



# Delrin® SC655 NC010

## 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® SC655 is a medium viscosity acetal homopolymer, developed for parts requiring high precision molding in the healthcare industry.

### SPECIAL CONTROL for HEALTHCARE APPLICATIONS

This product is manufactured according to Good Manufacturing Practice (GMP) principles and generally accepted in food contact applications in Europe and the USA when meeting applicable use conditions. This product is also tested against ISO 10993-5 and -11 and selected parts of USP Class VI. For details, individual compliance statements are available from your DuPont representative.

### 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	13 cm <sup>3</sup> /10min	ISO 1133
熔体质量流动速率	15 g/10min	ISO 1133
温度	190 °C	ISO 1133
负荷	2.16 kg	ISO 1133
模塑收缩率, 平行	2.0 %	ISO 294-4, 2577
模塑收缩率, 垂直	1.9 %	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	17 %	ISO 527-1/-2
名义断裂伸长率	30 %	ISO 527-1/-2
弯曲模量	2950 MPa	ISO 178
弯曲应力 (3.5%应变)	80 MPa	ISO 178
拉伸蠕变模量, 1h	2800 MPa	ISO 899-1
拉伸蠕变模量, 1000h	1600 MPa	ISO 899-1
简支梁无缺口冲击强度, +23°C	300 kJ/m <sup>2</sup>	ISO 179/1eU
简支梁无缺口冲击强度, -30°C	280 kJ/m <sup>2</sup>	ISO 179/1eU



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简支梁缺口冲击强度, +23°C	9 kJ/m <sup>2</sup>	ISO 179/1eA
简支梁缺口冲击强度, -30°C	8 kJ/m <sup>2</sup>	ISO 179/1eA
冲孔最大力, +23°C	2000 N	ISO 6603-2
冲孔功, +23°C	3 J	ISO 6603-2
悬臂梁缺口冲击强度, 23°C	9 kJ/m <sup>2</sup>	ISO 180/1A
悬臂梁缺口冲击强度, -30°C	8 kJ/m <sup>2</sup>	ISO 180/1A
无缺口悬臂梁冲击强度, 23°C	280 kJ/m <sup>2</sup>	ISO 180/1U
无缺口悬臂梁冲击强度, -30°C	250 kJ/m <sup>2</sup>	ISO 180/1U
洛氏硬度	92 -	ISO 2039-2
洛氏硬度, Rockwell	120 -	ISO 2039-2
Poisson's ratio	0.37 -	

## 热性能

熔融温度, 10°C/min	178 °C	ISO 11357-1/-3
热变形温度, 1.80 MPa	95 °C	ISO 75-1/-2
热变形温度, 0.45 MPa	160 °C	ISO 75-1/-2
维卡软化温度, 50°C/h 50N	155 °C	ISO 306
球压测试	165 °C	IEC 60695-10-2
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
相对温度指数, 电气性能, 0.75mm	50 °C	UL 746B
相对温度指数, 电气性能, 1.5mm	110 °C	UL 746B
相对温度指数, 电气性能, 3mm	110 °C	UL 746B
相对温度指数, 冲击, 0.75mm	50 °C	UL 746B
相对温度指数, 冲击, 1.5mm	85 °C	UL 746B
相对温度指数, 冲击, 3mm	90 °C	UL 746B
相对温度指数, 强度, 0.75mm	50 °C	UL 746B
相对温度指数, 强度, 1.5mm	90 °C	UL 746B
相对温度指数, 强度, 3mm	95 °C	UL 746B

## 电性能

相对介电常数., 100Hz	3.8 -	IEC 62631-2-1
相对介电常数., 1MHz	3.8 -	IEC 62631-2-1
介质损耗因子, 100Hz	90 E-4	IEC 62631-2-1
介质损耗因子, 1MHz	55 E-4	IEC 62631-2-1
体积电阻率	2E12 Ohm.m	IEC 62631-3-1
表面电阻率	4E14 Ohm	IEC 62631-3-2
介电强度	44 kV/mm	IEC 60243-1
相对漏电起痕指数	600 -	IEC 60112

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### 其它性能

吸湿性, 2mm	0.3 %	类似ISO 62
吸水性, 2mm	1.4 %	类似ISO 62
密度	1420 kg/m <sup>3</sup>	ISO 1183

### VDA性能

甲醛散发	<8 mg/kg	VDA 275
雾化	90 %	ISO 6452
雾化	0.35 mg	ISO 6452

### 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 %
优良熔体温度	215 °C
注塑 熔体温度	210 °C
注塑 熔体温度	220 °C
优良模具温度	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
回火时间, 可选	30 min/mm
回火温度	160 °C

### 典型数据

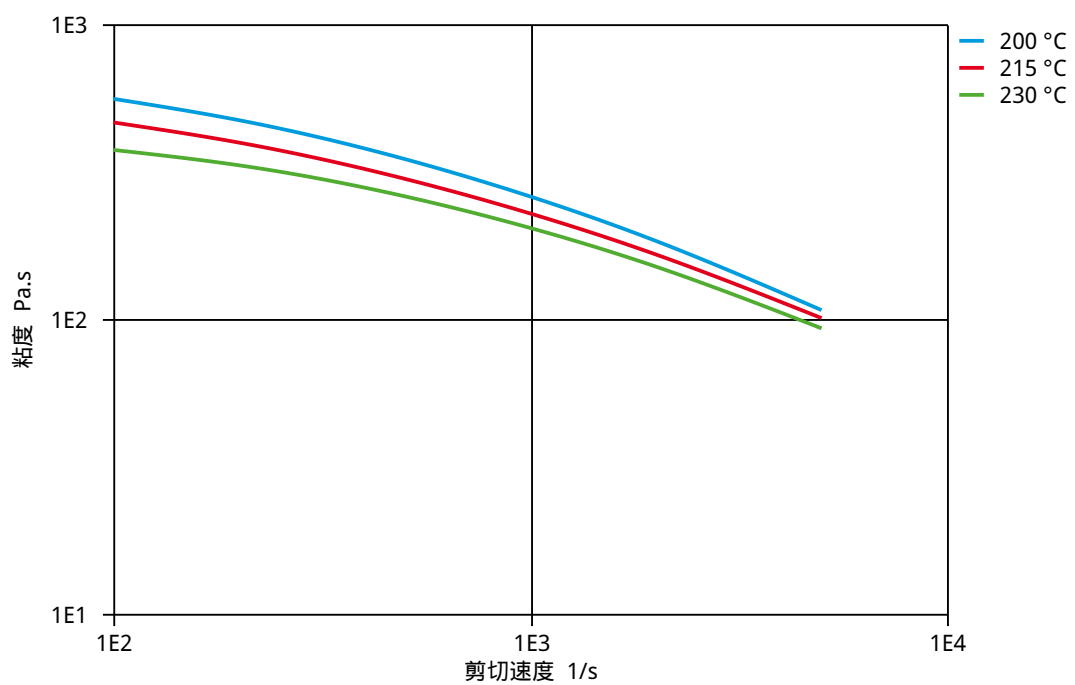
添加剂	脱模助剂
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ACETAL RESIN

粘度 - 剪切速度

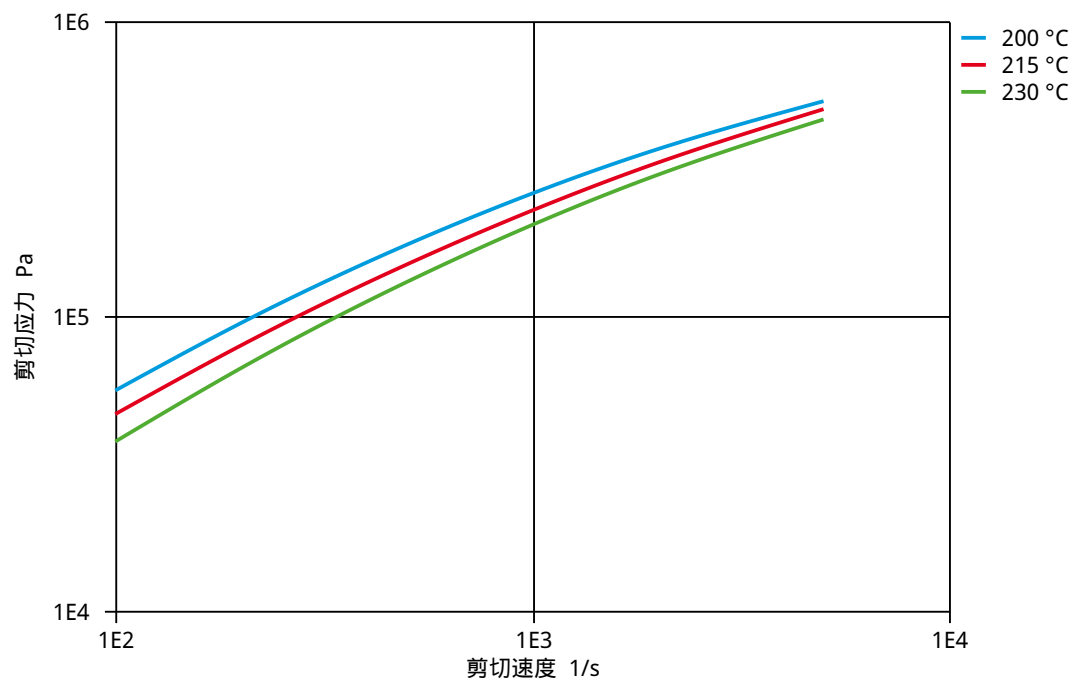




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剪切应力 - 剪切速度

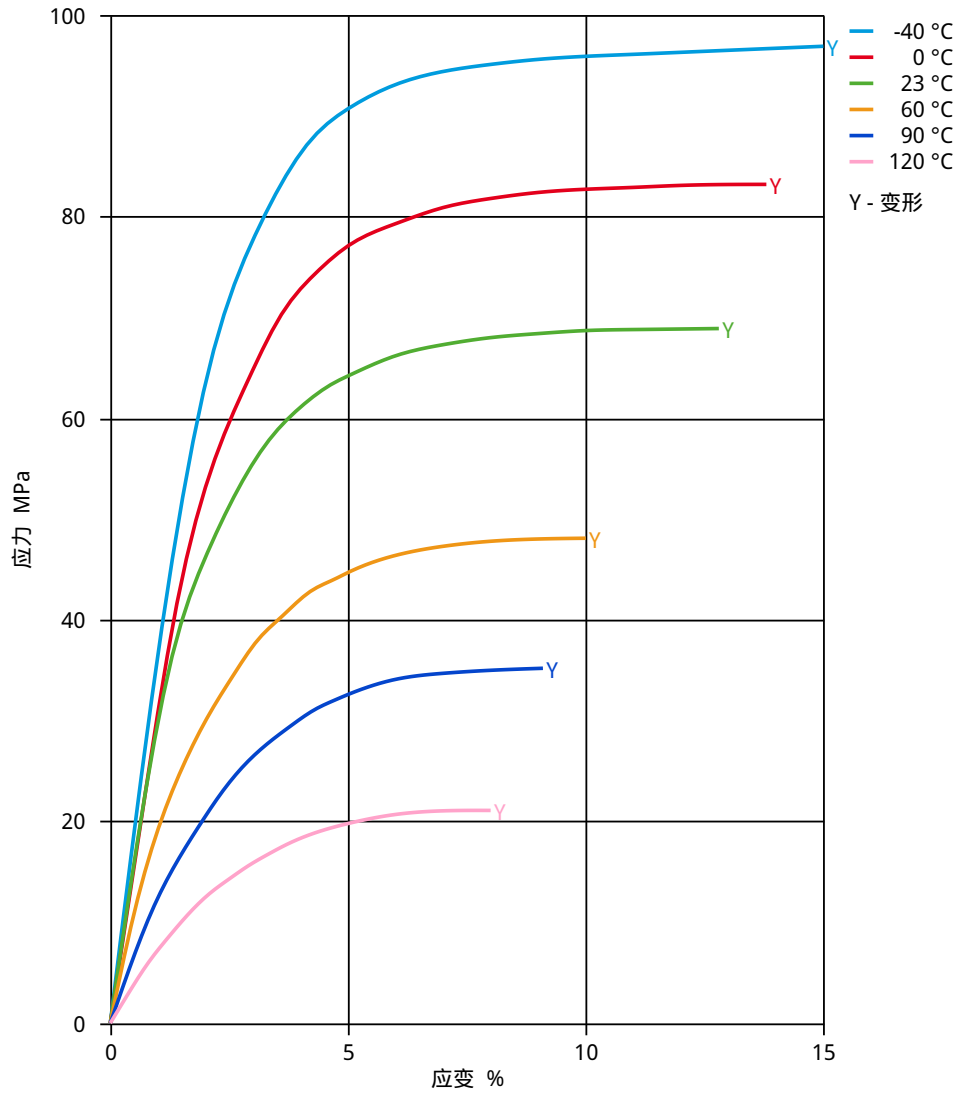




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应力 - 应变.

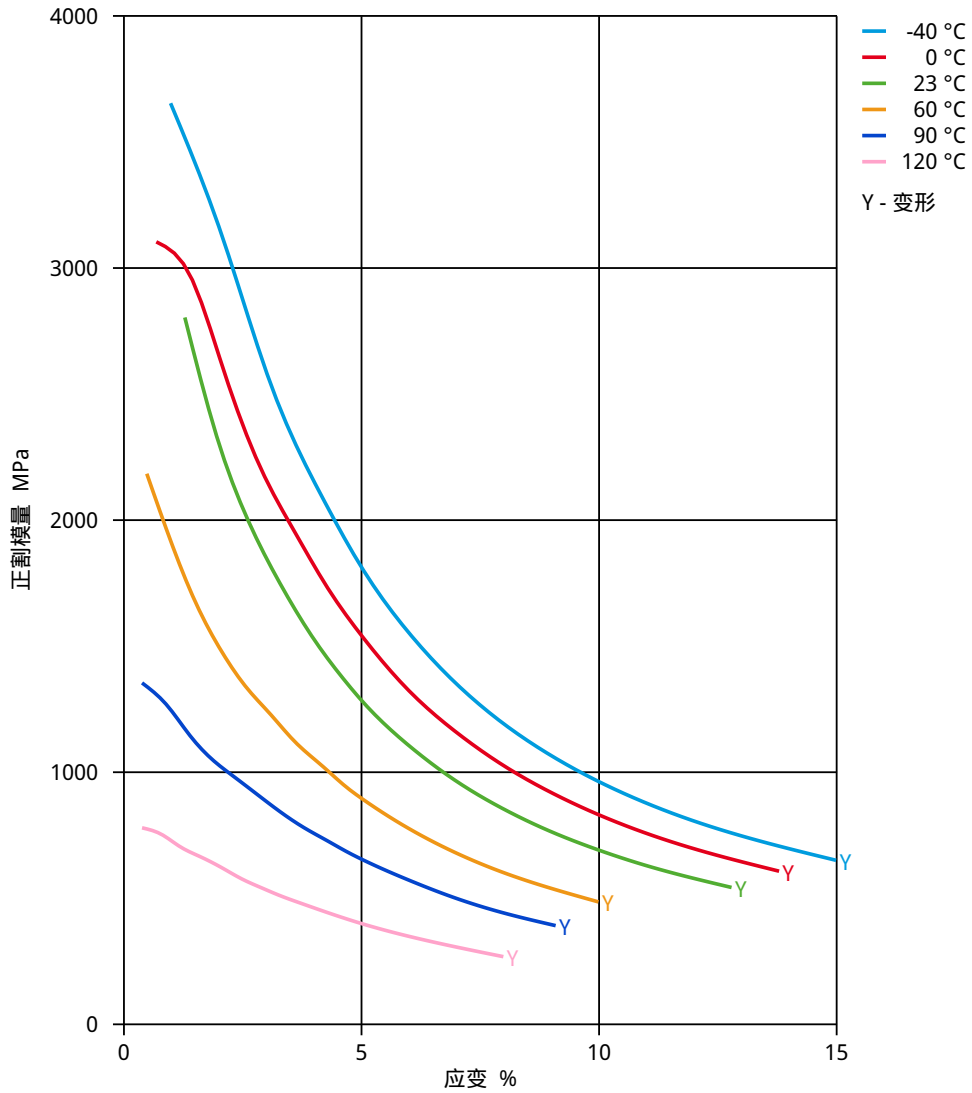




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正割模量 - 应变.

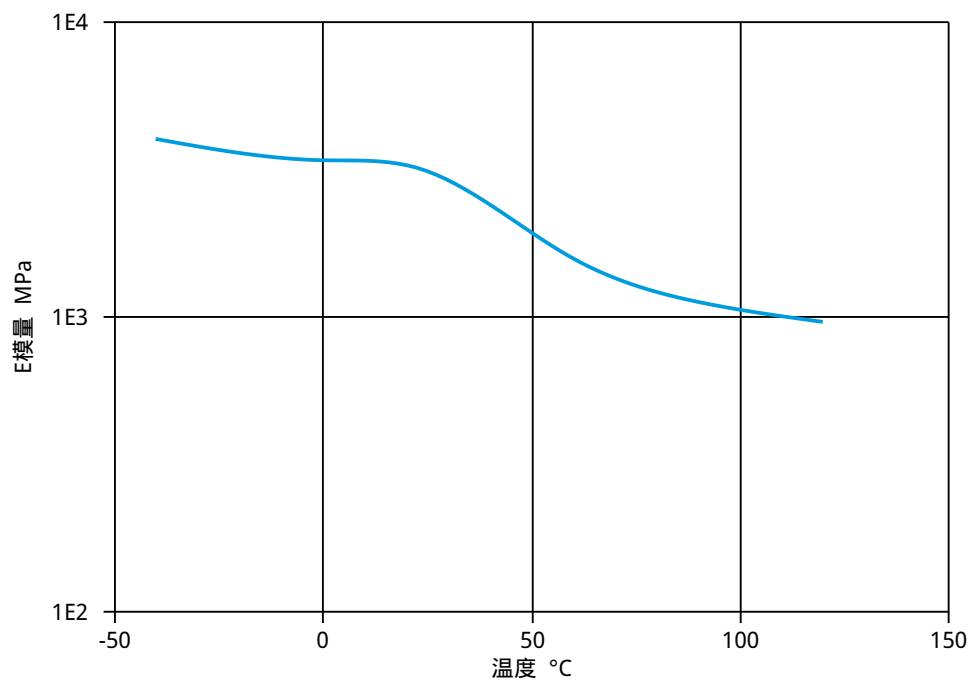




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拉伸模量 - 温度



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