



Tough Gray15

Production Rigid

A cost-effective, rigid gray material designed for durable part production and functional prototypes.

Production Parts at an Economical Price

Figure 4 Tough-GRY 15 delivers a balance of strength, stability, and affordability for production-grade applications.

Its cost-efficient formulation enables short-run manufacturing at a fraction of traditional tooling costs.

With 35% elongation at break, this durable opaque gray material ensures high accuracy and dependable performance, making it ideal for consumer products, automotive components, and aerospace applications. Engineered for digital molding productivity, it combines precision, durability, and cost efficiency in every print.

LIQUID Material

MEASUREMENT	CONDITION	VALUE	
Viscosity	@ 25 °C (71 °F)	780 cps	
Color		Gray	
Solid Density	@ 25 °C (77 °F)	1.12 g/cm3	0.04 lb/in3
Liquid Density	@ 25 °C (77 °F)	1.04 g/cm3	0.038 lb/in3
Package Volume		1 kg bottle 10 kg container	
Layer Thickness (Standard Mode)		0.05 mm	0.002 in
Vertical Build Speed Standard Mode Draft Mode		41 mm/hr 68 mm/hr	1.6 in/hr 2.7 in/hr

APPLICATIONS

- Rapid design iteration and prototype validation
- Functional parts for:
 - Automotive styling and interior components
 - Form, fit, and function testing
 - Durable assemblies: snap-fits
 - Bezels, covers, and cases
 - Master patterns
- Short-run manufacturing of rigid parts
- Consumer product housings and accessories
- Suitable for painting, coating, or plating

BENEFITS

- Strong and rigid parts for end-use production
- Delivers consistent mechanical performance over time
- Cost-effective solution for batch production

FEATURES

- High elongation at break provides added durability
- Excellent humidity and moisture resistance
- Rigid, impact-resistant structure
- Smooth opaque gray finish ideal for painting, coating, or plating

POST-CURED MATERIAL

Mechanical Properties

MEASUREMENT	CONDITION	METRIC	U.S
Tensile Strength (MPa PSI)	ASTM D638	48	7020
Tensile Modulus (MPa KSI)	ASTM D638	2120	307
Elongation at Break	ASTM D638	35%	
Elongation at Yield	ASTM D638	4%	
Flexural Strength (MPa PSI)	ASTM D790	73	10590
Flexural Modulus (MPa KSI)	ASTM D790	1960	284
Notched Izod Impact Strength (J/m Ft-lbs/in)	ASTM D256	32	0.6
Unnotched Izod Impact Strength (J/m Ft-lbs/in)	ASTM D4812	599	11.2
Heat Deflection Temperature @ 0.45 MPa (66 PSI) @ 1.82 MPa (264 PSI)	ASTM D648	59 °C 51 °C	138 °F 124 °F
Coefficient of Thermal Expansion (CTE) (ppm/°C ppm/°F) < T _g > T _g	ASTM E831	96 158	53 88
Glass Transition (T _g)	DMA, E''	55 °C	130 °F
Hardness, Shore	ASTM D2240	82D	
Water Absorption	ASTM D570	0.37%	