

CAMPUS® foglio dati



Zytel® 73G30HSL NC010 - PA6-GF30
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® 73G30HSL NC010 is a 30% glass fibre reinforced, heat stabilised polyamide 6 for injection molding.

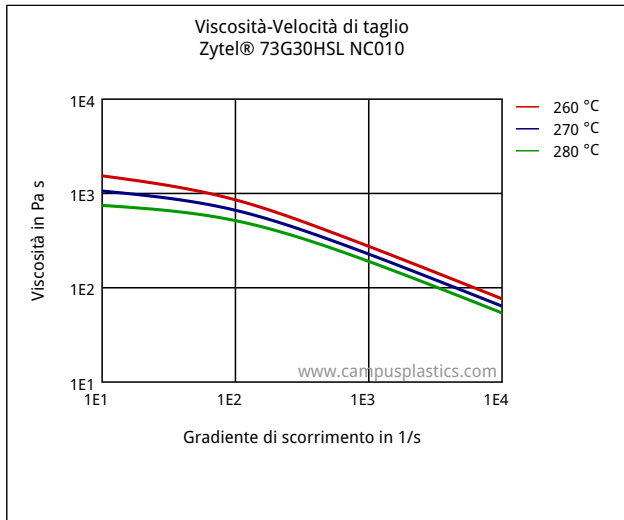
Proprietà Reologiche	secco/cond	Unitá	Norma del test
Ritiro di stampaggio, parallelo	0.2 / *	%	ISO 294-4, 2577
Ritiro di stampaggio, perpendicolare	0.6 / *	%	ISO 294-4, 2577
Proprietà Meccaniche	secco/cond	Unitá	Norma del test
Modulo a trazione	9500 / 6000	MPa	ISO 527-1/-2
Carico unitario a rottura	190 / 120	MPa	ISO 527-1/-2
Deformazione a rottura	3.5 / 6	%	ISO 527-1/-2
Modulo di scorrimento a trazione, 1h	* / 5500	MPa	ISO 899-1
Modulo di scorrimento a trazione, 1000h	* / 4500	MPa	ISO 899-1
Resistenza all'urto Charpy, +23°C	100 / 100	kJ/m ²	ISO 179/1eU
Resistenza all'urto Charpy, -30°C	80 / 80	kJ/m ²	ISO 179/1eU
Resist. urto Charpy con intaglio, +23°C	16 / 23	kJ/m ²	ISO 179/1eA
Resist. urto Charpy con intaglio, -30°C	10 / 21	kJ/m ²	ISO 179/1eA
Energia di perforazione, +23°C	3.5 / 6.5	J	ISO 6603-2
Proprietà Termiche	secco/cond	Unitá	Norma del test
Temperatura di fusione, 10°C/min	221 / *	°C	ISO 11357-1/-3
Temperatura di transizione vetrosa, 10°C/min	60 / *	°C	ISO 11357-1/-2
Temp.di inflessione sotto carico, 1.80 MPa	210 / *	°C	ISO 75-1/-2
Temp.di inflessione sotto carico, 0.45 MPa	220 / *	°C	ISO 75-1/-2
Temp.di rammollimento Vicat, 50°C/h 50N	215 / *	°C	ISO 306
Coeff.di dilatazione termica lin., parallelo	26 / *	E-6/K	ISO 11359-1/-2
Coeff.di dilatazione termica lin., perpend.	75 / *	E-6/K	ISO 11359-1/-2
Reaz. al fuoco spess.nom. 1.5mm	HB / *	class	IEC 60695-11-10
Spessore provato	1.5 / *	mm	IEC 60695-11-10
Yellow Card disponibile	Yes / *	-	-
Reazione al fuoco a spessore h	HB / *	class	IEC 60695-11-10
Spessore provato	0.8 / *	mm	IEC 60695-11-10
Yellow Card disponibile	Yes / *	-	-
Velocità di avanzamento fiamma, spessore 1mm	50	mm/min	ISO 3795 (FMVSS 302)
FMVSS	B	-	ISO 3795 (FMVSS 302)
Indice di ossigeno	21 / *	%	ISO 4589-1/-2
Altre Proprietà	secco/cond	Unitá	Norma del test
Assorbimento d'acqua	6.3 / *	%	Sim. alla ISO 62
Assorbimento d'umidità	2.1 / *	%	Sim. alla ISO 62

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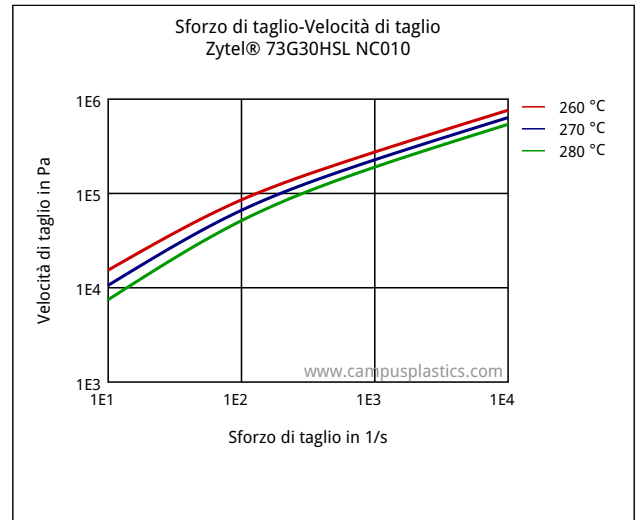
Massa volumica	1360 / -	kg/m ³	ISO 1183
Proprietà Specifiche Materiale	secco/cond	Unità	Norma del test
Numero di viscosità	140 / *	cm ³ /g	ISO 307, 1157, 1628
Proprietà reologiche per la simulazione	Valore	Unità	Norma del test
Densità del fuso	1200	kg/m ³	-
Conduktività termica del fuso	0.26	W/(m K)	-
Capacità termica specifica del fuso	2280	J/(kg K)	-
Diffusività termica	9.1E-8	m ² /s	-

Funzioni

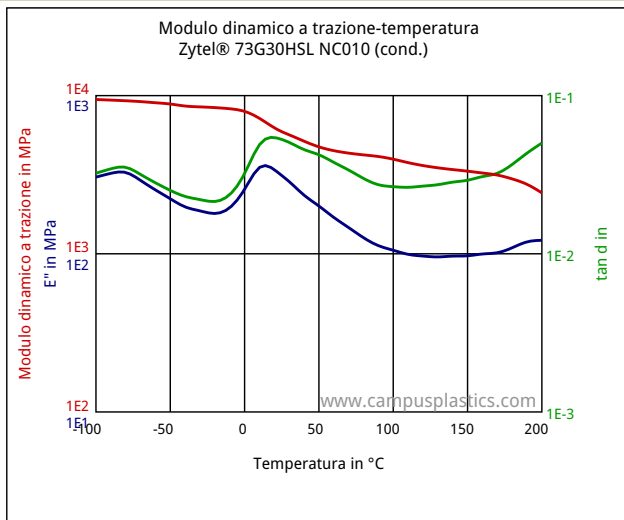
Viscosità-Velocità di taglio



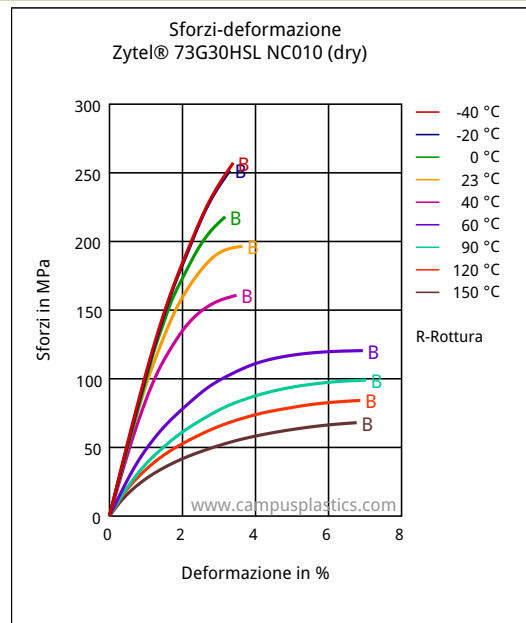
Sforzo di taglio-Velocità di taglio



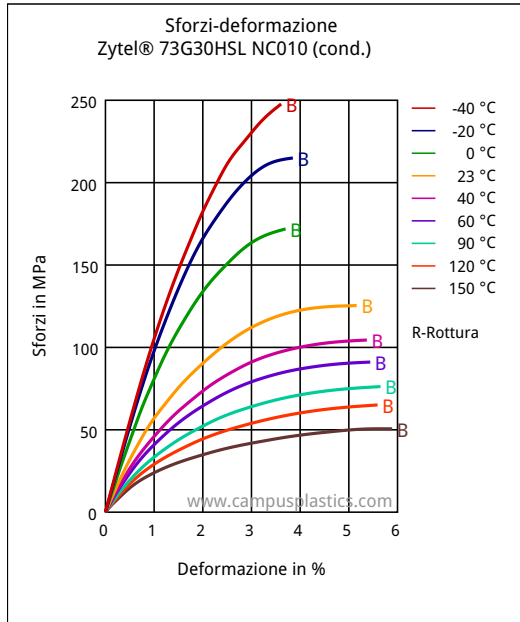
Modulo dinamico a trazione-temperatura



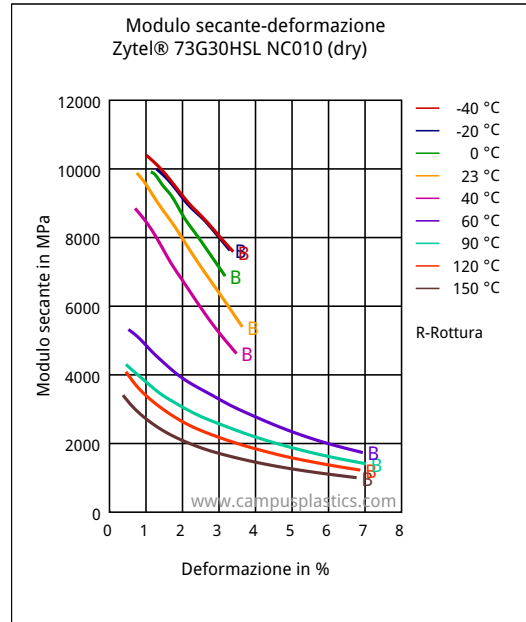
Sforzi-deformazione



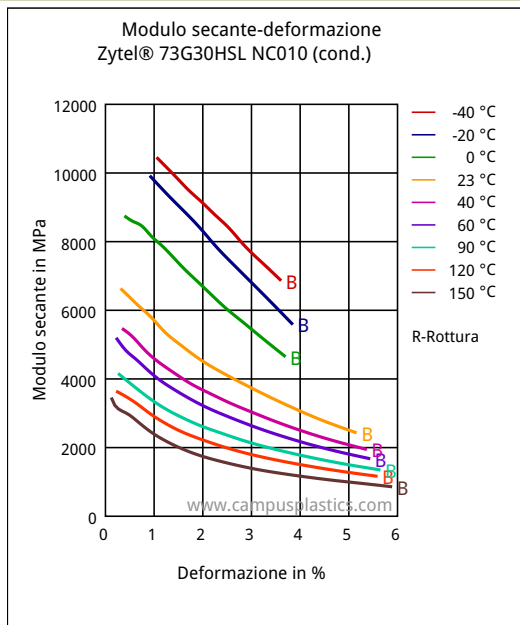
Sforzi-deformazione



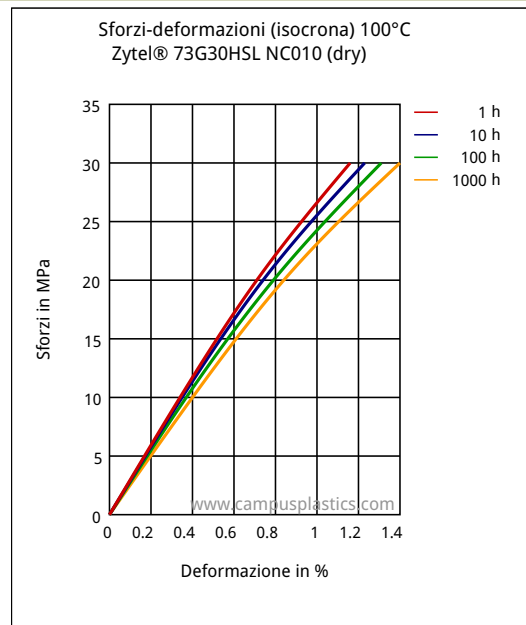
Modulo secante-deformazione



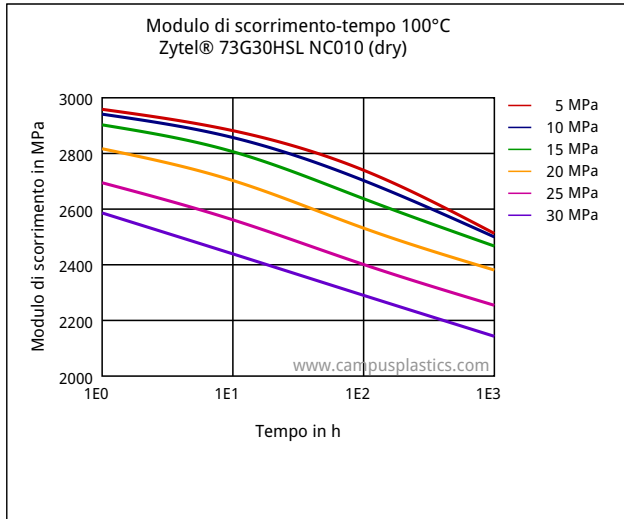
Modulo secante-deformazione



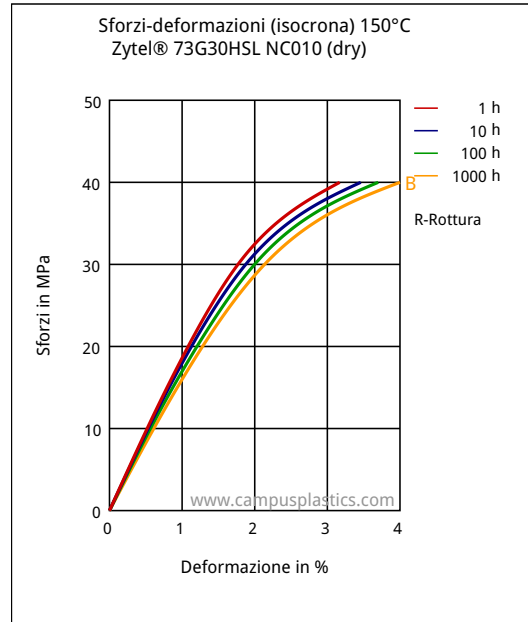
Sforzi-deformazioni (isocrona) 100°C



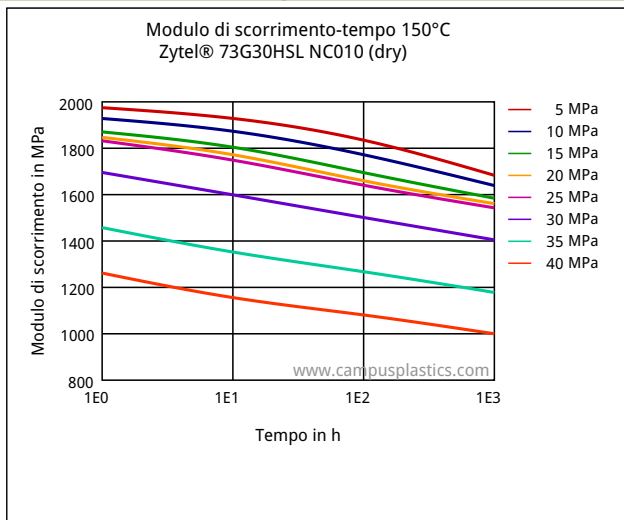
Modulo di scorrimento-tempo 100°C



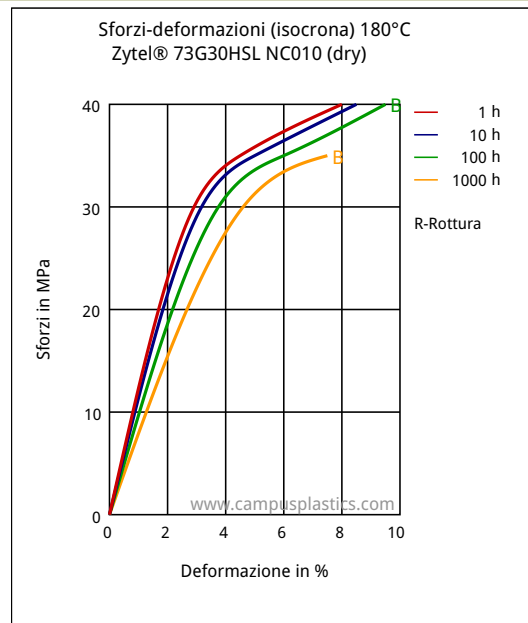
Sforzi-deformazioni (isocrona) 150°C



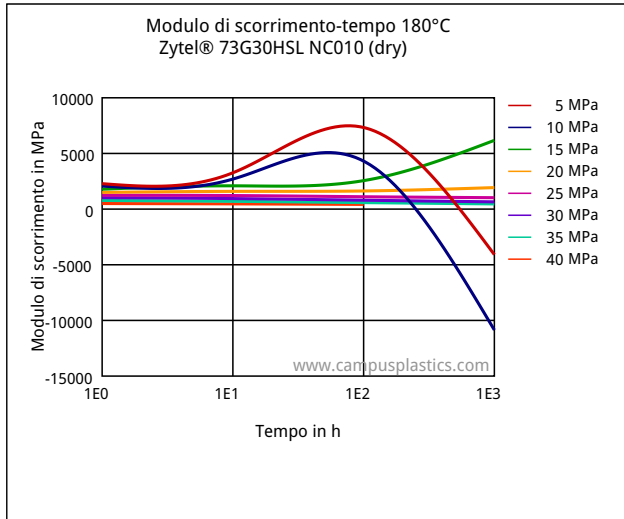
Modulo di scorrimento-tempo 150°C



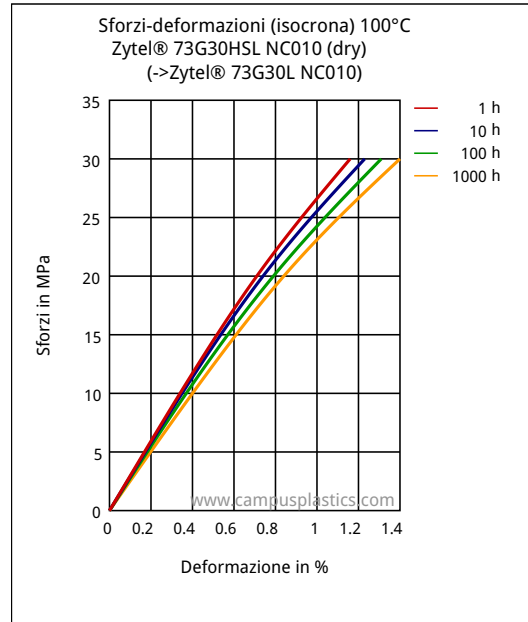
Sforzi-deformazioni (isocrona) 180°C



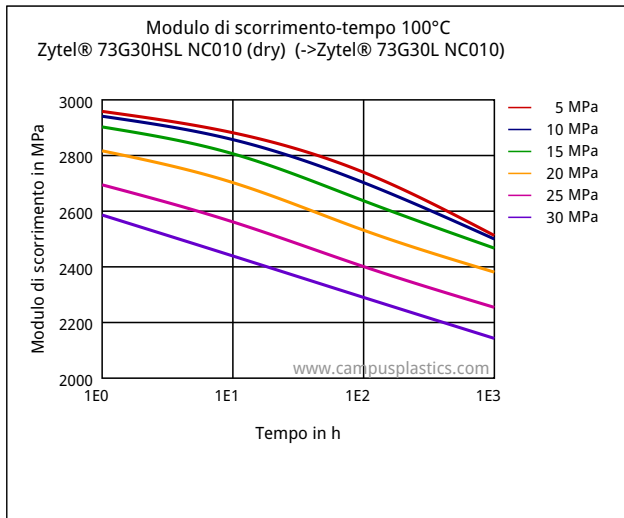
Modulo di scorrimento-tempo 180°C



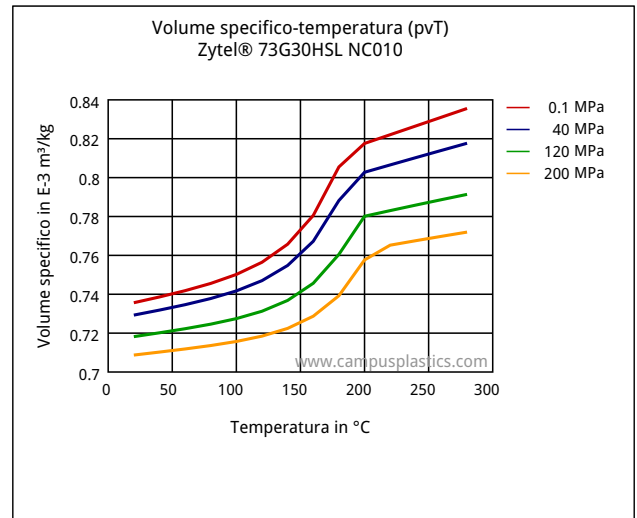
Sforzi-deformazioni (isocrona) 100°C



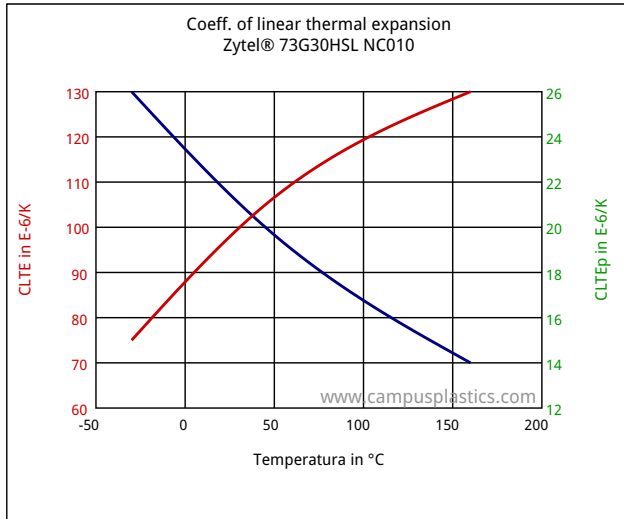
Modulo di scorrimento-tempo 100°C



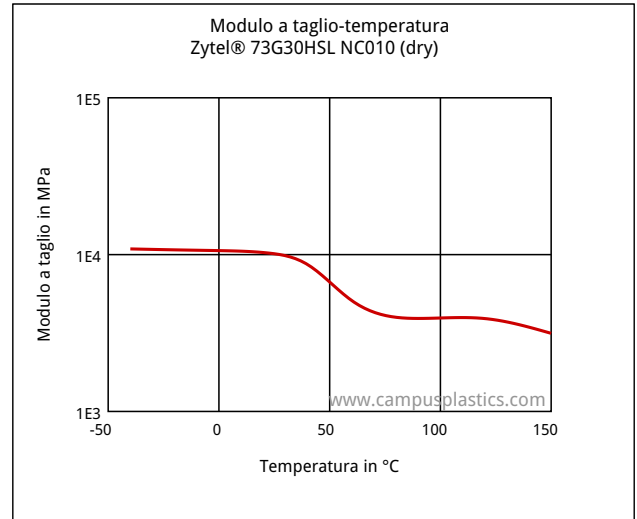
Volume specifico-temperatura (pVT)



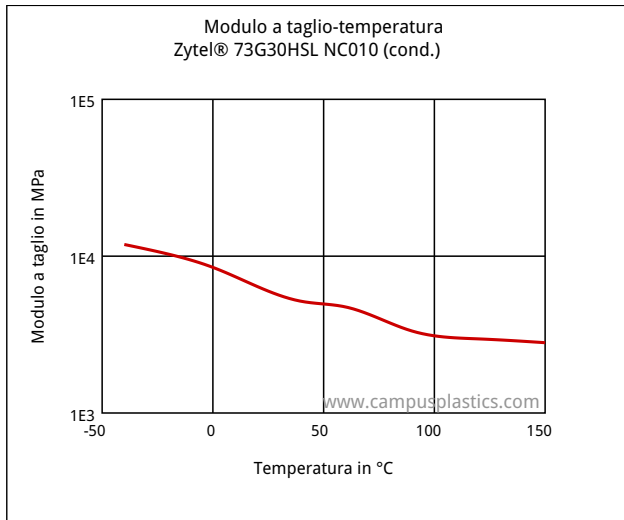
Coeff. of linear thermal expansion



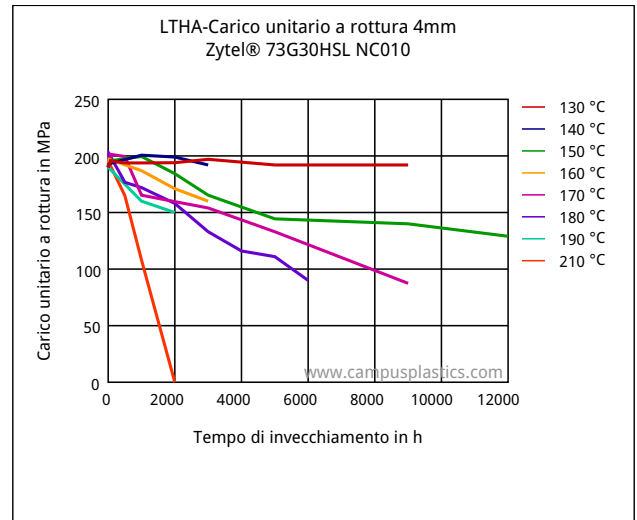
Modulo a taglio-temperatura



Modulo a taglio-temperatura



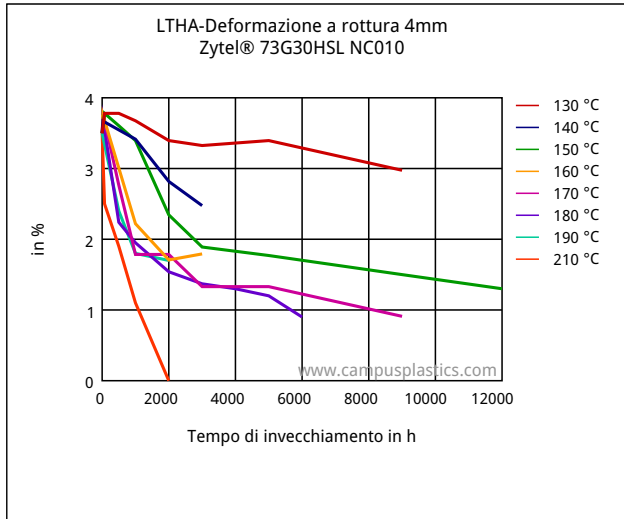
LTHA-Carico unitario a rottura 4mm



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LTHA-Deformazione a rottura 4mm



Caratteristiche

Processabilità e Forma di Forni

Stampaggio ad Iniezione

Forma fisica disponibile

Pellet

Additivi

Lubrificanti, Agente di distacco

Caratteristiche speciali

Stabilizzato o stabile al calore

Disponibilità geografica

Nord America, Europa, Asia Oceano Pacifico, South and Central America, 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)

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- ☺ Toluene (23°C)
- ☺ isoottano (23°C)

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)
- ☹ Diesel EN 590 (100°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)
- ☺ DOT No. 4 Fluido per freni (120°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)
- ☹ Refrigerante Glystantin G48, 1:1 in acqua (125°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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