



# Delrin® 300CPE NC010 (PRELIMINARY)

## ACETAL RESIN

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® 300CPE (DE20732) is a medium-high viscosity acetal homopolymer with outstanding balance of ease of processing and part performance, and with very low VOC emissions. Delrin® 300CPE provides optimum mechanical performance with its excellent combination of toughness and strength with improved processing, thermal stability and productivity for injection molding.

### 总说明

树脂鉴别	POM	ISO 1043
制品标识码	>POM<	ISO 11469

### 流变性能

熔体体积流动速度, MVR	6 cm <sup>3</sup> /10min	ISO 1133
熔体质量流动速率	7 g/10min	ISO 1133
温度	190 °C	ISO 1133
负荷	2.16 kg	ISO 1133
熔体质量流率, 温度	190 °C	ISO 1133
熔体质量流率, 载荷	2.16 kg	ISO 1133
模塑收缩率, 平行	2.1 %	ISO 294-4, 2577
模塑收缩率, 垂直	1.8 %	ISO 294-4, 2577

### 机械性能

拉伸模量	3100 MPa	ISO 527-1/-2
屈服应力	71 MPa	ISO 527-1/-2
屈服伸长率	25 %	ISO 527-1/-2
名义断裂伸长率	40 %	ISO 527-1/-2
简支梁无缺口冲击强度, +23°C	N kJ/m <sup>2</sup>	ISO 179/1eU
简支梁无缺口冲击强度, -30°C	370 kJ/m <sup>2</sup>	ISO 179/1eU
简支梁缺口冲击强度, +23°C	10.5 kJ/m <sup>2</sup>	ISO 179/1eA
简支梁缺口冲击强度, -30°C	10 kJ/m <sup>2</sup>	ISO 179/1eA
Poisson's ratio	0.37 -	



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### 热性能

熔融温度, 10°C/min	178 °C	ISO 11357-1/-3
热变形温度, 1.80 MPa	94 °C	ISO 75-1/-2
热变形温度, 0.45 MPa	165 °C	ISO 75-1/-2
线膨胀系数, 平行	110 E-6/K	ISO 11359-1/-2
线膨胀系数, 垂直	110 E-6/K	ISO 11359-1/-2

### 燃烧性能

1.5mm名义厚度时的燃烧性	HB class	IEC 60695-11-10
测试用试样的厚度	1.5 mm	IEC 60695-11-10
UL注册	yes -	UL 94
厚度为h时的燃烧性	HB class	IEC 60695-11-10
测试用试样的厚度	0.8 mm	IEC 60695-11-10
UL注册	yes -	UL 94
FMVSS Class	B -	ISO 3795 (FMVSS 302)
燃烧速率, 厚度 : 1毫米	23 mm/min	ISO 3795 (FMVSS 302)

### 电性能

相对介电常数., 100Hz	3.8 -	IEC 62631-2-1
相对介电常数., 1MHz	3.5 -	IEC 62631-2-1
介质损耗因子, 1MHz	56 E-4	IEC 62631-2-1
体积电阻率	>1E13 Ohm.m	IEC 62631-3-1
表面电阻率	>1E15 Ohm	IEC 62631-3-2
相对漏电起痕指数	600 -	IEC 60112

### 其它性能

吸湿性, 2mm	0.2 %	类似ISO 62
吸水性, 2mm	0.9 %	类似ISO 62
密度	1420 kg/m <sup>3</sup>	ISO 1183
熔体密度	1160 kg/m <sup>3</sup>	

### VDA性能

甲醛散发	<2 mg/kg	VDA 275
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### 注塑

建议干燥	是
干燥温度	80 °C
干燥时间, 除湿干燥机	2 - 4 h
加工前水分含量	≤ 0.2 %
好的熔体温度	205 °C
注塑 熔体温度	200 °C
注塑 熔体温度	215 °C
螺杆切线速度	0.2 m/s



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好的模具温度	90 °C
模具温度	80 °C
模具温度	100 °C
保压范围	80 - 100 MPa
保压时间	8 s/mm
喷射温度	135 °C
回火时间, 可选	30 min/mm
回火温度	160 °C

## 典型数据

添加剂

脱模助剂

## 成型

注塑

Drying is recommended, but not necessary for newly opened packaging stored in a dry location.

Follow the drying guidelines above in the following cases:

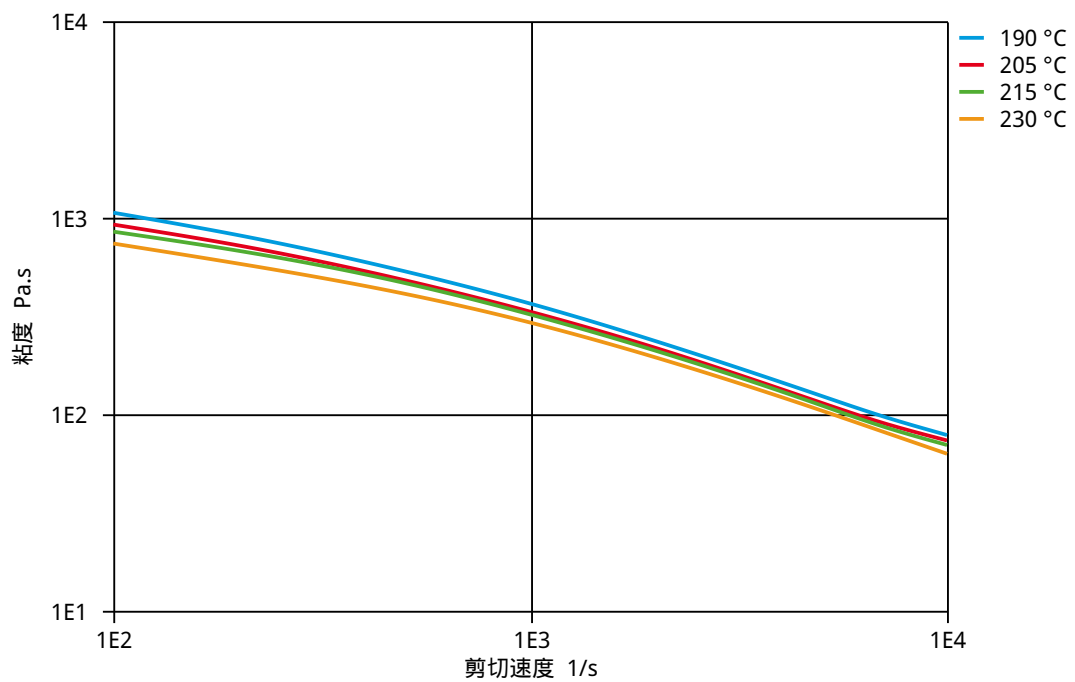
- If moisture is above the Processing Moisture Content recommendation,
- When a resin container is damaged,
- When the material is not properly stored in a dry place at room temperature, or
- When packaging stays open for a significant time.



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粘度 - 剪切速度

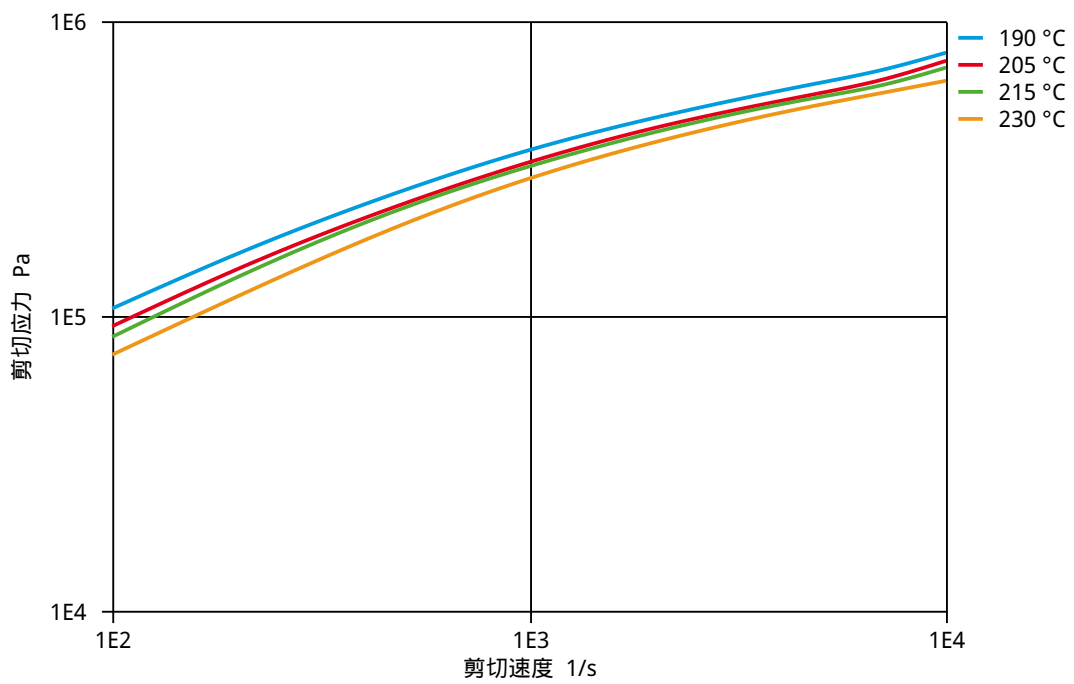




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剪切应力 - 剪切速度

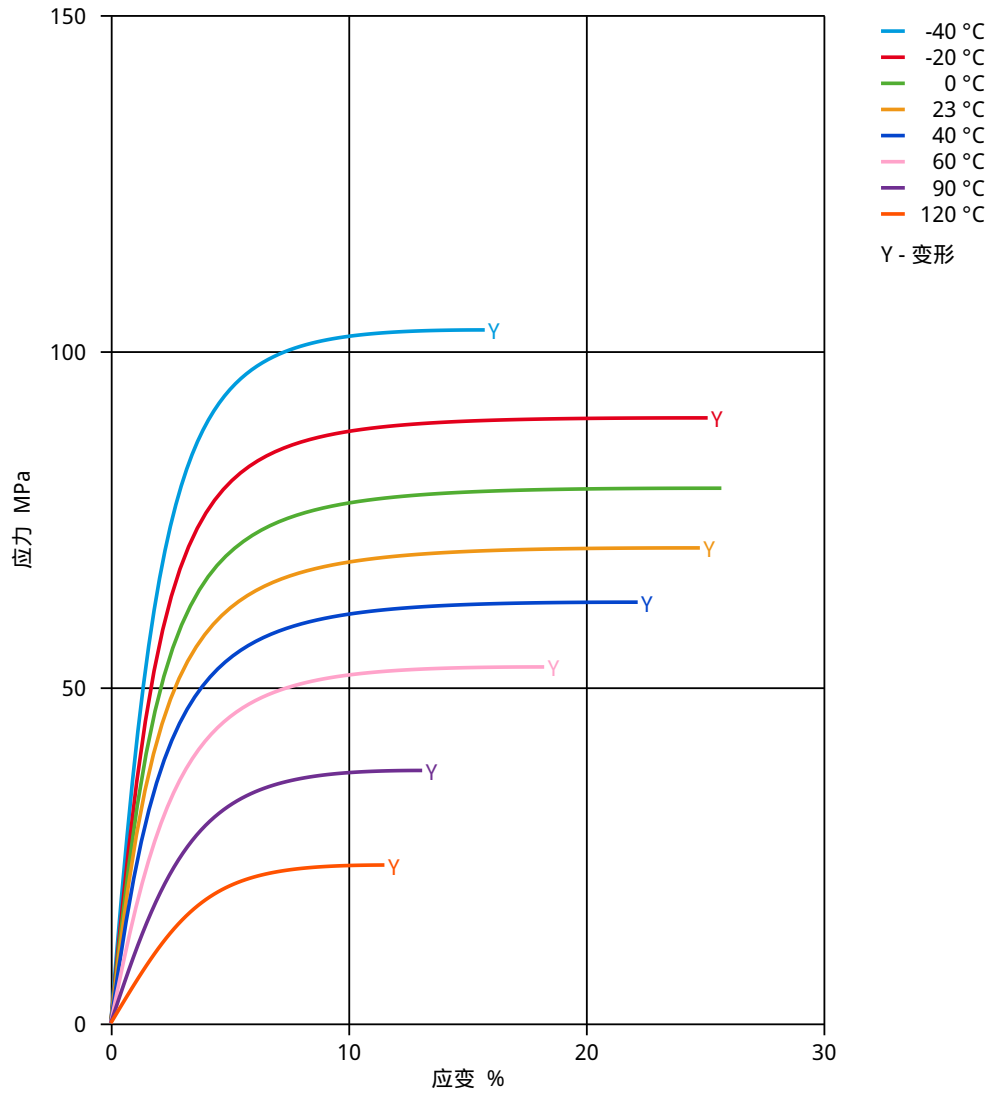




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应力 - 应变.

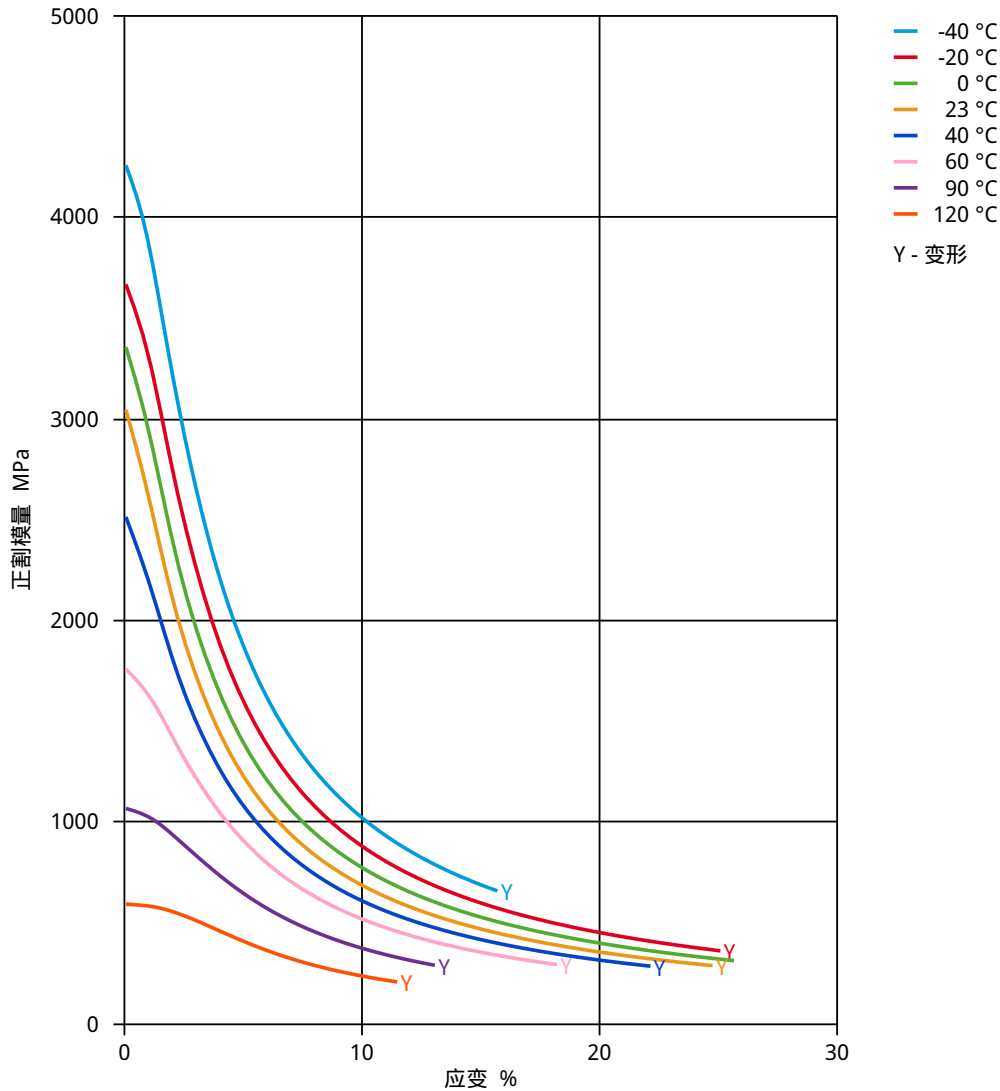




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正割模量 - 应变.



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The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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