

UBE NYLON 5034B /

TDS
Technical Data Sheet

Airblown
50µm monolayer



UBE NYLON 5034B is a high viscosity copolyamide 6/6.6 (PA6/6.6). The grade is suitable in outer, middle and/or inner layer for a wide range of film extrusion applications.

Basic properties ⁽¹⁾ /	Method	Unit	Value
Melting point	ISO 11357	°C	192
Relative Viscosity ⁽²⁾	UBE Method	-	4.05
Viscosity number ⁽³⁾	ISO 307	ml/g	244
Density	DIN 53479	g.cm ⁻³	1.14

⁽¹⁾ Measured on base resin. Average values. ⁽²⁾ 96% H₂SO₄, 1% polymer concentration. ⁽³⁾ 96% H₂SO₄, 0.5% polymer concentration.

Food legislation compliance /

FDA EC GB Japan positive list

Mechanical properties ⁽⁴⁾ /

T=-18°C T=23°C, RH=50%

Tensile strength at yield	ASTM D-882	MPa	-	23 - 27
Tensile strength at break		MPa	65 - 75	100 - 120
Tensile elongation at break		%	300 - 330	470 - 500
Tensile modulus		MPa	1900 - 2100	500 - 600
Puncture load	JAS P-1019	N	12.0 - 13.0	10.0 - 11.0
Puncture deformation		mm	5.0 - 6.0	9.5 - 10.5
Tear resistance	ASTM D-1922	kN/m	-	28 - 34
Spencer impact resistance	ASTM D-3420	mJ	-	850 - 950
Flexcrack resistance (Gelboflex)	MIL-STD-3010C	Holes/0.04m ²	50 cycles < 10	1000 cycles < 10

Optical properties ⁽⁴⁾ /

T=23°C, RH=50%

Haze	ASTM D-1003	%	5 - 7
Gloss (60°)	ASTM D-523	G.U.	110 - 130

Gas barrier properties ⁽⁴⁾ /

Oxygen T.R.	ASTM D-3985	ml/m ² .day	T=23°C, RH=0%	24 - 26
Water vapor T.R.	JIS Z-0208	g/m ² .day	T=40°C, RH=90%	170 - 190

Slip properties ⁽⁴⁾ /

T=23°C, RH=50%

Coefficient of Friction Static	ASTM D-1894	-	> 1
Coefficient of Friction Dynamic		-	0.50 - 0.55

Thermoforming properties ⁽⁴⁾ /

T=23°C, RH=50%

Max. Thermoforming depth	UBE Method	mm	80 - 90
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⁽⁴⁾ Film samples processed on a pilot Airblown line at 6 m.min⁻¹, applying a Blow Up Ratio of 2.1
Samples conditioned at T=23°C, RH=50% for t≥24h before testing

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