

Royalcast® 2501

Polyurethane (Polyether based)

Chemtura

Message:

ROYALCAST 2501 combines the rigidity of an engineering plastic with an excellent balance of physical properties. When cured with MBCA, ROYALCAST 2501 yields an 80 Shore D hardness material with a flexural modulus of 165,000 psi and a notched izod impact strength of 9 ft-lbs/in. As a castable material, ROYALCAST 2501 is processed under conditions typically used in an Adiprene/Vibrathane (polyurethane) open casting operation. This allows the molder to use low cost tooling to produce a full range of rigid parts, including:

- Short volume runs
- Large parts
- Parts with thick or varied cross-sections

General Information			
Features	High Rigidity		
Processing Method	Casting		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.22	g/cm ³	ASTM D792
Molding Shrinkage - Flow	1.4	%	Internal Method
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 20°C)	114		ASTM D785
Durometer Hardness			ASTM D2240
Shore D, 100°C	71		
Shore D, 70°C	75		
Shore D, 20°C	80		
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	55.2	MPa	ASTM D638
Tensile Elongation (Break)	170	%	ASTM D638
Flexural Modulus	1140	MPa	ASTM D790
Flexural Strength	41.4	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (20°C)	480	J/m	ASTM D256
Unnotched Izod Impact (20°C)	No Break		ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	62.0	°C	ASTM D648
CLTE - Flow	1.4E-4	cm/cm/°C	Internal Method
Thermoset	Nominal Value	Unit	
Thermoset Components			
Hardener	Mix Ratio by Weight: 34		
Resin	Mix Ratio by Weight: 100		
Pot Life	1.5	min	
Demold Time	25	min	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

