



## Daelim Po1y® LH-4100

DAELIM INDUSTRIAL CO., LTD. - Polyethylene, High Density

Wednesday, March 19, 2008

### General Information

#### General

Material Status	• Commercial: Active
Availability	• Asia Pacific
Features	• Comonomer, Hexene • Durable • ESCR, High (Stress Crack Resist.) • Impact Resistance, Ultra High
Uses	• Piping
Agency Ratings	• ASTM D 1248, III, Class A, Cat. 5
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Extrusion, Profile

### ASTM and ISO Properties

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.948 g/cm <sup>3</sup>	0.948 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	0.080 g/10 min	0.080 g/10 min	
190°C/5.0 kg	0.35 g/10 min	0.35 g/10 min	
Environmental Stress-Cracking Resistance Condition B, F20	> 3000 hr	> 3000 hr	ASTM D1693
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	3560 psi	24.5 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	600 %	600 %	ASTM D638
Flexural Modulus	128000 psi	883 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact	No Break	No Break	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Point	259 °F	126 °C	ASTM D1525

#### Additional Properties

Tensile Elongation @ Brk, ASTM D638, 50 mm/min: >600%  
 OIT, ASTM D3895, 200°C, Aluminum Pan: >40 min  
 Pipe Properties (PE100), ISO 1167, 5.5MPa, 80?: >4000 hr  
 Pipe Properties (PE100), ISO 1167, 5.0MPa, 80?: >9000 hr

### Processing Information

Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	374 to 428 °F	190 to 220 °C

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 2.0 in/min (50 mm/min)