

3M Dyneon™ TFE 90Z Peroxide Cure Perfluoroelastomer

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

Material Notes:

3M™ Dyneon™ Peroxide Cure Perfluoroelastomer PFE 90Z is a technically advanced peroxide curable perfluoroelastomer, designed to meet the challenges of demanding sealing applications. It is classified as FFKM per ASTM D1418. Its fully fluorinated back bone structure provides a very broad chemical and thermal stability. Features and Benefits: Ideal for wet chemical, fluid handling, cleaning and chemical etching processes for CPI and aerospace Good compression set resistance Upper use temperature of 220°C Peroxide curable FFKM Low metal ion content with low extractables in a wide range of chemicals Information provided by the Dyneon division of 3M.

Order this product through the following link:

http://www.lookpolymers.com/polymer_3M-Dyneon-TFE-90Z-Peroxide-Cure-Perfluoroelastomer.php

Physical Properties	Metric	English	Comments
Specific Gravity	2.00 g/cc	2.00 g/cc	
Mooney Viscosity	98 @Temperature 121 °C	98 @Temperature 250 °F	ML 1+ 10

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	75	75	Press Cure 10 Minutes @ 177°C, Post Cure 16 Hours @ 232°C; ASTM D2240
Tensile Strength at Break	21.2 MPa	3070 psi	Press Cure 10 Minutes @ 177°C, Post Cure 16 Hours @ 232°C; ASTM D412
Elongation at Break	155 %	155 %	Press Cure 10 Minutes @ 177°C, Post Cure 16 Hours @ 232°C; ASTM D412
100% Modulus	0.0106 GPa	1.54 ksi	Press Cure 10 Minutes @ 177°C, Post Cure 16 Hours @ 232°C; ASTM D412
Compression Set	37 % @Treatment Temp. 230 °C, Time 252000 sec	37 % @Treatment Temp. 446 °F, Time 70.0 hour	Method B, -214 O-rings, Aged 70 Hours, 25% Deformation; ASTM D395
	40 % @Treatment Temp. 200 °C, Time 252000 sec	40 % @Treatment Temp. 392 °F, Time 70.0 hour	Method B, -214 O-rings, Aged 70 Hours, 25% Deformation; ASTM D395
	49 % @Treatment Temp. 200 °C, Time 605000 sec	49 % @Treatment Temp. 392 °F, Time 168 hour	Method B, -214 O-rings, Aged 168 Hours, 25% Deformation; ASTM D395
	50 % @Treatment Temp. 230	50 % @Treatment Temp. 446	Method B, -214 O-rings, Aged 168 Hours, 25% Deformation; ASTM D395

Mechanical Properties	Metric °C Time 605000 sec	English °F Time 168 hour	Comments
-----------------------	---------------------------------	--------------------------------	----------

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	220 °C	428 °F	
Brittleness Temperature	-35.0 °C	-31.0 °F	
Transformation Temperature	-2.00 °C	28.4 °F	TR10

Descriptive Properties	Value	Comments
Color	White	
Form	Crumb	
MH, Maximum Toque	16.0 Inch-lb	100 cpm, 0.5° Arc, 6 Minutes @ 177°C, ASTM D412
ML, Minimum Torque	2.0 Inch-lb	100 cpm, 0.5° Arc, 6 Minutes @ 177°C, ASTM D412
t2, Time to 2 Inch-lb Rise from Minimum	0.5 Minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C, ASTM D412
t'50, Time to 50% Cure	0.7 Minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C, ASTM D412
t'90, Time to 90% Cure	1.7 Minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C, ASTM D412

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