



Perfactory[®] Material

RC31

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.

Mechanical Properties*		
ASTM Method	Description	RC31
D638M	Tensile Strength Elongation at Break Modulus of Elasticity	35.4 MPa 2.5% 4890 MPa
D790M	Flexural Strength Flexural Modulus	102 MPa 3,860 MPa
D256A	Izod Impact-Notched	0.016 kJ/m ²
D695-02a	Maximum Compressive Strength Compressive Modulus	127 MPa 4,490 MPa
D1004	Hardness (Shore D)	93.1 Shore

Thermal and Electrical Properties*		
ASTM Method	Description	RC31
E1545-00	Glass Transition Temperature	42 °C
D648-98c	HDT @ 0.455 MPa HDT @ 1.82 MPa	67 °C 53.6 °C

*All data provided is preliminary data and must be verified by the individual user.

Recommended Machines
Aureus, Apollo, Desktop XL, Perfactory [®] 4 Standard, Perfactory [®] 4 Standard XL, Perfactory [®] 4 Mini, Perfactory [®] 4 Mini XL, Perfactory [®] 3 Mini Multi Lens

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



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