CAMPUS® foglio dati

Delrin® 100P NC010 - POM
DuPont Engineering Polymers

Testo del prodotto

Common features of Delrin® acetal resins include mechanical and physical properties such as high mechanical strength and rigidity, excellent fatigue and impact resistance, as well as resistance to moisture, gasoline, lubricants, solvents, and many other neutral chemicals. Delrin® acetal resins also have excellent dimensional stability and good electrical insulating characteristics. They are naturally resilient, self-lubricating, and available in a variety of colors and speciality grades.

Delrin® acetal resin typically is used in demanding applications in the automotive, domestic appliances, sports, industrial engineering, electronics, and consumer goods industries.

Delrin® 100P is a high viscosity acetal homopolymer for use in easy-to-fill molds. Delrin® 100P provides a great combination of toughness and strength, improved processing thermal stability and productivity for injection molding, and low VOC emissions.

Proprietà Reologiche	Valore	Unitá	Norma del test
Indice di fusione di volume, MVR	**2.1**	cm³/10min	ISO 1133
Temperatura	**190**	°C	ISO 1133
Carico	**2.16**	kg	ISO 1133
Ritiro di stampaggio, parallelo	**2.2**	%	ISO 294-4, 2577
Ritiro di stampaggio, perpendicolare	**1.9**	%	ISO 294-4, 2577

Proprietà Meccaniche	Valore	Unitá	Norma del test
Modulo a trazione	**2900**	MPa	ISO 527-1/-2
Carico unitario a trazione	**70**	MPa	ISO 527-1/-2
Deformazione a snervamento	**26**	%	ISO 527-1/-2
Deformazione nominale a rottura	**45**	%	ISO 527-1/-2
Modulo di scorrimento a trazione, 1h	**2700**	MPa	ISO 899-1
Modulo di scorrimento a trazione, 1000h	**1500**	MPa	ISO 899-1
Resistenza all'urto Charpy, +23°C	**N**	kJ/m²	ISO 179/1eU
Resistenza all'urto Charpy, -30°C	**400**	kJ/m²	ISO 179/1eU
Resist. urto Charpy con intaglio, +23°C	**14**	kJ/m²	ISO 179/1eA
Resist. urto Charpy con intaglio, -30°C	**13**	kJ/m²	ISO 179/1eA

Proprietà Termiche	Valore	Unitá	Norma del test
Temperatura di fusione, 10°C/min	**178**	°C	ISO 11357-1/-3
Temp.di inflessione sotto carico, 1.80 MPa	**95**	°C	ISO 75-1/-2
Temp.di inflessione sotto carico, 0.45 MPa	**155**	°C	ISO 75-1/-2
Temp.di rammollimento Vicat, 50°C/h 50N	**160**	°C	ISO 306
Coeff.di dilatazione termica lin., parallelo	**110**	E-6/K	ISO 11359-1/-2
Coeff.di dilatazione termica lin., perpend.	**110**	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**	-	-

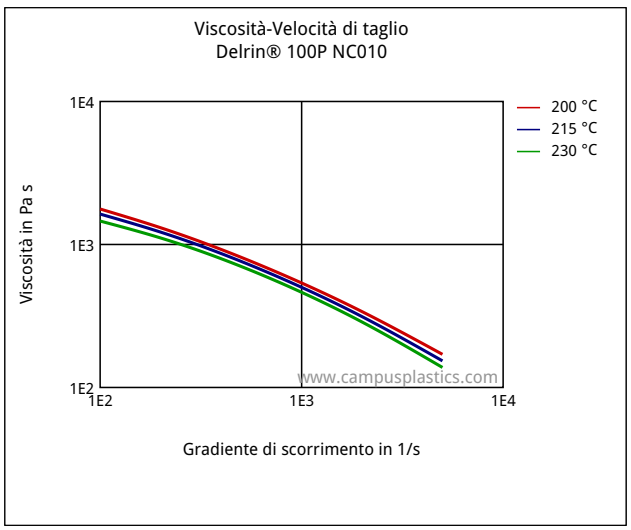
Proprietà Elettriche	Valore	Unitá	Norma del test
Costante dielettrica relativa, 100Hz	**3.9**	-	IEC 62631-2-1
Costante dielettrica relativa, 1MHz	**3.9**	-	IEC 62631-2-1
Fattore di dissipazione, 100Hz	**35**	E-4	IEC 62631-2-1
Fattore di dissipazione, 1MHz	**55**	E-4	IEC 62631-2-1
Resistività volumica	**1E12**	Ohm*m	IEC 62631-3-1
Resistività superficiale	**2E13**	Ohm	IEC 62631-3-2

Rigidità dielettrica	**41**	kV/mm	IEC 60243-1
Res. Alle correnti striscianti superficiali	**600**	-	IEC 60112

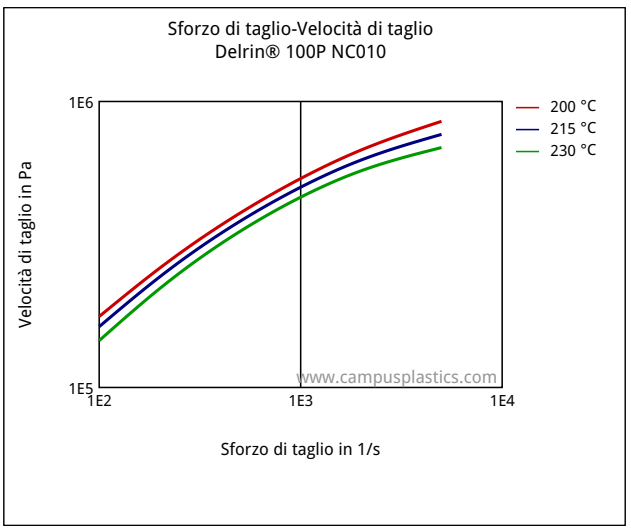
Altre Proprietà	**Valore**	**Unitá**	**Norma del test**
Assorbimento d'acqua	**1.4**	%	Sim. alla ISO 62
Assorbimento d'umidità	**0.3**	%	Sim. alla ISO 62
Massa volumica	**1420**	kg/m³	ISO 1183

Funzioni

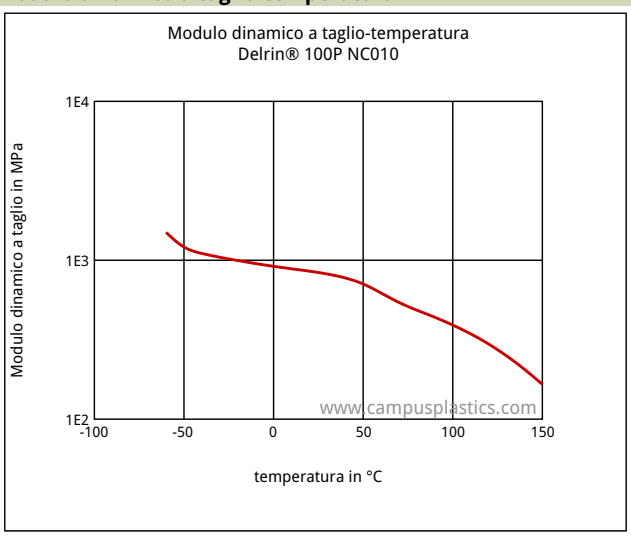
Viscosità-Velocità di taglio



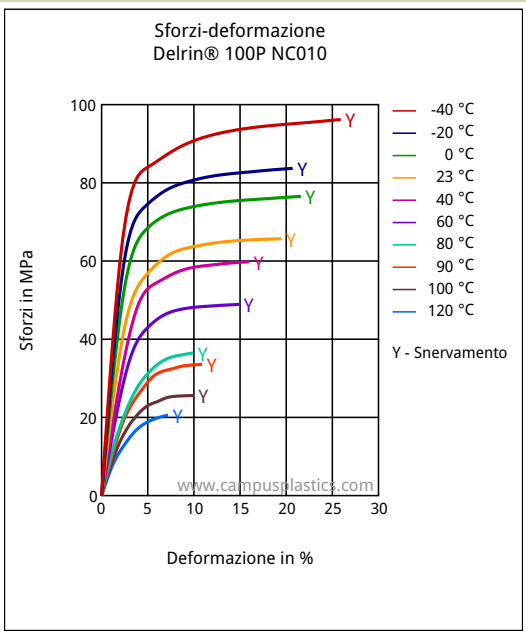
Sforzo di taglio-Velocità di taglio



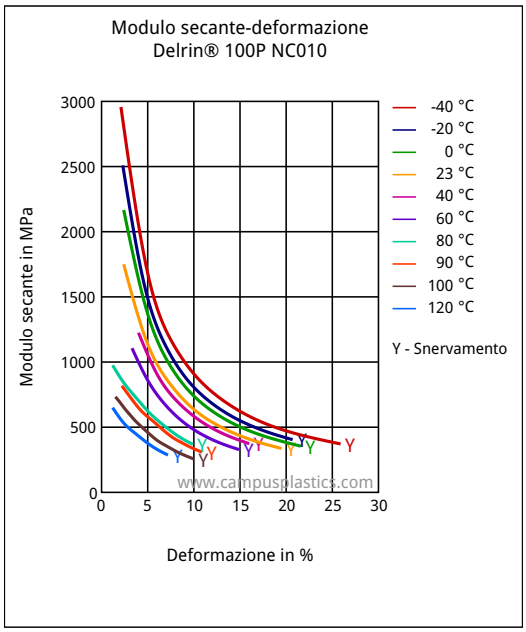
Modulo dinamico a taglio-temperatura



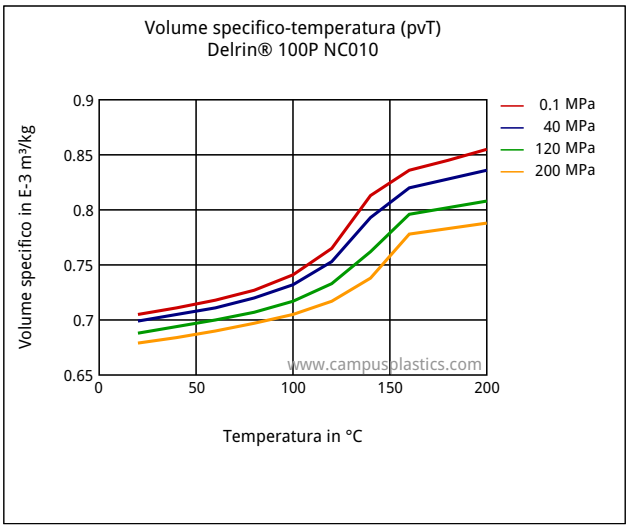
Sforzi-deformazione



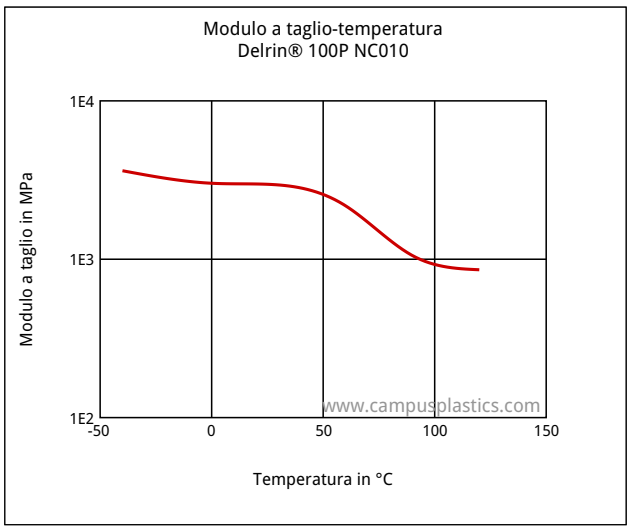
Modulo secante-deformazione



Volume specifico-temperatura (pvT)



Modulo a taglio-temperatura



Caratteristiche

Processabilità e Forma di Forni
Stampaggio ad Iniezione, Estrusione Profilati, Estrusione di Lastre/Fogli, Altre Estrusioni

Forma fisica disponibile
Pellet

Additivi
Lubrificanti, Agente di distacco

Disponibilità geografica
Nord America, Europa, Asia Oceano Pacifico, South and Central America

Altre informazioni

Stampaggio ad Iniezione
Drying is recommended, but not necessary for newly opened packaging stored in a dry location.
Follow the drying guidelines above in the following cases:

· If moisture is above the Processing Moisture Content recommendation,
· When a resin container is damaged,
· When the material is not properly stored in a dry place at room temperature, or
· When packaging stays open for a significant time.

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)

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.

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication.
This information may be subject to revision as new knowledge and experience becomes available.
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For further information, please contact your DuPont representative. You may also request a copy of DuPont POLICY Regarding Medical Applications... H-50103-5 and DuPont CAUTION Regarding Medical Applications... H-50102-5.