SOLVAY
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Biesterfeld
Competence in Solutions

- Bisphenol-Curable Dipolymers
- Bisphenol-Curable Terpolymers
- Peroxide-Curable
- Peroxide-Curable Low-Temperature
- Peroxide-Curable Extreme Low-Temperature
- Cure System
- Processing Aids
- Carbon Black
- Fluoropolymer Additives

Fluorocarbon Rubber (FKM) & Additives

FKM - Fluorocarbon Rubber

Bisphenol-Curable Dipolymers

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® N 215/U	66	10	-17	Base polymer
Tecnoflon® N 535	66	27	-17	Base polymer, FDA compliant
Tecnoflon® N 935	66	62	-17	Base polymer, FDA compliant
Tecnoflon® NH	66	124	-17	Base polymer, FDA compliant
Tecnoflon® FOR 210	66	10	-17	Cure incorporated
Tecnoflon® FOR 421/U	66	24	-17	Cure incorporated
Tecnoflon® FOR 432	66	19	-17	Cure incorporated
Tecnoflon® FOR 4353	66	20	-17	Cure incorporated, FDA compliant
Tecnoflon® FOR 531	66	46	-17	Cure incorporated
Tecnoflon® FOR 5312K	66	42	-17	Cure incorporated, metal adhesion
Tecnoflon® FOR 532	66	45	-17	Cure incorporated
Tecnoflon® FOR 5351	66	24	-17	Cure incorporated
Tecnoflon® FOR 5351/U	66	24	-17	Cure incorporated
Tecnoflon® FOR 539	66	21	-17	Cure incorporated
Tecnoflon® FOR 60K/U	66	31	-17	Cure incorporated
Tecnoflon® FOR 610	66		-17	Cure incorporated
Tecnoflon® FOR 65BI	66	37	-17	Cure incorporated
Tecnoflon® FOR 7353	66	38	-17	Cure incorporated, FDA compliant

Bisphenol-Curable Dipolymers, HS Grades

Based on an innovative polymerisation technology that allows curing without Ca(OH)2. Benefits include enhanced scorch safety, improved mechanical properties, lower compression set and shorter post-cure time.

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® N 90HS	66	45	-17	Base polymer, FDA compliant
Tecnoflon® FOR 501HS	66	23	-17	Cure incorporated
Tecnoflon® FOR 50HS	66	23	-17	Cure incorporated
Tecnoflon® FOR 801HS	66	40	-17	Cure incorporated
Tecnoflon® FOR 80HS	66	38	-17	Cure incorporated

Bisphenol-Curable Terpolymers

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® TN 50A	68	23	-14	Base polymer
Tecnoflon® TN	68	67	-14	Base polymer, FDA compliant
Tecnoflon® FOR 4391	70	49	-7	Cure incorporated
Tecnoflon® FOR 5381	68,5	21	-13	Cure incorporated
Tecnoflon® FOR 7380K	68	32	-14	Cure incorporated, metal adhesion
Tecnoflon® FOR 9381	68,5	50	-13	Cure incorporated

Bisphenol-Curable Low-Temperature Terpolymers

Due to the specific monomer composition, these grades show improved cold-temperature flexibility compared to bisphenol terpolymers and dipolymers.

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® T 636/L	66	22	-19	Base polymer
Tecnoflon® FOR 5361	66	21	-19	Cure incorporated
Tecnoflon® FOR 6363A	65,5	30	-19	Cure incorporated
Tecnoflon® FOR TF636	66	31	-19	Cure incorporated

Peroxide-Curable

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® P 457	67	21	-15	FDA compliant
Tecnoflon® P 757	67	45	-15	FDA compliant
Tecnoflon® P 459	70	24	-5	FDA compliant
Tecnoflon® P 959	70	48	-5	FDA compliant

Peroxide-Curable Low-Temperature

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® PL 458	66	29	-24	
Tecnoflon® PL 958	66	53	-24	
Tecnoflon® PL 557	65,5	35	-29	
Tecnoflon® PL 455	64	19	-30	
Tecnoflon® PL 855	64	54	-30	

Peroxide-Curable Extreme Low-Temperature

	Fluorine Content (%)	Mooney Viscosity, ML (1+10) 121°C	TR10 (°C)	Description
Tecnoflon® VPL 55540	65	25	-40	
Tecnoflon® VPL 85540	65	45	-40	

Specialty Grades

	Description
Tecnoflon® TN Latex	Water-based FKM Terpolymer emulsion (70 % solids), alternative to solvent-based fluoro-elastomer coatings
Tecnoflon® NM Powder	FKM Copolymer used as processing aid for polyolefins

Additives

For compounding we offer a range of additives/chemicals/fillers specifically suited for FKM based formulations:

Cure System

Tecnoflon FOR M1	Bisphenol-AF masterbatch, crosslinker for use in bishenol curing base polymers.
Tecnoflon FOR M2	Phosphonium salt masterbatch, accelerator for use in bisphenol curing base polymers.
Biesterfeld TAC-70E	Crosslinker/co-agent for peroxide cure FKM. 70 % active ingredient on silica (dry liquid).

Processing Aids

MA-L79	Internal lubricant for high temperature applications. Provides good flow and release effect in FKM. Lubricating properties lead to reduction of injection pressure in the molding process and prevent scorch.
Carnauba wax	Natural wax from the carnauba palm in Brazil. Lubricating and realease improvement during compounding, improves extrusion smoothness.

Carbon Black

Sterling 1120	Low surface area carbon black. Similar loading capability as medium thermal black, but exhibits higher tensile strength.

Fluoropolymer Additives

Tecnoflon FPA 1	Fluorinated processing aid that improves the flowability of compounds, thereby reducing flow lines and knitting defects.
Algoflon L206	PTFE micronised powder. Benefits are improved mold release and wear resistance, reduced friction.

Biesterfeld also offers polyphenylene sulfide (Ryton®), polyphenylsulfone (Radel®), polysulfone (Udel®), polyethersulfone (Veradel®) by Solvay.

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Competence in Solutions

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