

# Polyfort TPP40AE05UL-BKBLK

## LyondellBasell Industries - Polypropylene Homopolymer

### General Information

#### Product Description

Polyfort TPP40AE05UL-BKBLK is a Polypropylene Homopolymer Talc, 42% filled material and is typically used in Injection Molding applications. Features include: Heat Stabilized, and Homopolymer.

#### General

Filler / Reinforcement	• Talc, 42% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Stabilized • Homopolymer
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.5	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (73°F)	4390	psi	ASTM D638
Tensile Elongation (Break, 73°F)	6.0	%	ASTM D638
Flexural Modulus			ASTM D790
1% Secant : 73°F	434000	psi	
Tangent : 73°F	555000	psi	
Flexural Strength (73°F)	7400	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	0.39	ft-lb/in	ASTM D256
Unnotched Izod Impact (73°F)	4.1	ft-lb/in	ASTM D4812
Gardner Impact (73°F)	5.00	in-lb	ASTM D5420
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	75		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	270	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	180	°F	ASTM D648

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	399 to 410	°F
Middle Temperature	410 to 415	°F
Front Temperature	415 to 421	°F
Nozzle Temperature	421 to 424	°F
Processing (Melt) Temp	428 to 500	°F
Mold Temperature	86 to 140	°F

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<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Back Pressure	20.0 to 50.0	psi
Screw Speed	100 to 150	rpm
Clamp Tonnage	2.0 to 3.0	tons/in <sup>2</sup>