Tecnoflon® P 549L

Peroxide Curable Terpolymer

Tecnoflon® P 549L is a low viscosity, high fluorine (70 %), peroxide curable fluoroelastomer. Tecnoflon® P 549L exhibits superior resistance to a wide variety of chemicals, coupled with excellent processability. Tecnoflon® P 549L can be cross-linked using organic peroxides in conjunction with a co-agent.

Some of the basic properties of Tecnoflon® P 549L are:

- Low post cure
- Superior mold flow
- Lack of mold fouling
- Excellent mold release
- Good chemical resistance especially in:
  - Alcohol containing fuels
  - Steam
  - Fluids containing amine additives

Tecnoflon® P 549L can be used for injection and transfer molding of shaft seals, valve seals, O-rings, gaskets or any item requiring superior chemical resistance. Tecnoflon® P 549L can be combined with the cure system and other typical fluoroelastomer compounding ingredients. Mixing can be accomplished with two roll mills or internal mixers.

Tecnoflon® P 549L can be extruded into hoses or profiles and can be calendered to make sheet stocks or belting. Finished goods may 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
Mooney viscosity ML (1+10') at 121 °C	29	MU	ASTM D1646
Fluorine content	70	%	Solvay Internal Method – NMR
Specific gravity	1.90	g/cm^3	ASTM D792
Color	Translucent		
Packaging / Form	Slabs		
Solubility	Ketones and esters		

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Typical properties

Test Compound	Typical Value	Unit	Test Method
Tecnoflon® P 549L	100	phr	
Luperox® 101XL-45	3	phr	
Drimix® TAIC (75 %)	4	phr	
ZnO	5	phr	
N-990 MT Carbon Black	30	phr	

Property	Typical Value	Unit	Test Method
Mooney viscosity ML (1+10') at 121 °C	32	MU	ASTM D1646
MDR 6 min at 177 °C arc 0.5 °			ASTM D6601
Minimum torque	0.58	lb·in	
Maximum torque	29.4	lb·in	
t_{s2}	0.4	min	
t'_{50}	0.5	min	
t'_{90}	0.9	min	
Press cure: 3 min at 170 °C, post cure: 4 h at 230 °C			
100 % Modulus	6.5	MPa	ASTM D412C
Tensile strength	22.5	MPa	
Elongation at break	260	%	
Hardness	74	ShoreA	ASTM D2240
Temperature retraction			ASTM D1329
TR_{10}	−5	°C	

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