



# Polyfort TPP40AC45BK-BKBLK

LyondellBasell Industries - Polypropylene

## General Information

### Product Description

Meets/Exceeds Ford Engineering Specification ESA-M4D166-A.

Primary end use is for fan shrouds and battery covers.

### General

Filler / Reinforcement	• Talc, 40% 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	1.28		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.6	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (73°F)	4600	psi	ASTM D638
Tensile Elongation (Yield)	4.0	%	ASTM D638
Flexural Modulus	551000	psi	ASTM D790
Flexural Strength (Yield)	7640	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	0.51	ft-lb/in	ASTM D256
Unnotched Izod Impact (73°F)	4.5	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	74		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	268	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	176	°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
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>