

Perfactory® RC31

Acrylic

EnvisionTEC, Inc.

Message:

EnvisionTEC 's RC31 is a high temperature resistant resin for building tough and stiff parts. It can be processed on all Perfactory® products from EnvisionTEC. RC31 is a nanoparticle-filled material that is used to build hard-wearing, stiff and high temperature-resistant parts. They have an opaque peach color appearance. RC31 is ideal for applications requiring superior stiffness and high heat deflection temperature, such as automotive components, pump housings and impellers, wind tunnel test parts, light reflectors, injection molds, hard chrome plating, etc.

Applications

Aerospace, Animation and Entertainment, Architecture and Art, Automotive, Consumer Packaged Goods, Education, Electronics, Manufacturing, Sporting Goods, Toys

Recommended Machines:

Perfactory® 4 Standard with ERM, Perfactory® 4 Standard XL with ERM

General Information			
Filler / Reinforcement	Unspecified Nano		
Features	Filled		
	Good Stiffness		
	Good Toughness		
	High Heat Resistance		
Uses	Aerospace Applications		
	Automotive Applications		
	Consumer Applications		
	Electrical/Electronic Applications		
	Engineering Parts		
	Housings		
	Modeling Material		
	Prototyping		
	Sporting Goods		
	Toys		
Appearance	Opaque		
	Tan		
Forms	Liquid		
Processing Method	3D Printing, Stereolithography		
Hardness	Nominal Value		Test Method
Durometer Hardness (Shore D)	93		ASTM D1004
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4890	MPa	ASTM D638
Tensile Strength	35.4	MPa	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638

Flexural Modulus	3860	MPa	ASTM D790
Flexural Strength	102	MPa	ASTM D790
Compressive Modulus	4490	MPa	ASTM D695
Compressive Strength	< 127	MPa	ASTM D695
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	16.0	J/m ²	ASTM D256A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	67.0	°C	
1.8 MPa, Unannealed	53.6	°C	
Glass Transition Temperature	42.0	°C	ASTM E1545

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

