

Rigid Grey

Production Rigid

Static rigid production components and long term use parts

This high contrast grey plastic has balanced thermal and mechanical properties.



Benefits

- **Tough and rigid**
- **High stiffness and hardness**
- **High accuracy**

Applications

- Static rigid production components like housings and covers
- Small parts requiring detail and accuracy for consumer products and general use
- Parts requiring painting, plating, and laser-etching
- Functional prototyping and low volume production parts where visualization of features is critical



Physical Properties

Colour	Grey
Type	ABS

Mechanical Properties

		TEST/ISO
Solid Density	1.15g/cm³	ASTM D792
Tensile Strength (MPa)	61	ASTM D638 Type IV
Tensile Modulus (MPa)	2400	
Elongation at Break (%)	30	
Elongation at Yield (%)	4.60	
Flexural Strength (MPa)	87	ASTM D790
Flexural Modulus (MPa)	2200	
Notched Izod Impact Strength (J/m)	21	ASTM D256
Unnotched Izod Impact Strength (J/m)	150	ASTM D4812
Heat Deflection Temperature (°C)		ASTM D648
@ 0.45 MPA	72	
@ 1.82 MPA	59	
Co-efficient of Thermal Expansion (ppm/°C)		ASTM E831
-40 to 30C	81	
65 to 145C	166	
Glass Transition (T _g)		DMA, E''
Shore Hardness	82D	ASTM D2240
24hr Water Absorption (%)	0.99	ASTM D570

Electrical

Dielectric Strength (kV/mm) @3mm	15	ASTM D149
Dielectric Constant @ 1kHz	3.27	ASTM D150
Dissipation Factor @ 1kHz	0.02	
Volume Resistivity (ohm-cm)	7.16x10¹⁵	ASTM D257

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