



# 6821N

Linear Low Density Polyethylene for Blown Film

## Product Description

6821N is fractional melt index hexene copolymer based Linear Low Density Polyethylene grade suitable for high strength packaging applications. Films produced using these resins gives outstanding toughness, excellent puncture resistance, good sealing characteristics and tear resistance.

## Typical Applications

Heavy duty shipping sacks, lamination films, Ice & frozen food bags, agricultural films, stretch wrap films etc.

## Typical data

Properties	Unit	Value <sup>(1)</sup>	ASTM Method
<b>Resin Properties</b>			
Melt Flow Rate @ 190°C & 2.16 kg load	g/10 min.	0.8	D 1238
Density @ 23°C	kg/m <sup>3</sup>	921	D 1505
<b>Mechanical Properties<sup>(2)</sup></b>			
Tensile Strength @ break, MD	MPa	48	D 882
TD		40	
Tensile Elongation @ break, MD	%	680	D 882
TD		850	
Tensile Strength @ yield, MD	MPa	12	D 882
TD		13	
1% Secant Modulus, MD	MPa	280	D 882
TD		300	
Puncture Resistance	J/mm	89	SABIC Method
Dart Impact Strength	g	150	D 1709
Elmendorf Tear Strength, MD	g	350	D 1922
TD		550	
<b>Optical Properties<sup>(2)</sup></b>			
Haze	%	12	D 1003
Gloss @ 60°	-	80	D 2457
<b>Thermal Properties</b>			
Vicat Softening Point	°C	101	D 1525

(1) Typical values; not to be construed as specification limits.

(2) Properties have been measured by producing 30 μ film with 2.5 BUR using 100% 6821N.

## Processing Conditions

Typical processing conditions for 6821N are:

Melt temperature: 205 - 220°C

Blow up ratio: 2 - 3

### **Food Regulation**

6821N is suitable for Food contact application. Detailed information is provided in relevant Material Safety Datasheet and for additional specific information please contact SABIC local representative for certificate.

### **Storage and Handling**

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably don't exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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