

REF. GDFT023

ISO 9001 CERTIFIED

Novamid® BF33L is a Polyamide 6 resin produced by the CPL reaction in a polymerization process. The polymer is especially suitable for film extrusion applications in general like BOPA film and CAST film.

Product Specifications	Values	Standard method
Relative viscosity (1% m/v in 96% m/m sulfuric acid, 25°C)	3,31 +/- 0,1	ISO 1628
Extractable % max.	≤ 1	ISO 6427
Moisture content % max.	≤ 0,1	NAPPA-032

General Properties	Unit	Value	Testing method
Melting point	°C	220	ISO 3146
Density	g/cm <sup>3</sup>	1,13	ISO 1148
Water absorption (23°C/sat.)	%	9	ISO 62
Moisture absorption (23°C/50 %RH)	%	3	ISO 62
Apparent density	g/cm <sup>3</sup>	0,69	NAPPA-059
Chip size (length-diameter)	mm	2,5	NAPPA-045

**Central offices**

Independencia, 21. 3ª  
50001 Zaragoza. Spain  
T +34 976 216 129  
F +34 976 238 703  
www.novamid.com

**Plant**

Polígono de Malpica, Ctra de Barcelona  
50016 Zaragoza. Spain  
T +34 976 465 579  
F +34 976 574 108

NOVAMID ®  
Registered trade mark by NUREL ENGINEERING POLYMERS

Film Properties <sup>1</sup>	Conditions	Unit	Value	Method
Stress at yield	MD	MPa	32	ISO 527-3
Stress at break	MD	MPa	83	ISO 527-3
Elongation at break	MD	%	380	ISO 527-3
Trouser tear resistance	MD	N/mm	30	ISO 6383-1
Haze	Chill roll temperature 90°C	%	≤5	ASTM D1003
	Chill roll temperature 50°C		≤0,5	
Dynamic coefficient of friction	Film/Steel	-	≤0,25	ISO 8295
O <sub>2</sub> transmission rate, 23°C	0% RH	cc/m <sup>2</sup> .d.atm	25	ASTM D3985
	50% RH		15	
	85% RH		40	
Moisture vapor transmission rate, 23°C	85% RH	g/m <sup>2</sup> .d	15	ISO 15106-1

(1) Values were measured on 50µm flat film (chill-roll temperature 90°C): the properties like those of all PA films, are greatly dependent on manufacturing conditions.

Packaging	Big bag / Octabin / Silo truck
-----------	--------------------------------

Disclaimer: All the information submitted is based on our knowledge and experience. The shown values have been established by using standardized tests performed at our plant. Figures should be regarded as guidance and not as a minimum values. The affectation of the process and applications by different factors or conditions cannot be guaranteed, therefore, users are recommended to perform the test in order to determine the suitability of the product for one particular use.

**Central offices**

Independencia, 21. 3ª  
 50001 Zaragoza. Spain  
 T +34 976 216 129  
 F +34 976 238 703  
 www.novamid.com

**Plant**

Polígono de Malpica, Ctra de Barcelona  
 50016 Zaragoza. Spain  
 T +34 976 465 579  
 F +34 976 574 108

NOVAMID ®  
 Registered trade mark by NUREL ENGINEERING POLYMERS