

## **3M Dyneon™ LTFE 6400ZC Low Temperature Fluoroelastomer**

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

## **Material Notes:**

3M™ Dyneon™ Low Temperature Fluoroelastomers LTFE 6400ZC are technically advanced low temperature, peroxide-cured fluoroelastomers, designated as a FKM type 3 elastomer per ASTM D1418. They are designed to meet the challenging demands of the automotive, aerospace and chemical processing industries, requiring low temperature sealing in chemically aggressive environments. LTFE 6400ZC offer a unique low temperature sealing capability of TR10 = -40°C as well as broad chemical resistance. Features and Benefits:TR10 = -40°C which means true dynamic sealing capability at low temperaturesVery good chemical resistance against most chemicals such as acids, bases, fuels, oils, coolants, and alcoholsProcesses comparably to other peroxide-cured fluoroelastomersGood compression set resistance with low/no post-cureInformation provided by the Dyneon division of 3M.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_3M-Dyneon-LTFE-6400ZC-Low-Temperature-Fluoroelastomer.php

Physical Properties	Metric	English	Comments	
Specific Gravity	1.86 g/cc	1.86 g/cc		
Mooney Vigoosity	95	95	ML 1+ 10	
Mooney Viscosity	@Temperature 121 °C	@Temperature 250 °F	MIL IT IO	

Mechanical Properties	Metric	English	Comments	
Hardness, Shore A	68	68	Press Cure 10 Minutes @ 177°C	
	70	70	Post Cure 16 Hours @ 230°C	
Tensile Strength at Break	11.9 MPa	1730 psi	Press Cure 10 Minutes @ 177°C	
	13.3 MPa	1930 psi	Post Cure 16 Hours @ 230°C	
Elongation at Break	175 %	175 %	Post Cure 16 Hours @ 230°C	
	180 %	180 %	Press Cure 10 Minutes @ 177°C	
100% Modulus	0.00610 GPa	0.885 ksi	Press Cure 10 Minutes @ 177°C	
	0.00610 GPa	0.885 ksi	Post Cure 16 Hours @ 230°C	
	15 %	15 %	Method B, -214 O-rings, Aged 70 Hours; ASTM D395	
Compression Set	@Treatment Temp. 150 °C, Time 252000 sec	@Treatment Temp. 302 °F, Time 70.0 hour		
	26 %	26 %		
	@Treatment Temp. 200 °C, Time 252000 sec	@Treatment Temp. 392 °F, Time 70.0 hour	Method B, -214 O-rings, Aged 70 Hours; ASTM D395	



Mechanical Properties	Metric	English	Comments
	@Treatment Temp. 200 °C, Time 605000 sec	@Treatment Temp. 392 °F, Time 168 hour	Hours; ASTM D395

Thermal Properties	Metric	English	Comments
Minimum Service Temperature, Air	-40.0 °C	-40.0 °F	TR10
Brittleness Temperature	-60.0 °C	-76.0 °F	
Glass Transition Temp, Tg	-40.0 °C	-40.0 °F	
Transformation Temperature	-40.0 °C	-40.0 °F	TR10; ASTM D1329

Component Elements Properties	Metric	English	Comments	
Fluorine, F	67.1 %	67.1 %		

Descriptive Properties	Value	Comments
Color	White	
Form	Crumb	
MH, Maximum Toque	14.0 Inch-lb	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
ML, Minimum Torque	4.0 Inch-lb	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
t2, Time to 2 Inch-lb Rise from Minimum	0.5 Minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
t'50, Time to 50% Cure	0.7 Minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
t'90, Time to 90% Cure	2.3 Minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C

## **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