

Tecnoflon® N 535

Raw Copolymer

Tecnoflon® N 535 is a low viscosity fluoroelastomer copolymer. Tecnoflon® N 535 is intended as a general purpose fluoroelastomer. It can be blended with other polymers of the Tecnoflon® family to meet specific requirements. Tecnoflon® N 535 does not contain curatives: therefore the proper levels of Tecnoflon® FOR M1 and Tecnoflon® FOR M2 must be added to achieve the required properties. It can be also cured with diamine based systems.

Some of the unique properties of Tecnoflon® N 535 are:

- Excellent compression set
- Lack of mould fouling
- Superior extrusion behaviour
- Superior mould flow
- Excellent mould release

Tecnoflon® N 535 can be used for injection and transfer moulding of O-rings, gaskets and seals. Tecnoflon® N 535 can be mixed using typical fluoroelastomers compounding ingredients and mixing can be accomplished with two roll mills or internal mixers. Compounds based on Tecnoflon® N 535 can be dispersed in solvents for coating applications.

Tecnoflon® N 535 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	27	MU	ASTM D1646
Fluorine content	66	%	Solvay Internal Method – NMR
Specific gravity	1.81	g/cm ³	ASTM D792
Colour	Translucent		
Packaging/Form	Slabs		
Solubility	Ketones and esters		

Typical properties

Test Compound	Typical Value	Unit	Test Method
Tecnoflon® N 535	100	phr	
Tecnoflon® FOR M1	4	phr	
Tecnoflon® FOR M2	1.5	phr	
MgO–DE	3	phr	
Ca(OH) ₂	6	phr	
N-990 MT Carbon Black	30	phr	

Tecnoflon® N 535

Raw Copolymer

Property	Typical Value	Unit	Test Method
Mooney viscosity ML (1+10') at 121 °C	50	MU	ASTM D1646
Mooney Scorch MS 135 °C			ASTM D1646
MV	22	MU	
t ₁₅	31.8	min	
ODR 12 min at 177 °C arc 3°			ASTM D2084
Minimum torque	8.6	lb·in	
Maximum torque	114	lb·in	
t _{s2}	2.3	min	
t' ₅₀	3.3	min	
t' ₉₀	3.7	min	
MDR 6 min at 177 °C arc 0.5°			ASTM D6601
Minimum torque	0.87	lb·in	
Maximum torque	21.1	lb·in	
t _{s2}	1.5	min	
t' ₅₀	1.7	min	
t' ₉₀	2.6	min	
Press cure: 10 min at 170 °C, post cure: (8+16) h at 250 °C			
100 % Modulus	7.2	MPa	ASTM D412C
Tensile strength	17.5	MPa	
Elongation at break	182	%	
Hardness	74	ShoreA	ASTM D2240
Compression set			ASTM D395
25 % deformation, 70 h at 200 °C			method B
O-ring #214	13	%	
6 mm buttons	10	%	

www.solvay.com

SpecialtyPolymers.EMEA@solvay.com | Europe, Middle East and Africa

SpecialtyPolymers.Americas@solvay.com | Americas

SpecialtyPolymers.Asia@solvay.com | Asia Pacific

Material Safety Data Sheets (MSDS) are available by emailing us or contacting your sales representative. Always consult the appropriate MSDS before using any of our products. Neither Solvay Specialty Polymers nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Solvay's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Solvay's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. All trademarks and registered trademarks are property of the companies that comprise Solvay Group or their respective owners.

© 2014 Solvay Specialty Polymers. All rights reserved. R 02/19/2014 | Version 2.0 Design by ahlersheinel.com