

## HYDEX 4101 UD Blue - Stock Shapes

### Chemical Designation

PBT (Polybutylene terephthalate)

### Colour

blue

### Density

1.59 g/cm<sup>3</sup>

### Fillers

detectable filler

### Main features

- resistant to cleaning agents
- food grade blue
- good chemical resistance
- good dimensional stability
- good impact strength
- metal detectable
- x-ray opaque

### Target Industries

- food engineering
- food processing
- conveyor technology
- packaging and paper machinery

<b>Mechanical properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>	<b>comment</b>
Modulus of elasticity (tensile test)	@ 73 °F	550,000	psi	ASTM D 638	
Tensile strength	@ 73 °F	9,300	psi	ASTM D 638	
Elongation at break	@ 73 °F	3.53	%	ASTM D 638	
Flexural strength	@ 73 °F	15,250	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	556,150	psi	ASTM D 790	
Compression strength	@ 73 °F, 10% strain	13,760	psi	ASTM D 695	
Compression modulus	@ 73 °F	346,360	psi	ASTM D 695	
Impact strength (Izod)	Notched	0.58	ft-lbs/in	ASTM D 256	
Rockwell hardness	M-Scale	92		ASTM D 785	
<b>Thermal properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>	<b>comment</b>
Melting temperature		437	°F	-	(1) Injection molded samples
Deflection temperature	@ 66 psi	393	°F	ASTM D 648	(2) Injection molded samples
Deflection temperature	@ 264 °F	275	°F	ASTM D 648	(3) Per UL 746B
Service temperature		221	°F	-	(4) Injection molded samples
Thermal expansion (CLTE)		4.05	*10 <sup>-5</sup> in/in/°F	ASTM D 696	

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Date: 2014/01/13

Version: