

# Promyde® BF40 LN

Polyamide 6

NUREL, S.A.

## Message:

Promyde® BF40 LN is a lubricated and nucleated high viscosity Polyamide 6 for general extrusion applications and especially for cast film.

Promyde® BF40 LN combines good gas barrier properties and chemical resistance, good mechanical and optical properties along with high abrasion resistance and good thermoformability.

The additives package ensures good surface slip properties on the polyamide side of the film and also improves clarity and thermoformability.

## APPLICATIONS

Promyde® BF40 LN is used for the production of mono and coextruded cast and blown films that are suitable for thermoforming. In multilayer film

Promyde® BF40 LN assumes the function of a gas and aroma barrier, giving to the film outstanding mechanical properties and thermoformability. The main applications are vacuum packs and thermoformed packs for food such as meat, fish and cheese.

General Information	
Additive	Lubricant Nucleating Agent
Features	Gas Barrier Good Abrasion Resistance Good Chemical Resistance High Viscosity Lubricated Nucleated Opticals
Uses	Blown Film Cast Film Film Food Packaging Thermoforming Applications
Processing Method	Extrusion Film Extrusion

Physical	Nominal Value	Unit	Test Method
Density	1.13	g/cm <sup>3</sup>	ISO 1148
Apparent Density <sup>1</sup>	0.69	g/cm <sup>3</sup>	Internal Method
Water Absorption			ISO 62
Saturation, 23°C	9.0	%	
Equilibrium, 23°C, 50% RH	3.0	%	
Extractables	< 1.0	%	ISO 6427
Moisture Content <sup>2</sup>	< 0.10	%	Internal Method

Relative Viscosity <sup>3</sup> (25°C)	3.90 to 4.10		ISO 1628
Chip Size <sup>4</sup>	2.50	mm	Internal Method
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Coefficient of Friction (vs. Steel - Dynamic)	< 0.25		ISO 8295
<b>Films</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Film Thickness - Tested	50	μm	
Tensile Stress - MD			ISO 527-3
Yield, 50 μm	34.0	MPa	
Break, 50 μm	96.0	MPa	
Tensile Elongation - MD (Break, 50 μm)	350	%	ISO 527-3
Trouser Tear Resistance - MD (50 μm)	25.0	N/mm	ISO 6383-1
Oxygen Transmission Rate			ASTM D3985
23°C, 0% RH, 50 μm	25	cm <sup>3</sup> /m <sup>2</sup> /24 hr	
23°C, 50% RH, 50 μm	15	cm <sup>3</sup> /m <sup>2</sup> /24 hr	
23°C, 85% RH, 50 μm	40	cm <sup>3</sup> /m <sup>2</sup> /24 hr	
Water Vapor Transmission Rate (23°C, 85% RH, 50 μm)	15	g/m <sup>2</sup> /24 hr	ISO 15106-1
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Melting Temperature (DSC)	220	°C	ISO 3146
<b>Optical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Haze			ASTM D1003
50.0 μm <sup>5</sup>	< 0.50	%	
50.0 μm <sup>6</sup>	< 5.0	%	
<b>NOTE</b>			
1.	NAPPA-059		
2.	NAPPA-032		
3.	1% m/v in 96% m/m sulfuric acid		
4.	NAPPA-045		
5.	Chill roll temperature 50°C		
6.	Chill roll temperature 90°C		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT