W/m-K	1.67 BTU-in/hr-ft <sup>2</sup> -°F	
Glass Transition Temp, Tg	-18.0 °C	-0.400 °F	TR10

Electrical Properties	Metric	English	Comments
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Electrical Properties	Metric 1.00e+13 - 1.00e+14 0.001 Cm	English 1.00e+13 - 1.00e+14 0.001 Cm	Comments
Dielectric Constant	11.4 @Frequency 6.00e+7 Hz	11.4 @Frequency 6.00e+7 Hz	
Dielectric Strength	25.0 kV/mm	635 kV/in	

## Contact Songhan Plastic Technology Co.,Ltd.

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