

Tecnoflon[®] FOR 501HS



Cure incorporated copolymer

Solvay
Solexis





GENERAL FEATURES

TECNOFLON® FOR 501HS is a low viscosity cure incorporated copolymer, based on our breakthrough technology on bisphenol curable fluoroelastomers. Tecnoflon® FOR 501HS can be compounded to meet all the major fluoroelastomer specifications with only a 1 hour post cure and without using Calcium Hydroxide. Tecnoflon® FOR 501HS is well suited for moulded items with complicated shapes which require a very good hot tear resistance for part removal.

Some of the unique properties of Tecnoflon® FOR 501HS are:

- Low post cure time of 1 hour
- Lower post cure temperatures
- Curable without Calcium Hydroxide
- Excellent mould release
- Lack of mould fouling
- Lower compound viscosity
- Good scorch safety
- Fast cure rate

TECNOFLON® FOR 501HS can be used for injection and transfer moulding of O-rings, gaskets, and seals. The material can be extruded into hoses or profiles and can be calendered to make sheet stocks or belting. The product can be mixed using typical fluoroelastomers compounding ingredients and mixing can be accomplished with two-roll mills or internal mixers. Finished goods can be produced by a variety of rubber processing methods.

Basic characteristics of the raw polymer are as follows:

PROPERTIES	TYPICAL VALUES
ML (1+10') @ 121°C	24
Fluorine content (%)	66
Specific gravity (g/cc)	1.81
Colour	Off white
Packaging / Form	Slabs
Solubility	Ketones and esters

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.



TYPICAL RHEOLOGICAL PROPERTIES

CURABLE WITHOUT CALCIUM HYDROXIDE

TEST COMPOUND		
Tecnoflon® FOR 501 HS		100
MgO DE	phr	7
N-990 MT Carbon Black	phr	30

Mooney Scorch MS 135°C		
MV	MU	21
t ₁₅	min	40

MDR 6 min @ 177°C arc 0.5		
Minimum Torque	lb*in	0.9
Maximum Torque	lb*in	9.4
t _{s2}	min	2.1
t'50	min	2.8
t'90	min	4.3

MECHANICAL PROPERTIES		
Post Cure: 1 h @ 250°C		
100 % Modulus	MPa	3.4
Tensile Strength	MPa	15.0
Elongation at Break	%	270
Hardness	ShoreA	65

COMPRESSION SET			
(25 % Deformation, ASTM D395 Method B, 70 h @ 200 °C)			
#214 O-Ring	Post cure 1 h @ 250°C	%	17



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