

## 3M Dyneon™ FX 11818 Fluoroelastomer

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

## **Material Notes:**

3M™ Dyneon™ Flouroelastomer FX 11818 can be compounded using standard water cooled internal mixers or two-roll mills with standard fillers and ingredients utilized in typical fluoroelastomer formulations. The "dry" ingredients should be blended before adding to the masticated gum. For best results, Dyneon FX 11818 should be banded on the mill several minutes prior to adding the blended dry ingredients. Once mixed, the compounded stocks have good scorch resistance and storage stabilityComposition: Terpolymer of hexafluoropropylene, tetrafluoroethylene and vinylidene fluorideProcess targets: extrusions primarily; also beneficial in calenderingProprietary incorporated cure technologyIntermediate fluorine level product suitable for automobile fuel system applications requiring improved fuel resistance over standard di-polymer productsCurative level adjusted for applications requiring higher levels of elongationInformation provided by Dyneon, A 3M Company

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_3M-Dyneon-FX-11818-Fluoroelastomer.php

Physical Properties	Metric	English	Comments	
Specific Gravity	1.86 g/cc	1.86 g/cc		
Mooney Viscosity	28	28	ML1+10	
inouncy viscosity	@Temperature 121 °C	@Temperature 250 °F	WEITIO	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	74	74	Press Cure 5 minutes @ 177°C, Post Cure 24 hours @ 260°C; ASTM D2240
Tensile Strength at Break	12.4 MPa	1800 psi	Press Cure 5 minutes @ 177°C, Post Cure 24 hours @ 260°C
Elongation at Break	290 %	290 %	Press Cure 5 minutes @ 177°C, Post Cure 24 hours @ 260°C
100% Modulus	0.00338 GPa	0.490 ksi	Press Cure 5 minutes @ 177°C, Post Cure 24 hours @ 260°C
Compression Set	34 %	34 %	Aged 70 hours @ 200°C, -214 O-rings; ASTM D395 Method B

Thermal Properties	Metric	English	Comments
Transformation Temperature	-14.0 °C	6.80 °F	TR10; ASTM D1329

Component Elements Properties	Metric	English	Comments
Fluorine, F	68.6 %	68.6 %	

Descriptive Properties	Value	Comments	



Descriptive Properties	Opaque Off-White Value	Comments
MH, Maximum Torque	13.9 inch-lb	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
ML, Minimum Torque	1 inch-lb	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
Solubility	Ketones and Esters	
t`50, Time to 50% cure	1.6 minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
t`90 - Time to 90% cure	2.2 minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C
ts2 - Time to 2 in-lb rise from min	1.4 minutes	100 cpm, 0.5° Arc, 6 Minutes @ 177°C

## **Contact Songhan Plastic Technology Co.,Ltd.**

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