

CAMPUS® foglio dati



Zytel® FR70G25V0 NC010 - PA66-GF25 FR(17)

DuPont Engineering Polymers

Testo del prodotto

Common features of Zytel® nylon resin include mechanical and physical properties such as high mechanical strength, excellent balance of stiffness and toughness, good high temperature performance, good electrical and flammability properties, good abrasion and chemical resistance. In addition, Zytel® nylon resins are available in different modified and reinforced grades to create a wide range of products with tailored properties for specific processes and end-uses. Zytel® nylon resin, including most flame retardant grades, offer the ability to be coloured.

The good melt stability of Zytel® nylon resin normally enables the recycling of properly handled production waste. If recycling is not possible, DuPont recommends, as the preferred option, incineration with energy recovery (-31kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

Zytel® nylon resin typically is used in demanding applications in the automotive, furniture, domestic appliances, sporting goods and construction industry.

Zytel® FR70G25V0 NC010 is a 25% glass fiber reinforced, heat stabilized, flame retardant polyamide 66 resin for injection molding.

Proprietà Reologiche	secco/cond	Unità	Norma del test
Ritiro di stampaggio, parallelo	0.2 / *	%	ISO 294-4, 2577
Ritiro di stampaggio, perpendicolare	1.0 / *	%	ISO 294-4, 2577
Proprietà Meccaniche	secco/cond	Unità	Norma del test
Modulo a trazione	9000 / 7500	MPa	ISO 527-1/-2
Carico unitario a rottura	130 / 110	MPa	ISO 527-1/-2
Deformazione a rottura	2.4 / 3.4	%	ISO 527-1/-2
Resistenza all'urto Charpy, +23°C	43 / -	kJ/m ²	ISO 179/1eU
Resistenza all'urto Charpy, -30°C	45 / -	kJ/m ²	ISO 179/1eU
Resist. urto Charpy con intaglio, +23°C	10 / -	kJ/m ²	ISO 179/1eA
Resist. urto Charpy con intaglio, -30°C	9 / -	kJ/m ²	ISO 179/1eA
Proprietà Termiche	secco/cond	Unità	Norma del test
Temperatura di fusione, 10°C/min	260 / *	°C	ISO 11357-1/-3
Temp.di inflessione sotto carico, 1.80 MPa	243 / *	°C	ISO 75-1/-2
Temp.di rammollimento Vicat, 50°C/h 50N	235 / *	°C	ISO 306
Coeff.di dilatazione termica lin., parallelo	26 / *	E-6/K	ISO 11359-1/-2
Coeff.di dilatazione termica lin., perpend.	83 / *	E-6/K	ISO 11359-1/-2
Reaz. al fuoco spess.nom. 1.5mm	V-0 / *	class	IEC 60695-11-10
Spessore provato	1.5 / *	mm	IEC 60695-11-10
Yellow Card disponibile	Yes / *	-	-
Reazione al fuoco a spessore h	V-0 / *	class	IEC 60695-11-10
Spessore provato	0.8 / *	mm	IEC 60695-11-10
Yellow Card disponibile	Yes / *	-	-
Reazione al fuoco 5V a spess. h	5VA / *	class	IEC 60695-11-20
Spessore provato	1.5 / *	mm	IEC 60695-11-20
Yellow Card disponibile	Yes / *	-	-
FMVSS	DNI	-	ISO 3795 (FMVSS 302)
Proprietà Elettriche	secco/cond	Unità	Norma del test
Resistività volumica	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Resistività superficiale	* / 1E13	Ohm	IEC 62631-3-2
Rigidità dielettrica	37 / 26	kV/mm	IEC 60243-1
Res. Alle correnti striscianti superficiali	350 / 325	-	IEC 60112

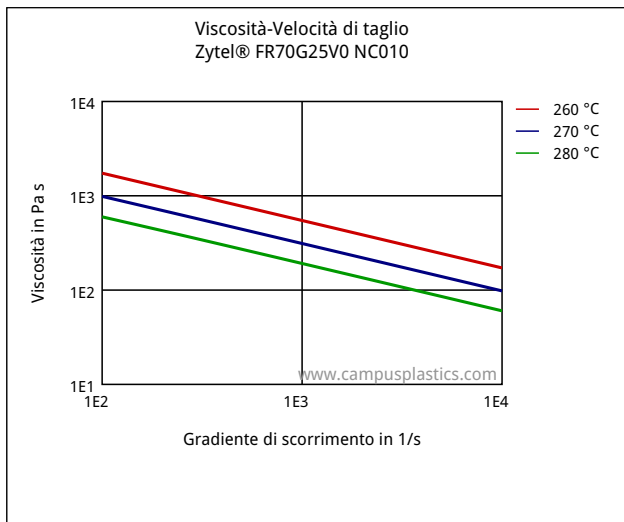
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Altre Proprietà	secco/cond	Unità	Norma del test
Assorbimento d'acqua	3.4 / *	%	Sim. alla ISO 62
Assorbimento d'umidità	0.9 / *	%	Sim. alla ISO 62
Massa volumica	1530 / -	kg/m ³	ISO 1183

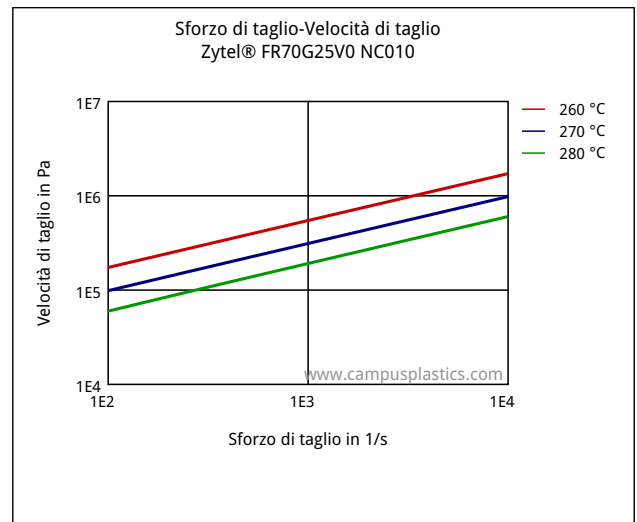
Proprietà reologiche per la simulazione	Valore	Unità	Norma del test
Densità del fuso	1350	kg/m ³	-
Conducibilità termica del fuso	0.22	W/(m K)	-
Capacità termica specifica del fuso	1910	J/(kg K)	-
Temperatura di estrazione	210	°C	-

Funzioni

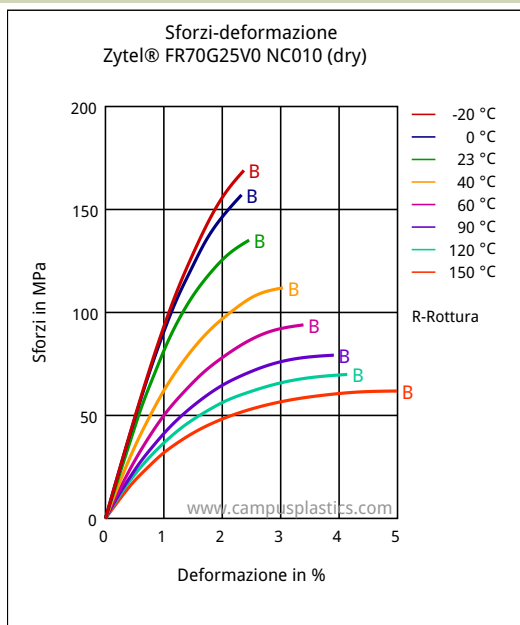
Viscosità-Velocità di taglio



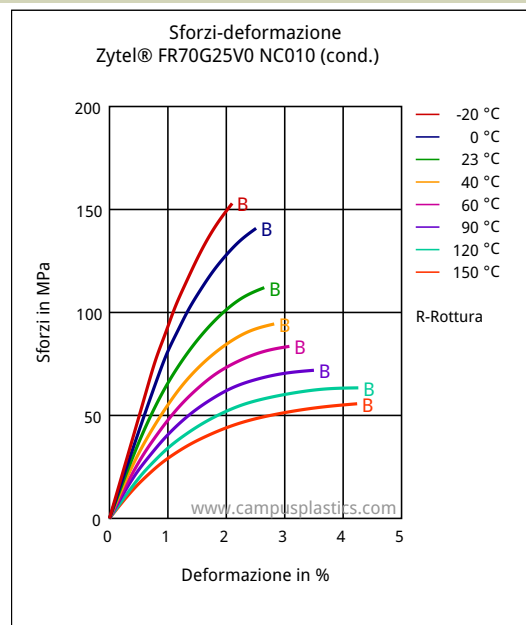
Sforzo di taglio-Velocità di taglio



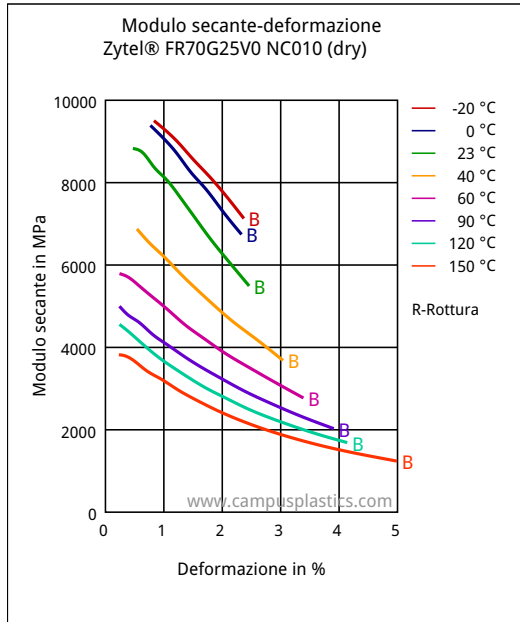
Sforzi-deformazione



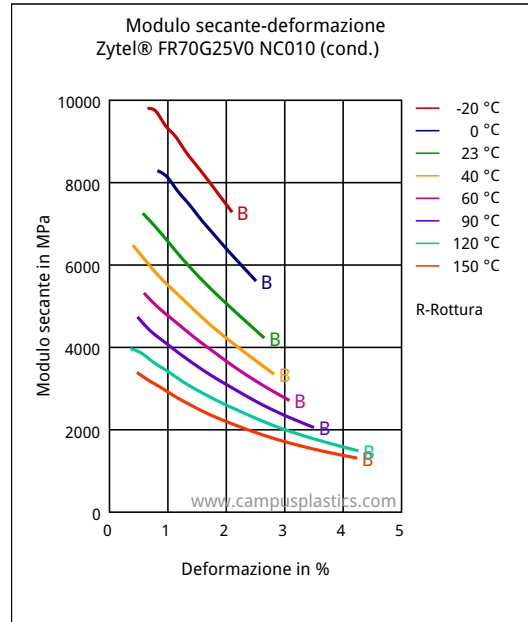
Sforzi-deformazione



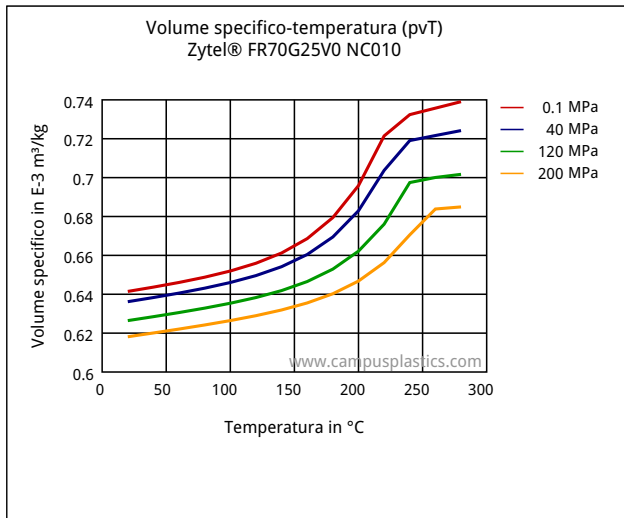
Modulo secante-deformazione



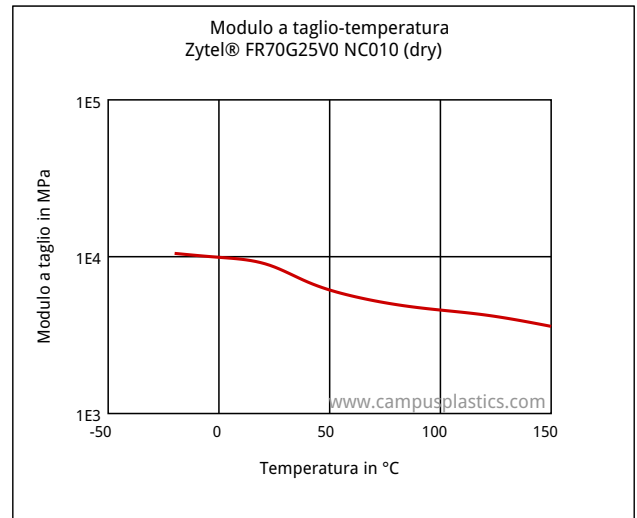
Modulo secante-deformazione



Volume specifico-temperatura (pvT)

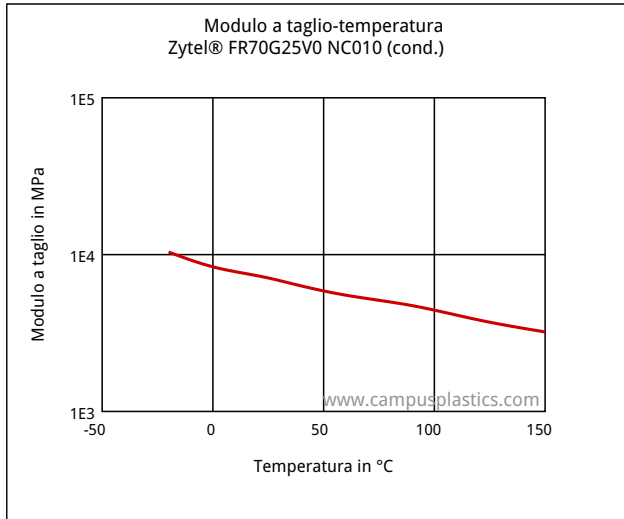


Modulo a taglio-temperatura

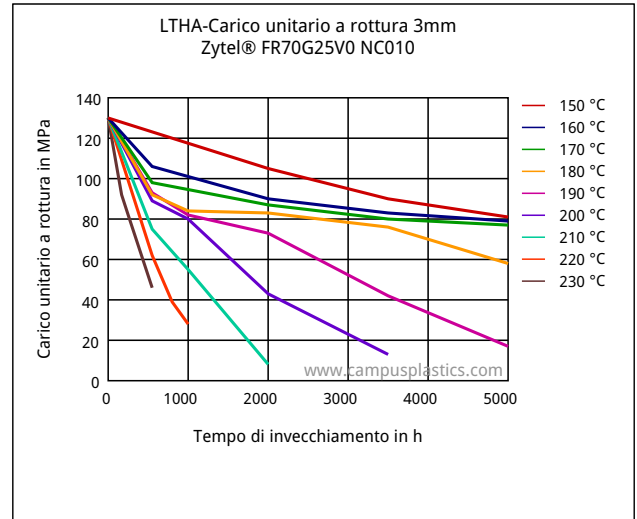


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Modulo a taglio-temperatura



LTHA-Carico unitario a rottura 3mm



Caratteristiche

Processabilità e Forma di Forni

Stampaggio ad Iniezione

Forma fisica disponibile

Pellet

Additivi

Agente di distacco

Disponibilità geografica

Europa, Asia Oceano Pacifico, Near East/Africa

Resistenza chimica

Acidi

- 😊 Acido acetico (5% da massa) (23°C)
- 😊 Soluzione acida citrica (10% da massa) (23°C)
- 😊 Acido lattico (10% da massa) (23°C)
- 🚫 Acido cloridrico (36% da massa) (23°C)
- 🚫 Acido nitrico (40% da massa) (23°C)
- 🚫 Acido solforico (38% da massa) (23°C)
- 🚫 Acido solforico (5% da massa) (23°C)
- 🚫 Soluzione acida cromica (40% da massa) (23°C)

Basi

- 🚫 Soluzione dell' idrossido del sodio (35% da massa) (23°C)
- 😊 Soluzione dell' idrossido del sodio (1% da massa) (23°C)
- 😊 Soluzione dell' idrossido di ammonio (10% da massa) (23°C)

Alcool

- 😊 Alcool di isopropile (23°C)
- 😊 Metanolo (23°C)
- 😊 Etanolo (23°C)

Idrocarburi

- 😊 n-Hexane (23°C)
- 😊 Toluene (23°C)
- 😊 isoottano (23°C)

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Chetoni

☹️ Acetone (23°C)

Eteri

☹️ Etere Etilico (23°C)

Oli minerali

- ☹️ Olio multigrade del motore di SAE 10W40 (23°C)
- ☹️ Olio multigrade del motore di SAE 10W40 (130°C)
- ☹️ Olio dell' ipoide-ingranaggio di SAE 80/90 (130°C)
- ☹️ Olio isolante (23°C)

Combustibili Standard

- ☹️ Liquido 1 di ISO 1817 (60°C)
- ☹️ Liquido 2 di ISO 1817 (60°C)
- ☹️ Liquido 3 di ISO 1817 (60°C)
- ☹️ Liquido 4 di ISO 1817 (60°C)
- ☹️ Combust. stand. senza alcool (pref. ISO 1817 liquido C) (23°C)
- ☹️ Combust. stand. con alcool (pref. ISO 1817 liquido 4) (23°C)
- ☹️ Combustibile diesel (pref. ISO 1817 liquido F) (23°C)
- ☹️ Combustibile diesel (pref. ISO 1817 liquido F) (90°C)
- ☹️ Combustibile diesel (pref. ISO 1817 liquido F) (>90°C)

Soluzioni saline

- ☹️ Soluzione del cloruro di sodio (10% da massa) (23°C)
- 🚫 Soluzione dell' ipoclorito del sodio (10% da massa) (23°C)
- ☹️ Soluzione del carbonato di sodio (20% da massa) (23°C)
- ☹️ Soluzione del carbonato di sodio (2% da massa) (23°C)
- 🚫 Soluzione del cloruro dello zinco (50% da massa) (23°C)

Altri

- ☹️ Acetato etilico (23°C)
- 🚫 Perossido di idrogeno (23°C)
- ☹️ Liquido di freno del DOT N° 4 (130°C)
- ☹️ Glicol etilenico (50% da massa) in acqua (108°C)
- ☹️ etanolo di nonylphenoxy-polyethyleneoxy 1% in acqua (23°C)
- ☹️ acido oleico 50% + olio di oliva 50% (23°C)
- ☹️ Acqua (23°C)
- 🚫 Acqua deionizzata (90°C)
- 🚫 Soluzione del fenolo (5% da massa) (23°C)

All data provided according to ISO 10350 for single points and ISO 11403 for multipoints.

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.

Test temperatures are 23°C unless otherwise stated.

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The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls

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