

DuPont™ Delrin® 300ATB BK000

ACETAL RESIN

Product Information

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® 300ATB is a filled, medium viscosity, toughened acetal homopolymer, designed to aid static dissipation of electric charge. Processing methods include injection moulding.

General information	Value	Unit	Test Standard
Resin Identification	POM-ICD	-	ISO 1043
Part Marking Code	POM-ICD	-	ISO 11469
Rheological properties	Value	Unit	Test Standard
Melt volume-flow rate	2.3	cm ³ /10min	ISO 1133
Temperature	190	°C	ISO 1133
Load	2.16	kg	ISO 1133
Melt mass-flow rate	3	g/10min	ISO 1133
Melt mass-flow rate, Temperature	190	°C	ISO 1133
Melt mass-flow rate, Load	2.16	kg	ISO 1133
Moulding shrinkage, parallel	1.7	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.5	%	ISO 294-4, 2577
Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	2300	MPa	ISO 527-1/-2
Stress at break	50	MPa	ISO 527-1/-2
Strain at break	16	%	ISO 527-1/-2
Flexural Modulus	2100	MPa	ISO 178
Charpy notched impact strength			ISO 179/1eA
23°C	8	kJ/m ²	
-30°C	6	kJ/m ²	
Izod notched impact strength, 23°C	7	kJ/m ²	ISO 180/1A
Hardness, Rockwell, M-scale	75	-	ISO 2039-2
A: Assessed			
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	178	°C	ISO 11357-1/-3
Temp. of deflection under load			ISO 75-1/-2
1.8 MPa	70	°C	
0.45 MPa	135	°C	
Coeff. of linear therm. expansion, parallel	120	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	120	E-6/K	ISO 11359-1/-2
Flammability	Value	Unit	Test Standard
FMVSS Class	B	-	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<100	mm/min	ISO 3795 (FMVSS 302)
Electrical properties	Value	Unit	Test Standard
Surface resistivity, conductive plastics	20000	Ohm	ASTM D 4496
Volume resistivity, conductive plastics	1000	Ohm*m	ASTM D 4496
Other properties	Value	Unit	Test Standard
Density	1410	kg/m ³	ISO 1183
Injection	Value	Unit	Test Standard
Drying Recommended	yes	-	-
Drying Temperature	≥80	°C	-
Drying Time, Dehumidified Dryer	2 - 4	h	-
Processing Moisture Content	≤0.05	%	-
Melt Temperature Optimum	205	°C	-
Min. melt temperature	200	°C	-

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

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Max. melt temperature	210	°C	-
Mold Temperature Optimum	50	°C	-
Min. mould temperature	40	°C	-
Max. mould temperature	60	°C	-
Hold pressure range	60 - 80	MPa	-
Hold pressure time	7.5	s/mm	-
Extrusion	Value	Unit	Test Standard
Drying Temperature	75 - 85	°C	-
Drying Time, Dehumidified Dryer	2 - 4	h	-
Processing Moisture Content	≤0.05	%	-
Melt Temperature Optimum	200	°C	-
Melt Temperature Range	195 - 205	°C	-

Characteristics

Processing	<ul style="list-style-type: none">• Injection Moulding• Profile Extrusion	<ul style="list-style-type: none">• Sheet Extrusion• Other Extrusion
Delivery form	<ul style="list-style-type: none">• Pellets	
Special characteristics	<ul style="list-style-type: none">• Increased electrical conductivity	<ul style="list-style-type: none">• Static dissipative
Regional Availability	<ul style="list-style-type: none">• North America• Europe	<ul style="list-style-type: none">• Asia Pacific• South and Central America• Near East/Africa• Global

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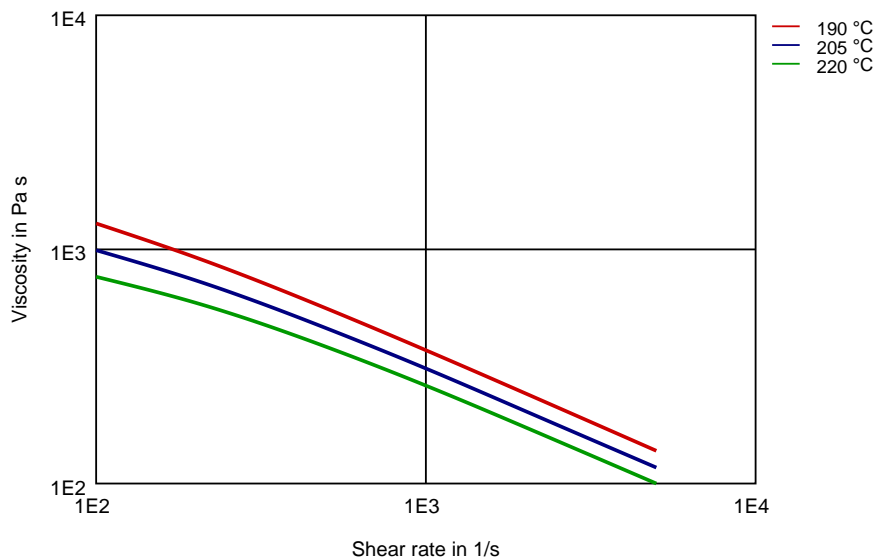


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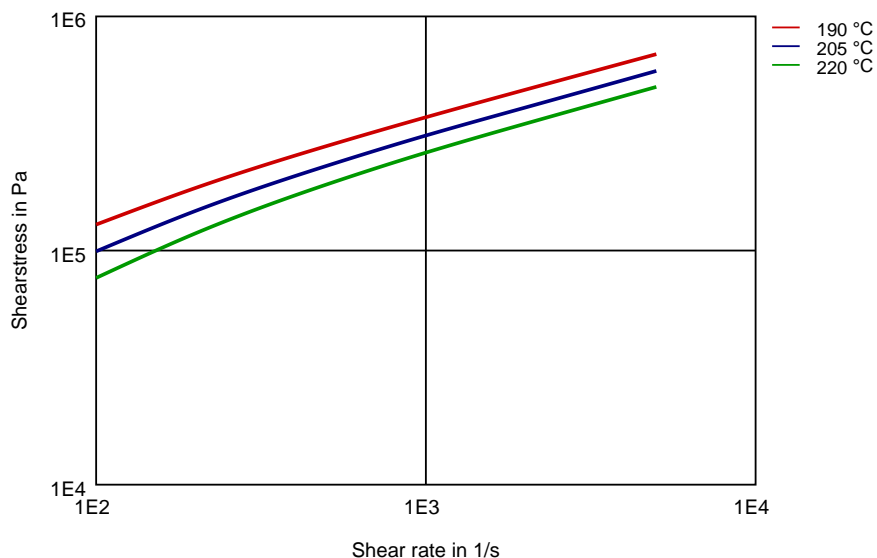
ACETAL RESIN

Diagrams

Viscosity-shear rate



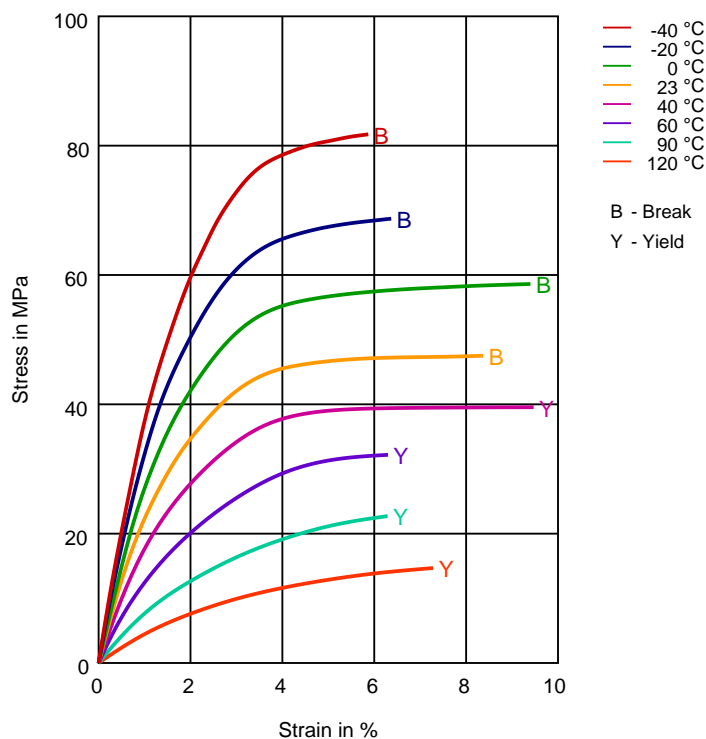
Shearstress-shear rate



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Stress-strain



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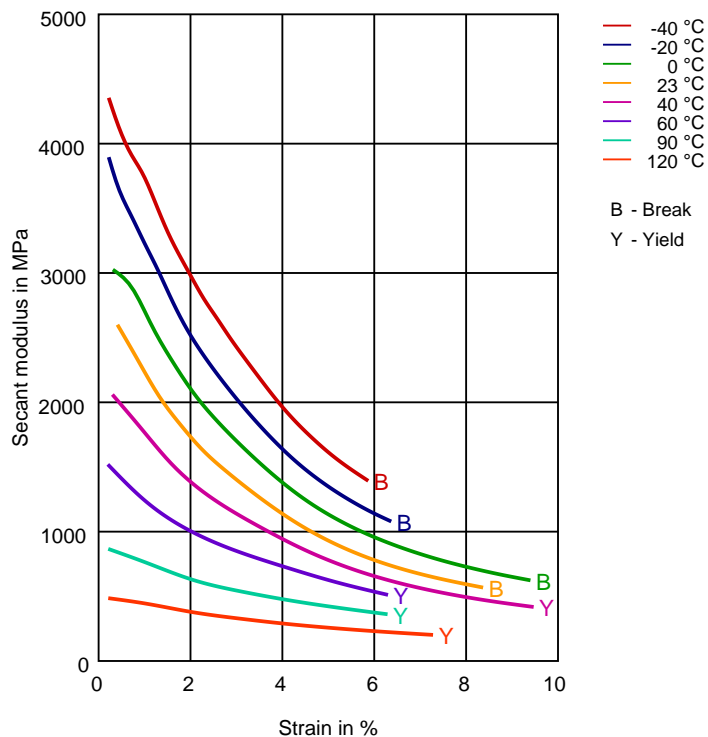


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Secant modulus-strain



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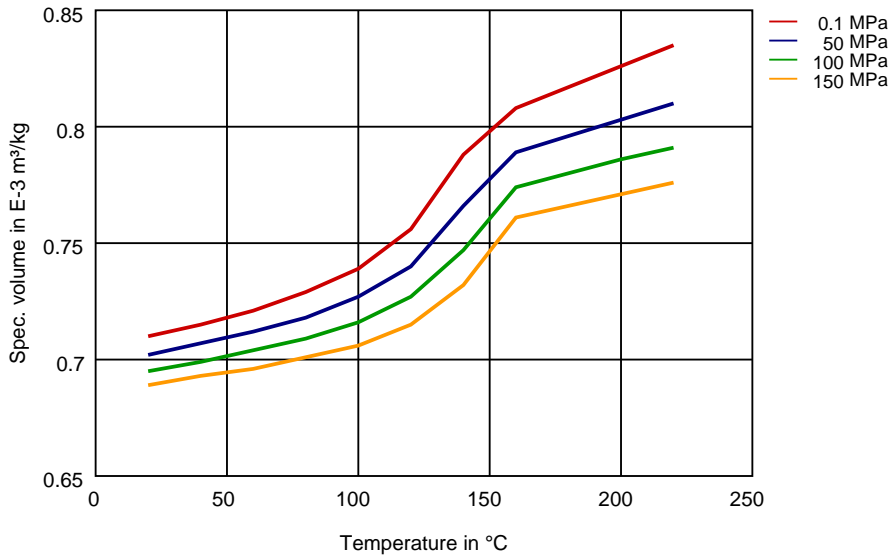
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Specific volume-temperature (pvT)



Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 4mm (Hytrel® measured at 2 mm), IEC Electrical properties measured at 2mm, all ASTM properties measured at 3.2mm, and test temperatures are 23°C unless otherwise stated.

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