

Melt-Processable Teflon™ Fluoroplastic Resins at a Glance

Product Information

Melt-processable Teflon fluoroplastic resins are the ideal choice for component development in the rapidly advancing technologies of wire and cable, aerospace, consumer electronics, automotive, semicon, oil and gas, chemical processing, and wireless transmission, to name a few.

Discover the outstanding functional properties of Teflon* fluoroplastic resins: exceptional dielectric properties, high stress-crack resistance, chemical inertness, low flammability, and thermal cycling capabilities.

Typical Properties¹

Resin Type	Resin ²	Upper Service Temperature	Dielectric Constant (1 MHz)	Dissipation Factor (1 MHz)	MFR g/10 min	Melting Point °C	Tensile Strength MPa	Elong- ation %	Flexural Modulus MPa	Specific Gravity	Features
	FEP 9302	200	2.03	0.0007	3	260	30	325	655	2.14	Low MFR resin with highest stress crack resistance among FEP resins
	FEP CJ95	200	2.03	0.0007	5	255	28	300	-	2.14	Low MFR resin with high stress crack resistance
	FEP 100	200	2.03	0.0006	7	260	27	340	580	2.14	Low MFR general purpose resin
Teflon" FEP	FEP CJ99	200	2.03	0.0007	9	255	28	300	_	2.14	Low MFR resin with high stress crack resistance and faster processing speeds
	FEP 9835	200	2.03	0.0006	20	255	24	300	520	2.14	Mid-range MFR resin with superior electrical properties. Used in data communication and other applications
	FEP 106	200	2.03	0.0007	22	255	20	300	655	2.12-2.17	Mid-range MFR resin for data communication and other applications
	FEP 9494	200	2.03	0.0006	30	255	20	300	520	2.14	High speed, premium resin with superior electrical properties. Well suited for data communications cabling
	FEP 9495	200	2.03	0.0006	30	255	20	300	520	2.14	High speed, premium resin with improved adhesion to copper wire. Well suited for data communications cabling
	FEP 9898	200	2.03	0.0006	30	255	20	300	520	2.14	High speed, premium resin with enhanced electrical properties at high frequencies. Well suited for data communications cabling
	FEP 9819FL	200	2.03	0.0006	30	255	20	300	520	2.14	High MFR powder for specialty applications



Typical Properties¹

Resin Type	Resin²	Upper Service Temperature	Dielectric Constant (1 MHz)	Dissipation Factor (1 MHz)	MFR g/10 min	Melting Point °C	Tensile Strength MPa	Elong- ation %	Flexural Modulus MPa	Specific Gravity	Features
	FFR 430	200	2.03	0.0007	7	260	_	_	_	2.14	Foamable resin for large coax cables
	FFR 550	200	2.03	0.0006	14	260	_	_	_	2.14	Foamable resin with increased production speed. For medium to large coax cables
Æ	FFR 750	250	2.03	0.0006	12	260–290	_	_	_	2.14	Foamable resin with superior attenuation performance. For medium to large coax cables
Teflon™ FFR	FFR 770	200	2.03	0.0006	30	260	_	_	_	2.14	High MFR foamable resin offering superior attenuation and high production speeds. Best suited for thin wall wire applications
	FFR 880	260	2.03	0.0001	42	305	_	_	_	2.14	Higher MFR foamable resin offering the best attenuation and resistance to solder flare back. Best suited for thin wall wire applications
	PFA 340	260	2.03	0.0001	14	302–310	25	300	590	2.12–2.17	General purpose, high MFR resin for molding and extrusion applications
	PFA 345	260	2.03	0.0001	5	302–310	29	300	690	2.15	General purpose, mid-range MFR resin for molding and extrusion applications
	PFA 350	260	2.03	0.0001	2	302–310	28	300	625	2.12–2.17	General purpose, low MFR resin for molding and extrusion applications
	PFA 416HP	260	2.03	0.0001	42	302–310	25	350	490	2.12–2.17	High purity resin with superior electrical properties and high MFR. Well suited for thin wall wire insulation and small injection molded parts
	PFA 440HPA	260	2.03	0.0001	14–19	302–310	25	300	590	2.12–2.17	High purity, high MFR resin for injection molding and extrusion applications
	PFA 440HPB	260	2.03	0.0001	12–15	302–310	25	300	590	2.12–2.17	High purity, high MFR resin for injection molding and extrusion applications
	PFA 445HP	260	2.03	0.0001	5	302–310	26	320	550	2.12–2.17	High purity, mid-range MFR resin for molding and extrusion applications
	PFA 450HP	260	2.03	0.0001	2	302–310	28	300	625	2.12–2.17	High purity, low MFR resin with high stress crack resistance. Suited for molding and extrusion applications
Teflon™ PFA	PFA 451HP	260	2.03	0.0001	2	302–310	33	360	410	2.12–2.17	High purity, low MFR resin with improved surface smoothness and increased resistance to chemical permeation. Suited for molding and extrusion applications
	PFA 940HP Plus	260	2.03	0.0001	14–19	285–300	28	310	650	2.12–2.17	Premium, high purity resin with high MFR and superior stress crack resistance. Suited for injection molding and extrusion applications
	PFA 945HP Plus	260	2.03	0.0001	5–7	285–300	28	290	600	2.12–2.17	Premium, high purity resin with mid-range MFR and superior stress crack resistance. Suited for injection molding and extrusion applications
	PFA 950HP Plus	260	2.03	0.0001	2	285–300	28	260	600	2.12–2.17	Premium, high purity resin with low MFR and superior stress crack resistance. Suited for molding and extrusion applications
	PFA 951HP Plus	260	2.03	0.0001	2	300–320	28	290	600	2.12–2.17	Premium, high purity resin with low MFR, superior stress crack resistance, and highest resistance to chemical permeation
	PFA C980	260	_	_	1.80-2.50	280	22	225	700	2.10-2.15	Static dissipative resin
	PFA 401RL/ 421HP RL	260	_	_	5.5-7.5	300–305	27	350	_	2.15	Rotolining resins for sublayers in anti- corrosive linings
	PFA 9738JN	260	2.03	0.0001	6	305–317	33	430	440	2.12-2.17	High purity rotomolding and rotolining resin
	PFA 9724	260	2.03	0.0001	12	302-310	25	300	590	2.12-2.17	High MFR powder for specialty applications
	PFA 9725	260	2.03	0.0001	1.7	302-310	26	300	625	2.12-2.17	Low MFR powder for specialty applications

Teflon Fluoroplastic Resin

Typical Properties¹

Resin Type	Resin ²	Upper Service Temperature	Dielectric Constant (1 MHz)	Dissipation Factor (1 MHz)	MFR g/10 min	Melting Point °C	Tensile Strength MPa	Elong- ation %	Flexural Modulus MPa	Specific Gravity	Features
ECCtreme"" ECA	ECA 3000	300	2.05	<0.00015	7	320	19	330	_	2.12–2.17	Special purpose resin with mid-range MFR and highest temperature rating. Well suited for large gauge wire extrusion and molding
	ECA 4000	300	2.05	<0.00015	14	320	19	330	_	2.12–2.17	Special purpose resin with high MFR and highest temperature rating. Well suited for fine wire extrusion
	ETFE 200	150	2.5-2.6	0.008	7	255-280	45	300	1200	1.7	General purpose resin
	ETFE 280	150	2.05	<0.00015	4	255-280	47	300	1200	1.7	High stress crack resistance
	ETFE HT2181	150	2.5–2.6	0.007	6	255–280	40	300	1000	1.7	General purpose resin with improved physical properties
	ETFE HT2183	150	2.5-2.6	0.007	6	255-280	40	300	1000	1.7	Higher stress crack resistance
	ETFE 750	200	2.5–2.6	0.006	7	220–255	38	300	645	1.76	Superior stress crack resistance with superior mechanical properties at high temperatures. Best suited for appliance wire applications
	ETFE HT2185	150	2.5-2.6	0.008	11	255-280	40	300	1000	1.7	Higher MFR resin
™ ETFE	ETFE 207	150	2.5–2.6	0.007	30	250–280	40	300	1000	1.74	Highest MFR among ETFE resins. Well suited for thin wall wire insulation and small injection molded parts
Tefzel [™] I	ETFE HT2188	150	2.5–2.6	0.009	14	220-240	40	300	800	1.7	Specialty resin with superior stress crack resistance and low melting point
	ETFE HT2160	150	_	_	1.5	255–280	38	200	_	1.7	Static dissipative resin
	ETFE HT2170	150	_	_	2	220–255	40	200	_	1.75	Static dissipative resin with lower melting point
	ETFE HT2202	150	_	_	7	255–280	35	250	1000	1.7	Adhesively modified resin for use as a tie-layer
	ETFE HT2202HS	150	_	_	30	250-280	35	250	1000	1.7	Adhesively modified resin with higher MFR for use as a tie-layer
	ETFE HT2184	150	_	_	6	255–280	40	300	1000	1.7	Powder for specialty applications
	ETFE HT2195	150	_	_	20	253	_	_	_	1.73	Rotomolding and rotolining grade

¹See product technical data sheets for ASTM/ISO test methods. Typical properties are not suitable for specification purposes. The User is responsible for evaluating and determining whether the Chemours product is suitable and appropriate for a particular use and intended application.

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Replaces: K-26907 C-10080 (7/15)

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