



# Rynite® SST35 NC010

## THERMOPLASTIC POLYESTER RESIN

### ISO 1043: PET-HIGF35

Common features of Rynite® thermoplastic polyester include mechanical and physical properties such as excellent balance of strength and stiffness, dimensional stability, creep resistance, heat resistance, outstanding colour stability, high surface gloss and inherent good electrical properties. It can be processed over a broad temperature range and has excellent flow properties.

The good melt stability of Rynite® thermoplastic polyester normally enables the recycling of properly handled production waste.

If recycling is not possible, DuPont recommends, as the preferred option, incineration with energy recovery (-22 kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

Rynite® thermoplastic polyester typically is used in demanding applications in the automotive, electrical and electronics, appliances, mechanical engineering industry, where they successfully replace metals and thermosets as well as other thermoplastic polymers.

Rynite® SST35 is a 35% glass fibre reinforced, super tough, modified polyethylene terephthalate for injection moulding.

It has excellent impact resistance and surface aspect.

Food compliance:  
Not compliant

### 总说明

树脂鉴别	PET-HIGF35	ISO 1043
制品标识码	>PET-HIGF35<	ISO 11469

### 机械性能

拉伸模量	7500 MPa	ISO 527-1/-2
断裂应力	90 MPa	ISO 527-1/-2
断裂伸长率	6 %	ISO 527-1/-2
压缩强度	80 MPa	ISO 604
剪切强度	40 MPa	ASTM D 732
Poisson's ratio	0.34 -	



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### 热性能

线膨胀系数, 垂直	130 E-6/K	ISO 11359-1/-2
熔体	0.21 W/(m K)	
有效导热率 <sup>a</sup>	1.2E-7 m <sup>2</sup> /s	
熔体的比热	1700 J/(kg K)	
相对温度指数, 电气性能, 0.75mm	150 °C	UL 746B
相对温度指数, 电气性能, 1.5mm	150 °C	UL 746B
相对温度指数, 电气性能, 3mm	150 °C	UL 746B
相对温度指数, 冲击, 0.75mm	150 °C	UL 746B
相对温度指数, 冲击, 1.5mm	150 °C	UL 746B
相对温度指数, 冲击, 3mm	150 °C	UL 746B
相对温度指数, 强度, 0.75mm	150 °C	UL 746B
相对温度指数, 强度, 1.5mm	150 °C	UL 746B
相对温度指数, 强度, 3mm	150 °C	UL 746B

### 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	0.75 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	<80 mm/min	ISO 3795 (FMVSS 302)

### 电性能

相对漏电起痕指数	500	IEC 60112
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### 其它性能

密度	1520 kg/m <sup>3</sup>	ISO 1183
熔体密度	1400 kg/m <sup>3</sup>	

### 注塑

建议干燥	是	
干燥温度	120 °C	
干燥时间, 除湿干燥机	4 - 6 h	
加工前水分含量	≤ 0.02 <sup>[1]</sup> %	
优良熔体温度	285 °C	
注塑 熔体温度	270 °C	
注塑 熔体温度	290 °C	
螺杆大的切线速度	0.2 m/s	
优良模具温度	95 °C	
模具温度	75 °C	



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模具温度	95 °C
保压范围	≥ 80 MPa
保压时间	4 s/mm
背压	As low as possible MPa
喷射温度	170 °C

[1]: At levels above 0.02%, strength and toughness will decrease, even though parts may not exhibit surface defects.

## 典型数据

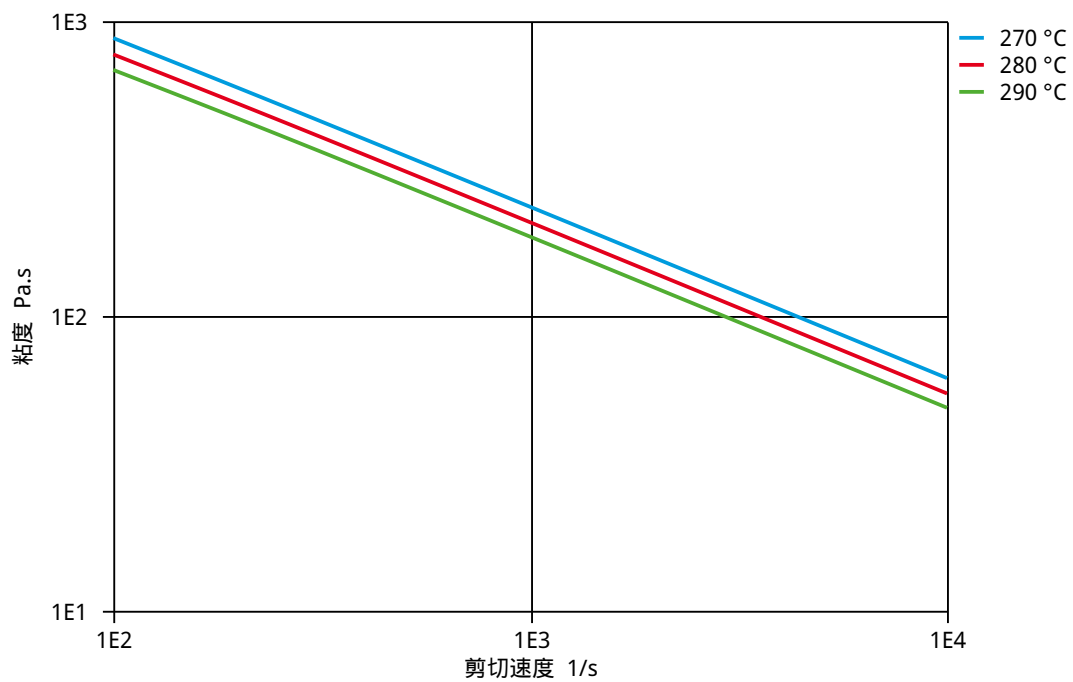
添加剂	脱模助剂
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THERMOPLASTIC POLYESTER RESIN

粘度 - 剪切速度

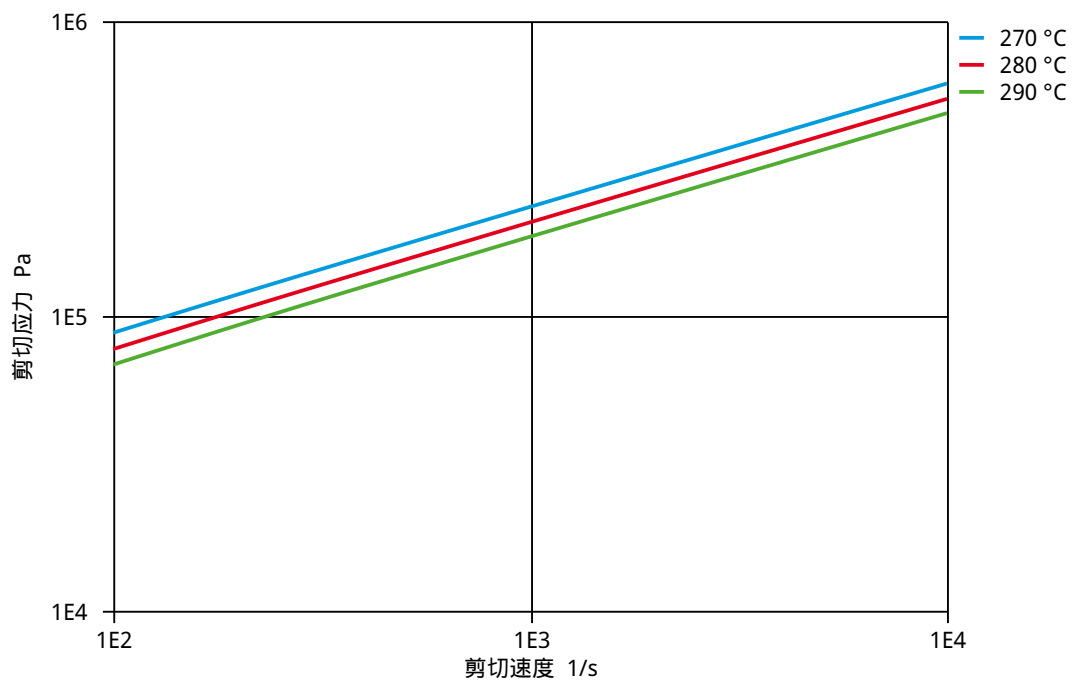




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THERMOPLASTIC POLYESTER RESIN

剪切应力 - 剪切速度

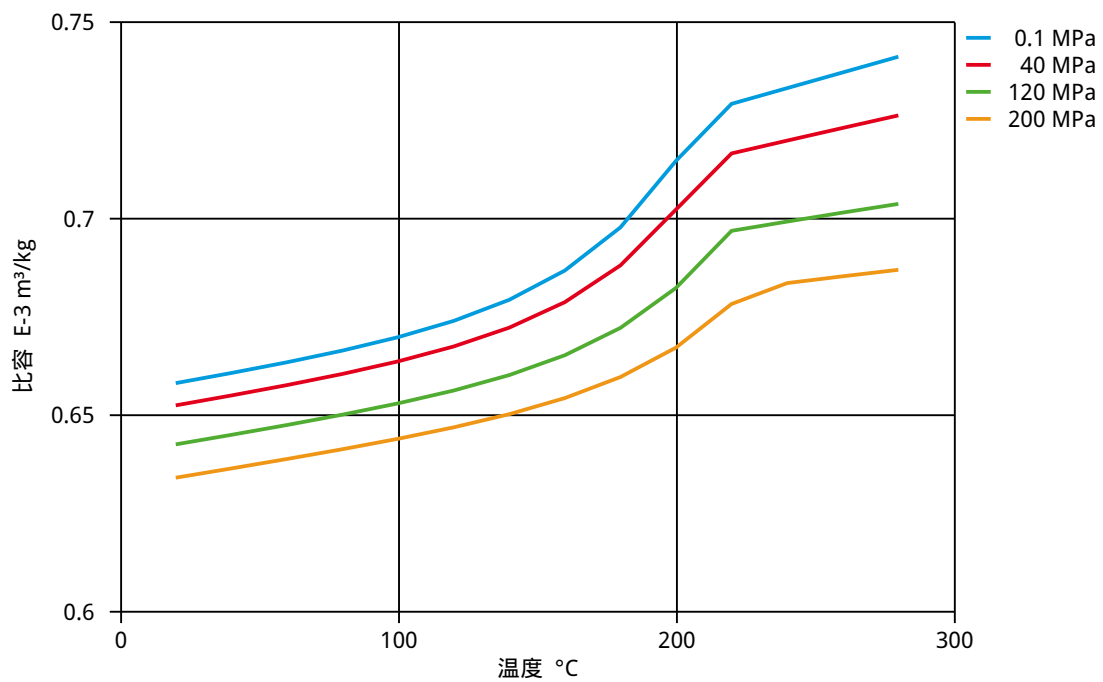




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比容 - 温度(pvT)



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## THERMOPLASTIC POLYESTER RESIN

### 耐化学性

#### 酸类

- ✓ 醋酸 (5g/100g), 23°C
- ✓ 柠檬酸溶液 (10g/100g), 23°C
- ✓ 乳酸 (10g/100g), 23°C
- ✗ 盐酸 (36g/100g), 23°C
- ✗ 硝酸 (40g/100g), 23°C
- ✗ 硫酸 (38g/100g), 23°C
- ✗ 硫酸 (5g/100g), 23°C
- ✗ 铬酸溶液 (40g/100g), 23°C

#### 碱类

- ✗ 氢氧化钠溶液 (35g/100g), 23°C
- ✓ 氢氧化钠溶液 (1g/100g), 23°C
- ✓ 氨水(氢氧化铵) (10g/100g), 23°C

#### 醇类

- ✓ 异丙醇, 23°C
- ✓ 甲醇, 23°C
- ✓ 乙醇, 23°C

#### 碳氢化合物

- ✓ n-乙烷, 23°C
- ✓ 甲苯, 23°C
- ✓ 异辛烷, 23°C

#### 酮类

- ✓ 丙酮, 23°C

#### 醚类

- ✓ (二)乙醚, 23°C

#### 矿物油

- ✓ SAE 10W40号多效润滑油, 23°C
- ✗ SAE 10W40号多效润滑油, 130°C
- ✗ SAE 89/90号变速箱润滑油, 130°C
- ✓ 绝缘油, 23°C

#### 标准燃油

- ✓ ISO 1817 燃油1号, 60°C
- ✓ ISO 1817 燃油2号, 60°C
- ✓ ISO 1817 燃油3号, 60°C
- ✓ ISO 1817 燃油4号, 60°C
- ✓ 不含酒精的标准燃油(优先使用C类ISO 1817 燃油), 23°C
- ✓ 含酒精的标准燃油(优先使用4号ISO 1817 燃油), 23°C
- ✓ 柴油(优先使用F类ISO 1817液体), 23°C
- ✓ 柴油(优先使用F类ISO 1817液体), 90°C
- ✗ 柴油(优先使用F类ISO 1817液体), >90°C

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### 盐溶液

- ✓ 氯化钠溶液(10g/100g), 23°C
- ✗ 次氯化钠溶液 (10g/100g), 23°C
- ✓ 碳酸钠溶液 (20g/100g), 23°C
- ✓ 碳酸钠溶液 (2g/100g), 23°C
- ✓ 氯化锌溶液 (50g/100g), 23°C

### 其它

- ✓ 乙酸乙酯, 23°C
- ✗ 过氧化氢, 23°C
- ✗ DOT4号刹车油, 130°C
- ✗ 乙二醇水溶液 (50g/100g), 108°C
- ✓ 1g/100g 基苯氧- 聚环氧乙烷乙烯水溶液, 23°C
- ✓ 油酸 (50g/100g) + 橄榄油 (50g/100g), 23°C
- ✓ 水, 23°C
- ✗ 去离子水, 90°C
- ✓ 酚溶液(5g/100g), 23°C

### Symbols used:

- ✓ possibly resistant  
Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).
- ✗ not recommended - see explanation  
Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

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