

CAMPUS® Datenblatt

Delrin® 100ST NC010 - POM
DuPont Engineering Polymers



Produkttext

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® 100ST is a super-toughened, high viscosity acetal homopolymer grade with superior impact resistance. It is designed for highly stressed parts where outstanding toughness is essential.

Rheologische Eigenschaften	Wert	Einheit	Prüfnorm
Schmelzevolumenrate, MVR	1.7	cm³/10min	ISO 1133
Temperatur	190	°C	ISO 1133
Belastung	2.16	kg	ISO 1133
Verarbeitungsschwindung, parallel	0.8	%	ISO 294-4, 2577
Verarbeitungsschwindung, senkrecht	1.1	%	ISO 294-4, 2577
Mechanische Eigenschaften	Wert	Einheit	Prüfnorm
Zug-Modul	1400	MPa	ISO 527-1/-2
Streckspannung	41	MPa	ISO 527-1/-2
Streckdehnung	30	%	ISO 527-1/-2
Nominelle Bruchdehnung	>50	%	ISO 527-1/-2
Zug-Kriechmodul, 1h	1100	MPa	ISO 899-1
Zug-Kriechmodul, 1000h	550	MPa	ISO 899-1
Charpy-Schlagzähigkeit, +23°C	N	kJ/m²	ISO 179/1eU
Charpy-Schlagzähigkeit, -30°C	N	kJ/m²	ISO 179/1eU
Charpy-Kerbschlagzähigkeit, +23°C	90	kJ/m²	ISO 179/1eA
Charpy-Kerbschlagzähigkeit, -30°C	18	kJ/m²	ISO 179/1eA
Shorehärte D	70	-	ISO 48-4
Thermische Eigenschaften	Wert	Einheit	Prüfnorm
Schmelztemperatur, 10°C/min	178	°C	ISO 11357-1/-3
Glasübergangstemperatur, 10°C/min	-35	°C	ISO 11357-1/-2
Formbeständigkeitstemperatur, 1.80 MPa	60	°C	ISO 75-1/-2
Formbeständigkeitstemperatur, 0.45 MPa	100	°C	ISO 75-1/-2
Längenausdehnungskoeffizient, parallel	130	E-6/K	ISO 11359-1/-2
Längenausdehnungskoeffizient, senkrecht	140	E-6/K	ISO 11359-1/-2
Brennbarkeit bei nominal 1.5mm	HB	class	IEC 60695-11-10
geprüfte Probekörperdicke	1.5	mm	IEC 60695-11-10
Yellow Card vorhanden	Yes	-	-
Elektrische Eigenschaften	Wert	Einheit	Prüfnorm
Dielektrizitätszahl, 100Hz	4.4	-	IEC 62631-2-1
Dielektrizitätszahl, 1MHz	3.8	-	IEC 62631-2-1
Spezifischer Durchgangswiderstand	1E12	Ohm*m	IEC 62631-3-1
Spezifischer Oberflächenwiderstand	1E14	Ohm	IEC 62631-3-2
Vergleichszahl der Kriechwegbildung	600	-	IEC 60112
Andere Eigenschaften	Wert	Einheit	Prüfnorm
Wasseraufnahme	0.9	%	Ähnlich ISO 62
Feuchtigkeitsaufnahme	0.35	%	Ähnlich ISO 62

Dichte

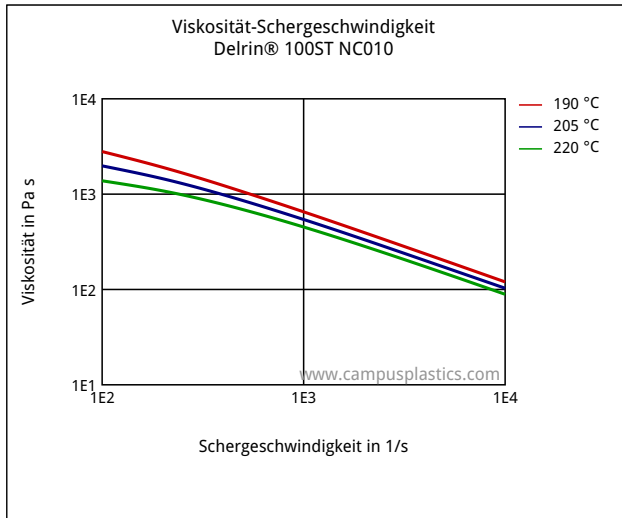
1340

kg/m³

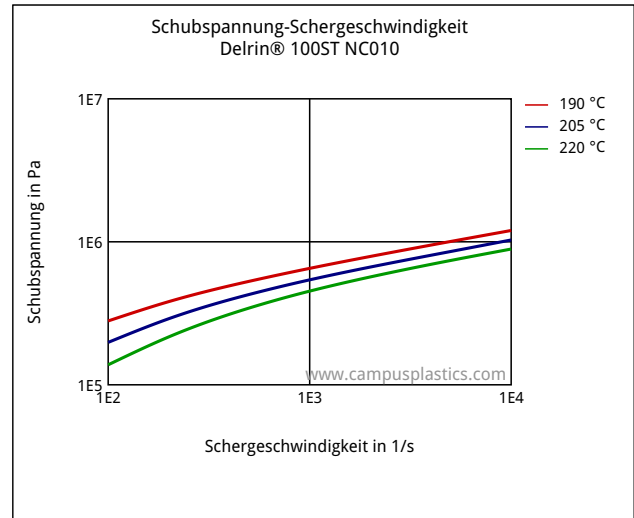
ISO 1183

Diagramme

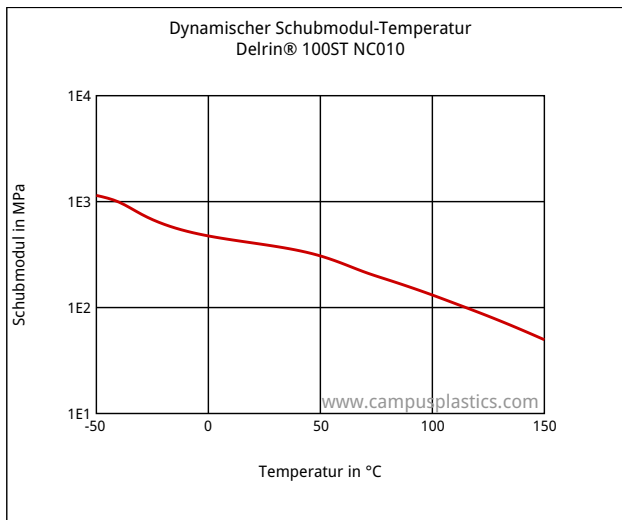
Viskosität-Schergeschwindigkeit



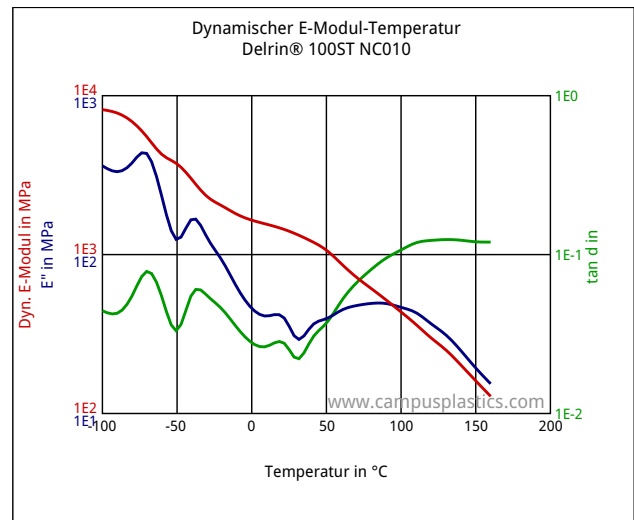
Schubspannung-Schergeschwindigkeit



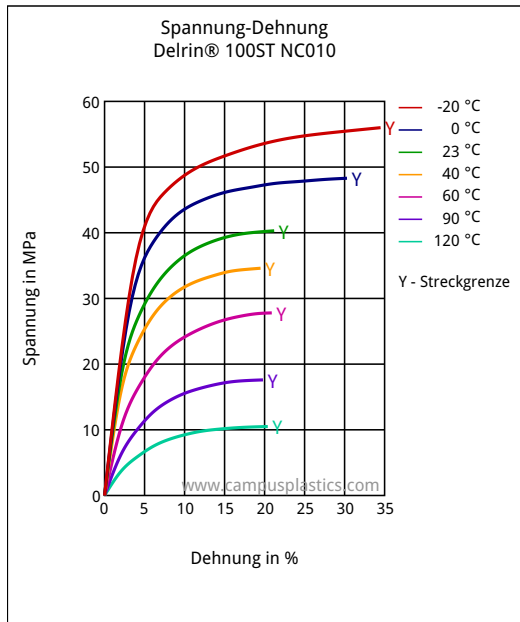
Dynamischer Schubmodul-Temperatur



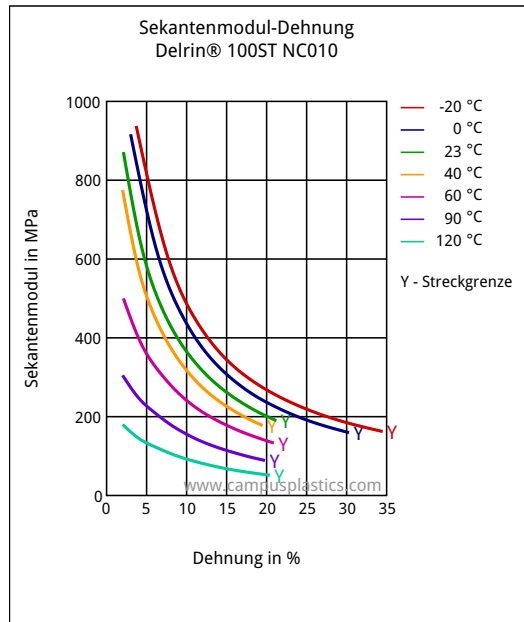
Dynamischer E-Modul-Temperatur



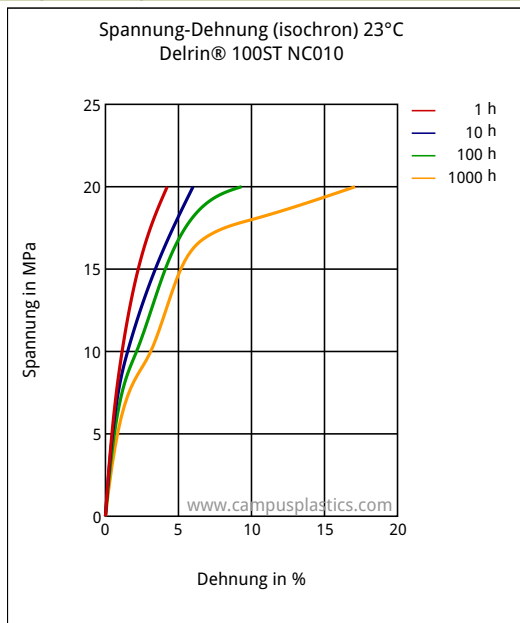
Spannung-Dehnung



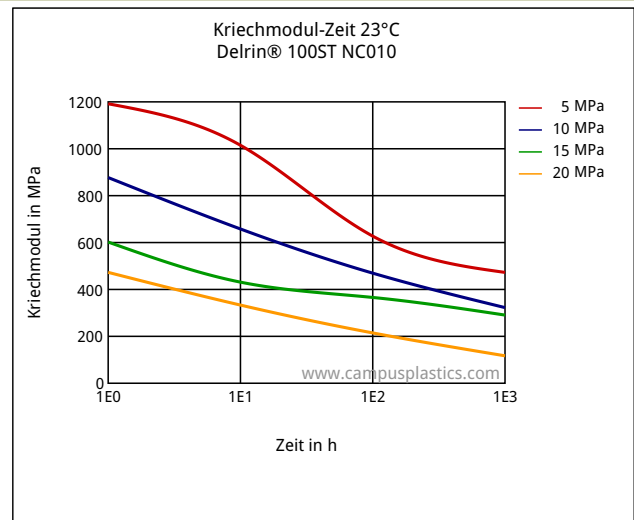
Sekantenmodul-Dehnung



Spannung-Dehnung (isochron) 23°C



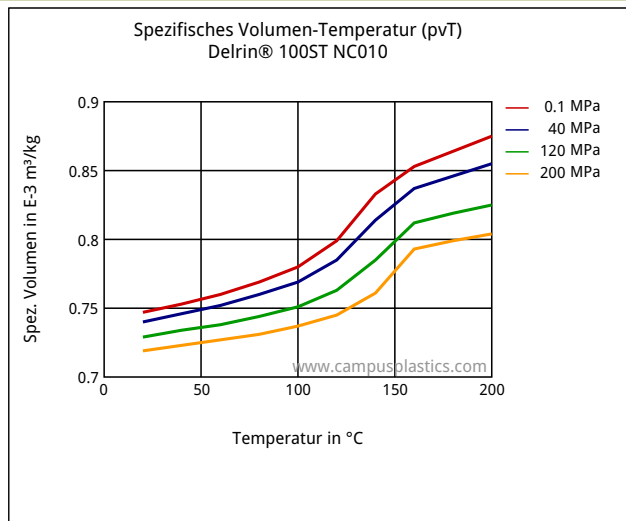
Kriechmodul-Zeit 23°C



Delrin® 100ST NC010 - POM

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Spezifisches Volumen-Temperatur (pvT)



Merkmale

Verarbeitungsmethoden

Spritzgießen, Profilextrusion, Plattenextrusion, übrige Extrusion

Lieferformen

Granulat

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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