

Tecnoflon[®] FOR 539



Solvay
Solexis



Cure incorporated copolymer



GENERAL FEATURES

TECNOFLON® FOR 539 is a low viscosity cure incorporated fluoroelastomer copolymer. This grade is especially suited for injection molding of O-rings and sealing components which must meet demanding specifications. Tecnoflon® FOR 539 contains a proprietary cure system and a special molecular weight distribution providing superior processability. It has been particularly designed to offer improved characteristics such as flow, mold release, scorch safety, no fouling and faster cycles at a wide range of molding temperatures.

Some of the basic properties of Tecnoflon® FOR 539 are:

- Outstanding flow ability
- Low viscosity
- Improved scorch safety
- No mould fouling

TECNOFLON® FOR 539 can be used for injection and transfer moulding of O-rings, gaskets, and seals. The product can be mixed using typical fluoroelastomers compounding ingredients and mixing can be accomplished with two-roll mills or internal mixers.

The material 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.

Basic characteristics of the raw polymer are as follows:

PROPERTIES	TYPICAL VALUES
ML (1+10') @ 121°C	21
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.



Solexis

Tecnoflon® FOR 539

TYPICAL RHEOLOGICAL PROPERTIES

TEST COMPOUND		
Tecnoflon® FOR 539		100
MgO-DE	phr	3
Ca(OH) ₂	phr	6
N-990 MT Carbon Black	phr	30
Mooney Viscosity ML (1+10') @ 121°C	MU	40
Mooney Scorch MS 135°C		
MV	MU	16
t ₁₅	min	50.6
MDR 6 min @ 177°C arc 0.5°		
Minimum Torque	lb*in	0.7
Maximum Torque	lb*in	24.0
t _{s2}	min	2.1
t' ₅₀	min	2.3
t' ₉₀	min	3.5



Solexis

Tecnoflon® FOR 539

TYPICAL PHYSICAL PROPERTIES

TEST COMPOUND		
Tecnoflon® FOR 539		100
MgO-DE	phr	3
Ca(OH) ₂	phr	6
N-990 MT Carbon Black	phr	30
MECHANICAL PROPERTIES		
Post Cure: (8+16) h @ 250°C		
100 % Modulus	MPa	6.5
Tensile Strength	MPa	16.5
Elongation at Break	%	188
Hardness	ShoreA	76
COMPRESSION SET		
(25 % Deformation, ASTM D395 Method B, 70 h @ 200 °C)		
#214 O-Ring	%	18



Whilst every care has been taken by Solvay Solexis S.p.A. in the preparation of this document, no warranty is given to its accuracy and completeness, nor as to compliance with laws so far as they may affect the content of this document.
Local laws and regulations (i.e. on consumers protection, safety, health and environment) are applicable.
The users shall be solely responsible of their respect.
Furthermore, freedom of use under patent or other similar rights should not be assumed.

SOLVAY SOLEXIS S.p.A.

Viale Lombardia, 20

20021 Bollate (MI), Italy

Tel: +39-02-38351

Fax: +39-02-3835-2110

E-mail: solvaysolexis.ita@solvay.com

Web: www.solvaysolexis.com



a Passion for Progress®