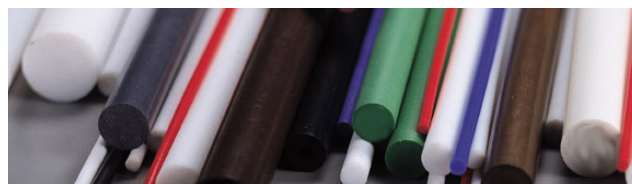
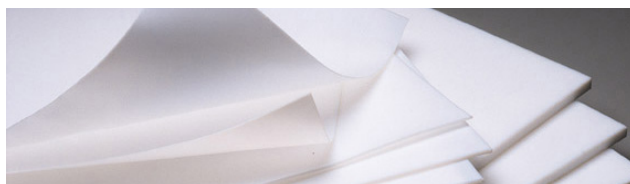


Composizione standard dei PTFE caricati / General properties of filled PTFE grades

Caratteristiche <i>Properties</i>		Unità di misura <i>Unit of measure</i>	FV 8515	FV 7525	FBR 4060	FVG 75205	FVM 80155	FCG 6535
Limite PV / <i>PV limit</i>	3 m/min.	$\frac{\text{kg}}{\text{cm}^2} \cdot \frac{\text{m}}{\text{min.}}$	214	214	321	236	236	315
	30 m/min.		268	278	396	321	300	315
	300 m/min.		321	343	600	472	375	252
PV per usura di 0,1/ 1000 ore (senza lubrificazione) <i>PV limit at a wear loss of 0,1 mm/1,000 hrs dry</i>			52	83	143	56	100	-
Coefficiente di attrito / <i>Friction coefficient</i>	statico / <i>static</i>		0,22	0,08	0,10	0,10	0,10	0,09
	dinamico / <i>dynamic</i>		0,14	0,06	0,07	0,065	0,08	0,07



25% CAR
75% Virgin ptfе + 25% carbon coke

Properties:

- Excellent compression and wear resistance; good thermal conductivity, low permeability; improved coefficient of thermal expansion when combined with ceramic.

Main applications:

- Widely used in seal applications where high wear resistance is required under high compression (eg. piston rings for dry compressors, bearings, grooved mechanical support).

Statement on suitability for contact with foodstuff:

- We certify that all our 25% Carbon filled molded and extruded semifinished products, made of P 25 CAR, can come in contact with foodstuff, as per the following requirement:

USA regulations (FDA, Food and Drug Administration, Department of Health and Human Services; Code of Federal Regulations 21 CFR Ch. 1 § 177.1550 (a) (1) and (b)-Perfluorocarbon Resins.

The user must verify that the finished item, made of the semifinished product, would be technically suitable for the requested application. The user must also verify that the finished item may not cause any modification to the organoleptic properties of the foodstuff and that the item's technological fitness it is assigned to, may be guaranteed.

For each foreign country market, where the articles are introduced into, it is responsibility of the user to determine whether both material than articles would comply with the applicable laws and regulations.

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PTFE caricato

Filled PTFE

25 CAR

75% Virgin ptfе + 25% carbon coke

25 CAR

75% Virgin ptfе + 25% carbon coke

Caratteristiche / <i>Properties</i>	Method / <i>Method</i>	Unità di misura <i>Unit of measure</i>	Specification <i>Specification</i>
Peso specifico / <i>Specific gravity</i>	ASTM D792	g/cm ³	2,050 – 2,120
Carico di rottura a trazione / <i>Tensile strength</i>	ASTM D4894	MPa	≥ 13
Allungamento a rottura / <i>Elongation</i>	ASTM D4894	%	≥ 60
Durezza / <i>Hardness</i>	ASTM D2240	Shore D	≥ 62
Resistenza a compressione con deformazione 1% <i>Compression strength at 1% deformation</i>		MPa	≥ 10
Deformation under load (140 Kg/cm ² for 24 hrs. at 23°C) <i>Deformation under load (140 Kg/cm² for 24 hrs. at 23°C)</i>	ASTM D621	%	5 - 7
Permanent deformation (after 24 hrs. Relaxation at 23° C) <i>Permanent deformation (after 24 hrs. Relaxation at 23° C)</i>	ASTM D621	%	2 - 4
Coefficient of linear thermal expansion (T= 25 - 100 ° C) <i>Coefficient of linear thermal expansion (T= 25 - 100 ° C)</i>		10 ⁻⁵ /°C	7 - 12,5
Coefficient of static friction / <i>Coefficient of static friction</i>			0,14 - 0,16
Coefficient of dynamic friction / <i>Coefficient of dynamic friction</i>			0,12 - 0,14
Volume resistivity / <i>Volume resistivity</i>	ASTM D257	Ohm cm	10 ⁴
Ageing and weatherability / <i>Ageing and weatherability</i>			Stable over 20 years of exposure <i>Stable over 20 years of exposure</i>
Radiations resistance (gamma rays) / <i>Radiations resistance (gamma rays)</i>	low:		Electrical properties unchanged, mechanical properties decreased <i>Electrical properties unchanged, mechanical properties decreased</i>
Service Temperature / <i>Service Temperature</i>		°C	-200 / +260

PTFE caricato

15%GL+5%MoS₂
(80% Virgin pte + 15% Glassfibers + 5% Molybdenum disulfide)

Properties:

- Improved compression and wear resistance; excellent chemical stability.
- Better thermal conductivity and coefficient of friction.

Main applications:

- It is the most commonly used filler for dynamic seal applications where both rotating and alternating movements are involved, pneumatic, hydraulic and mechanical parts.
- In dynamic seal applications, where self-lubricating properties, especially at starting point.

Filled PTFE

15%GL+5%MoS₂
(80% Virgin pte + 15% Glassfibers + 5% Molybdenum disulfide)

Properties:

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Main applications:

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Caratteristiche / Properties	Method / Method	Unità di misura Unit of measure	Specification Specification
Peso specifico / Specific gravity	ASTM D792	g/cm ³	2,260 – 2,300
Carico di rottura a trazione / Tensile strength	ASTM D4894	MPa	≥ 18
Allungamento a rottura / Elongation	ASTM D4894	%	≥ 200
Durezza / Hardness	ASTM D2240	Shore D	≥ 58
Deformation under load (14 N/mm ² for 24 hrs. at 23°C) Deformation under load (14 N/mm ² for 24 hrs. at 23°C)	ASTM D621	%	11 - 13
Permanent deformation (after 24 hrs. Relaxation at 23° C) Permanent deformation (after 24 hrs. Relaxation at 23° C)	ASTM D621	%	5,5 - 7
Coefficient of static friction / Coefficient of static friction			0,12 - 0,15
Coefficient of dynamic friction / Coefficient of dynamic friction			0,10 - 0,12
Service Temperature / Service Temperature		°C	-200 / +260



PTFE caricato

15%GL+5%GR

15%GL+5%GR(80% Virgin pte+ 15% Glassfibers+ 5% Graphite)

Properties:

- Improved compression and wear resistance; excellent chemical stability.
- Better thermal conductivity and coefficient of friction.

Main applications:

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Caratteristiche / Properties	Method / Method	Unità di misura Unit of measure	Specification Specification
Peso specifico / Specific gravity	ASTM D792	g/cm ³	2,140 – 2,170
Carico di rottura a trazione / Tensile strength	ASTM D4894	MPa	≥ 22
Allungamento a rottura / Elongation	ASTM D4894	%	≥ 250
Durezza / Hardness	ASTM D2240	Shore D	≥ 60
Deformation under load (14 N/mm ² for 24 hrs. at 23°C) Deformation under load (14 N/mm ² for 24 hrs. at 23°C)	ASTM D621	%	11 - 13
Permanent deformation (after 24 hrs. Relaxation at 23° C) Permanent deformation (after 24 hrs. Relaxation at 23° C)	ASTM D621	%	5,5 - 7
Volume resistivity / Volume resistivity	ASTM D257	Ohm cm	10 ⁴
Coefficient of static friction / Coefficient of static friction			0,12 - 0,14
Coefficient of dynamic friction / Coefficient of dynamic friction			0,10 - 0,12
Service Temperature / Service Temperature		°C	-200 / +260

PTFE caricato
50% INOX
(50% virgin ptfe + 50% Stainless steel AISI 316 L)

Properties:

- Improved compression resistance (very low cold flow), low permeability.

Main applications:

- In dynamic applications where high compression and chemical resistance are required (seals and bearings for food industry machinery).

Filled PTFE
50% INOX
(50% virgin ptfe + 50% Stainless steel AISI 316 L)

Properties:

- Improved compression resistance (very low cold flow), low permeability.

Main applications:

- In dynamic applications where high compression and chemical resistance are required (seals and bearings for food industry machinery).

Caratteristiche / <i>Properties</i>	Method / <i>Method</i>	Unità di misura <i>Unit of measure</i>	Specification <i>Specification</i>
Peso specifico / <i>Specific gravity</i>	ASTM D4884	g/cm ³	3,360 – 3,410
Carico di rottura a trazione / <i>Tensile strength</i>	ASTM D4894	MPa	≥ 15
Allungamento a rottura / <i>Elongation</i>	ASTM D4894	%	≥ 150
Durezza / <i>Hardness</i>	ASTM D2240	Shore D	≥ 65
Deformation under load (14 N/mm ² for 24 hrs. at 23°C) <i>Deformation under load (140 N/mm² for 24 hrs. at 23°C)</i>	ASTM D621	%	6 - 7,5
Permanent deformation (after 24 hrs. Relaxation at 23° C) <i>Permanent deformation (after 24 hrs. Relaxation at 23° C)</i>	ASTM D621	%	2,5 - 3,5
Coefficient of linear thermal expansion (T= 25 - 100 ° C) <i>Coefficient of linear thermal expansion (T= 25 - 100 ° C)</i>	ASTM D696	10 ⁻⁵ /°C	10 - 11,5
Coefficient of static friction / <i>Coefficient of static friction</i>	ASTM D1894		0,16 - 0,18
Coefficient of dynamic friction / <i>Coefficient of dynamic friction</i>	ASTM D1894		0,13 - 0,15
Volume resistivity / <i>Volume resistivity</i>	ASTM D257	Ohm cm	-
Service Temperature / <i>Service Temperature</i>		°C	-200 / +260



PTFE caricato

15% QUARTZ (85% virgin ptfе + 15% Quartz)

Properties:

- Improved compression and wear resistance; excellent chemical stability.
- Better thermal conductivity.

Main applications:

- It is the most commonly used filler for dynamic seal applications where both rotating and alternating movements are involved, pneumatic, hydraulic and mechanical parts.

Filled PTFE

15% QUARTZ (85% virgin ptfе + 15% Quartz)

Properties:

- Improved compression and wear resistance; excellent chemical stability.
- Better thermal conductivity.

Main applications:

- It is the most commonly used filler for dynamic seal applications where both rotating and alternating movements are involved, pneumatic, hydraulic and mechanical parts.

Caratteristiche / Properties	Method / Method	Unità di misura Unit of measure	Specification Specification
Peso specifico / Specific gravity	ASTM D792	g/cm ³	2,200 – 2,240
Carico di rottura a trazione / Tensile strength	ASTM D4894	MPa	≥ 18
Allungamento a rottura / Elongation	ASTM D4894	%	≥ 240
Durezza / Hardness	ASTM D2240	Shore D	≥ 60
Deformation under load (14 N/mm ² for 24 hrs. at 23°C) Deformation under load (14 N/mm ² for 24 hrs. at 23°C)	ASTM D621	%	11 - 12
Permanent deformation (after 24 hrs. Relaxation at 23° C) Permanent deformation (after 24 hrs. Relaxation at 23° C)	ASTM D621	%	5 - 5,5
Volume resistivity / Volume resistivity	ASTM D257	Ohm cm	10 ¹⁵
Coefficient of static friction / Coefficient of static friction			0,18 - 0,20
Coefficient of dynamic friction / Coefficient of dynamic friction			0,11 - 0,13
Service Temperature / Service Temperature		°C	-200 / +260