

# Zytel® 70G13HS1L NC010

NYLON RESIN

DuPont Performance Polymers



ides.com/prospector

## Technical Data

### 产品说明

Zytel® 70G13HS1L NC010 is a 13% glass fiber reinforced, heat stabilized polyamide 66 resin for injection molding.

### 总体

材料状态	<ul style="list-style-type: none"><li>已商用：当前有效</li></ul>
资料 <sup>1</sup>	<ul style="list-style-type: none"><li>Processing - Injection Molding (English)</li><li>Processing - Injection Molding of Glass-reinforced Zytel (English)</li><li>Technical Datasheet</li><li>Typical Processing for DuPont Engineering Polymers (English)</li></ul>
UL 黄卡 <sup>2</sup>	<ul style="list-style-type: none"><li>E41938-234399</li></ul>
搜索 UL 黄卡	<ul style="list-style-type: none"><li>DuPont Performance Polymers</li><li>Zytel®</li></ul>
供货地区	<ul style="list-style-type: none"><li>北美洲</li><li>非洲和中东</li><li>拉丁美洲</li><li>南美洲</li><li>欧洲</li><li>亚太地区</li><li>中美洲</li></ul>
填料/增强材料	<ul style="list-style-type: none"><li>玻璃纤维增强材料, 13% 填料按重量</li></ul>
添加剂	<ul style="list-style-type: none"><li>热稳定剂</li></ul>
性能特点	<ul style="list-style-type: none"><li>超声波可焊接</li><li>热稳定性</li><li>热稳定性, 良好</li><li>一般目的</li></ul>
用途	<ul style="list-style-type: none"><li>工程配件</li><li>工业领域：</li><li>汽车领域的应用：</li><li>设备/机械部件</li></ul>
RoHS 合规性	<ul style="list-style-type: none"><li>联系制造商</li></ul>
外观	<ul style="list-style-type: none"><li>自然色</li></ul>
形式	<ul style="list-style-type: none"><li>颗粒料</li></ul>
加工方法	<ul style="list-style-type: none"><li>注射成型</li></ul>
多点数据	<ul style="list-style-type: none"><li>Isothermal Stress vs. Strain (ISO 11403-1)</li></ul>
部件标识代码 (ISO 11469)	<ul style="list-style-type: none"><li>&gt;PA66-GF13&lt;</li></ul>
树脂ID (ISO 1043)	<ul style="list-style-type: none"><li>PA66-GF13</li></ul>

物理性能	干燥	调节后的	单位制	测试方法
比重				
--	1.22	--	g/cm <sup>3</sup>	ASTM D792
--	1.23	--	g/cm <sup>3</sup>	ISO 1183
收缩率				
流动: 1.60 mm	0.60	--	%	Internal Method
流动: 3.20 mm	0.70	--	%	Internal Method
流动: 6.40 mm	0.90	--	%	Internal Method
横向流动: 1.60 mm	1.2	--	%	Internal Method
横向流动: 3.20 mm	1.4	--	%	Internal Method
横向流动: 6.40 mm	1.7	--	%	Internal Method
横向流量: 2.00 mm	1.2	--	%	ISO 294-4
流量: 2.00 mm	0.70	--	%	ISO 294-4
吸水率				
23°C, 24 hr	1.7	--	%	ISO 62
饱和, 23°C	7.1	--	%	ASTM D570
饱和, 23°C	7.6	--	%	ISO 62
平衡, 23°C, 50% RH	2.2	--	%	ISO 62
机械性能	干燥	调节后的	单位制	测试方法
拉伸模量 (23°C)	5500	3500	MPa	ISO 527-2

# Zytel® 70G13HS1L NC010

NYLON RESIN

DuPont Performance Polymers



ides.com/prospector

机械性能	干燥	调节后的	单位制	测试方法
拉伸应力				
断裂, 23°C	120	75.0	MPa	ISO 527-2
23°C	121	83.0	MPa	ASTM D638
伸长率				
断裂, 23°C	3.0	8.0	%	ASTM D638
断裂, 23°C	3.0	13	%	ISO 527-2
拉伸蠕变模量				ISO 899-1
1 hr	--	3300	MPa	
1000 hr	--	2200	MPa	
弯曲模量				
23°C	4830	2760	MPa	ASTM D790
23°C	4900	2900	MPa	ISO 178
弯曲强度				
23°C	165	--	MPa	ASTM D790
23°C	190	100	MPa	ISO 178
剪切强度 (23°C)	76.0	--	MPa	ASTM D732
<b>冲击性能</b>	<b>干燥</b>	<b>调节后的</b>	<b>单位制</b>	<b>测试方法</b>
简支梁缺口冲击强度				ISO 179/1eA
-40°C	4.5	--	kJ/m <sup>2</sup>	
-30°C	--	4.0	kJ/m <sup>2</sup>	
23°C	5.0	6.0	kJ/m <sup>2</sup>	
简支梁缺口冲击强度				ISO 179/1eU
-30°C	30	30	kJ/m <sup>2</sup>	
23°C	32	70	kJ/m <sup>2</sup>	
悬壁梁缺口冲击强度				
23°C	48	53	J/m	ASTM D256
-40°C	4.5	3.0	kJ/m <sup>2</sup>	ISO 180/1A
-30°C	4.5	3.0	kJ/m <sup>2</sup>	ISO 180/1A
23°C	4.5	4.0	kJ/m <sup>2</sup>	ISO 180/1A
无缺口伊佐德冲击强度				ISO 180/1U
-30°C	35	28	kJ/m <sup>2</sup>	
23°C	40	55	kJ/m <sup>2</sup>	
<b>硬度</b>	<b>干燥</b>	<b>调节后的</b>	<b>单位制</b>	<b>测试方法</b>
洛氏硬度				ASTM D785
M 计秤	95	84		
R 计秤	122	113		
<b>热性能</b>	<b>干燥</b>	<b>调节后的</b>	<b>单位制</b>	<b>测试方法</b>
热变形温度				
0.45 MPa, 未退火	258	--	°C	ISO 75-2/B
1.8 MPa, 未退火	243	--	°C	ASTM D648
1.8 MPa, 未退火	238	--	°C	ISO 75-2/A
玻璃转化温度	80.0	--	°C	ISO 11357-2
熔融温度				
-- <sup>4</sup>	262	--	°C	ISO 11357-3
--	263	--	°C	ASTM D3418
线形膨胀系数				ISO 11359-2
流动: -40 到 23°C	0.000042	--	cm/cm/°C	
流动: 23 到 55°C	0.000040	--	cm/cm/°C	
流动: 55 到 160°C	0.000027	--	cm/cm/°C	
横向: -40 到 23°C	0.000077	--	cm/cm/°C	
横向: 23 到 55°C	0.000096	--	cm/cm/°C	
横向: 55 到 160°C	0.00016	--	cm/cm/°C	
RTI Elec (0.710 mm)	140	--	°C	UL 746

热性能	干燥	调节后的	单位制	测试方法
RTI Imp (0.710 mm)	125	--	°C	UL 746
RTI Str (0.710 mm)	140	--	°C	UL 746
电气性能	干燥	调节后的	单位制	测试方法
体积电阻率	> 1.0E+15	--	ohm·cm	IEC 60093
耗散因数				IEC 60250
23°C, 100 Hz	0.0070	0.24		
23°C, 1 MHz	0.0070	0.24		
相比耐漏电起痕指数(CTI) (3.00 mm)	> 600	--	V	UL 746
漏电起痕指数	600	--	V	IEC 60112
可燃性	干燥	调节后的	单位制	测试方法
UL 阻燃等级 (0.710 mm)	HB	--		UL 94

注射	干燥 单位制
干燥温度	80.0 °C
干燥时间	2.0 到 4.0 hr
建议的最大水分含量	< 0.20 %
加工 (熔体) 温度	285 到 305 °C
Melt Temperature, Optimum	295 °C
模具温度	70.0 到 120 °C
Mold Temperature, Optimum	100 °C
Drying Recommended	Yes, if moisture content of resin exceeds recommended level

### 备注

<sup>1</sup> 通过这些链接您能够访问供应商资料。我们尽量保证及时更新资料；不过您可以从供应商处了解最新资料。

<sup>2</sup> UL 黄卡含有 UL 验证的易燃性和电气特性。UL IDES 持续努力在 Prospector 中将黄卡链接至单个塑料材料，然而此列表可能未包括所有相应链接。重要的是，我们对 Prospector 中找到的这些黄卡和塑料材料之间的关联进行验证。如需完整的黄卡列表，请访问 UL 黄卡搜索。

<sup>3</sup> 一般属性：这些不能被视为规格。

<sup>4</sup> 10°C/min

## 购买地点

### 供应商

Zytel® 70G13HS1L NC010

#### DuPont Performance Polymers

Wilmington, DE USA

电话: 302-999-4592

Web: <http://plastics.dupont.com/>

Zytel® 70G13HS1L NC010

#### DuPont Performance Polymers

Wilmington, DE USA

电话: 302-999-4592

Web: <http://plastics.dupont.com/>

### 分销商

Zytel® 70G13HS1L  
NC010

#### Biesterfeld Plastic GmbH

Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.

电话: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

供货地区: Algeria, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey

#### PLASTIC ONLINE INTERNATIONAL CHEMICAL (HK) CO., LIMITED

电话: +86-0-13829119073

Web: <http://www.pom-pa.com.cn/offerlist.htm>

供货地区: China, Hong Kong

#### PolyOne Distribution

PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.

电话: 800-894-4266

Web: <http://polyonedistribution.com/>

供货地区: Global

Zytel® 70G13HS1L  
NC010

#### Biesterfeld Plastic GmbH

Biesterfeld Plastic GmbH is a Pan European distribution company. Contact Biesterfeld Plastic GmbH for availability of individual products by country.

电话: +49-40-32008-0

Web: <http://www.biesterfeld-plastic.com/>

供货地区: Algeria, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Libyan Arab Jamahiriya, Luxembourg, Mauritania, Morocco, Netherlands, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, Tunisia, Turkey

#### PLASTIC ONLINE INTERNATIONAL CHEMICAL (HK) CO., LIMITED

电话: +86-0-13829119073

Web: <http://www.pom-pa.com.cn/offerlist.htm>

供货地区: China, Hong Kong

#### PolyOne Distribution

PolyOne Distribution is a global distribution company. Contact PolyOne Distribution for availability of individual products by country.

电话: 800-894-4266

Web: <http://polyonedistribution.com/>

供货地区: Global



Founded in 1986 and based in Laramie, Wyoming, IDES is now part of the UL family of companies. UL is a premier global independent safety science company with more than a century of proven history. Employing nearly 10,000 professionals in over 100 countries, UL has five distinct business units -- Product Safety, Environment, Life & Health, Knowledge Services and Verification Services -- to meet the expanding needs of our customers and to deliver on our public safety mission.



### Prospector Plastics Database - [www.ides.com/prospector](http://www.ides.com/prospector)

Prospector is a searchable online database that includes 85,000 data sheets from 875 manufacturers and 44,000 UL yellow cards. Each data sheet includes property, processing and supplier contact information. Prospector is relied on by nearly 400,000 design engineers and plastics processors. Using Prospector, they save time with plastic material selection by quickly and easily referencing technical information critical to the success of their products.

"Prospector is absolutely the best and most well-known search engine for plastic raw materials in the world. We use Prospector every day – it's a real time saver!"  
– Birgit Elvardt Bader, Production Manager, Micoctron

#### Power Searches

- Property Search** – select plastics by 500 key properties and design parameters.
- Alternative Resins Search** – find replacement plastics within minutes.
- Automotive Plastics Search** – easily locate automotive approved plastics.
- Curve Data** – view, overlay and export curve data.



### Material Data Management – [www.ides.com/datasheets](http://www.ides.com/datasheets)

With our data management services, plastic suppliers and distributors can have custom search interfaces available on their website for their customers, website visitors, sales and customer service teams. These provide intuitive ways to find and view technical data sheets for their products.

"With UL IDES data services, our website now displays the most current information on the products we distribute and links to our backend RFQ and sales order system, adding both value and service for our customers."  
– Kevin Chase, Owner & President, Chase Plastics



### Advertising – [www.ides.com/advertise](http://www.ides.com/advertise)

Reach 365,000 pre-qualified plastics professionals and generate leads with proven techniques. Electronic newsletter insertions, sponsored webinars and powerful online ads are available to make the most of your lead-generation program.

For more information, call: 800.788.4668 or 307.742.9227 ext. 220