

# Tecnoflon® FOR 60K/U

## Cure Incorporated Copolymer

Tecnoflon® FOR 60K/U is a medium-low viscosity cure incorporated fluoroelastomer copolymer. This grade is designed to improve bonding in any application requiring adhesion to metal. In shaft seals or valve stem seals production, Tecnoflon® FOR 60K/U greatly reduces the reject rate due to adhesion problems.

Some of the basic properties of Tecnoflon® FOR 60K/U are:

- Superior bonding to metal
- Very good scorch safety
- Superior mold flow
- Lack of mold fouling
- Excellent hot tear resistance
- Excellent mold release

Tecnoflon® FOR 60K/U can be used for injection, compression, and transfer moulding of gaskets and seals. Tecnoflon® FOR 60K/U can be mixed using typical fluoroelastomers compounding ingredients and mixing can be accomplished with two roll mills or internal mixers.

Tecnoflon® FOR 60K/U can be extruded into hoses or profiles and can be calendered to make sheet stocks or belting. Finished goods can be produced by a variety of rubber processing methods.

### Handling and safety

Normal care and precautions should be taken to avoid skin contact, eye contact and breathing of fumes. Smoking is prohibited in working areas. Wash hands before eating or smoking. For complete health and safety information, please refer to the material safety data sheet.

### Basic characteristics of the raw polymer are as follows

Property	Typical Value	Unit	Test Method
ML (1+10') at 121 °C	31	MU	ASTM D1646
Fluorine content	66	%	Solvay Internal Method – NMR
Specific gravity	1.81	g/cm <sup>3</sup>	ASTM D792
Colour	Off white		
Packaging / Form	Slabs		
Solubility	Ketones and esters		

### Typical properties

Test Compound	Typical Value	Unit	Test Method
<b>Tecnoflon® FOR 60K/U</b>	100	phr	
MgO–DE	3	phr	
Ca(OH) <sub>2</sub>	6	phr	
N-990 MT Carbon Black	30	phr	

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Property	Typical Value	Unit	Test Method
Mooney viscosity ML (1+10') at 121 °C	58	MU	ASTM D1646
<b>Mooney Scorch MS 135 °C</b>			ASTM D1646
MV	31	MU	
t <sub>15</sub>	31	min	
<b>MDR 6 min at 177 °C arc 0.5 °</b>			ASTM D6601
Minimum torque	1.3	lb·in	
Maximum torque	16.5	lb·in	
t <sub>s2</sub>	2.1	min	
t' <sub>90</sub>	4.0	min	
<b>Press cure: 10 min at 170 °C, post cure: (8+16) h at 250 °C</b>			
100 % Modulus	6.3	MPa	ASTM D412C
Tensile strength	17.5	MPa	
Elongation at break	225	%	
Hardness	72	ShoreA	ASTM D2240
<b>Compression set</b> 25 % deformation, 70 h at 200 °C			ASTM D395 method B
O-ring #214	18	%	
<b>Heat resistance, 70 h at 275 °C</b>			ASTM D573
Δ Tensile strength	– 33	%	
Δ Elongation at break	11	%	
Δ Hardness	2	ShoreA	

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