

## NanoCure RC25

Tough, Stiff, High temperature Nanocomposite resin for **Perfactory®** & **Vanquish®** Systems

### Description

EnvisionTEC NanoCure RC25 is a nanoparticle filled material that produces strong, stiff, high temperature resistant, composite parts on the Perfactory® and the Vanquish® machines. Parts created with EnvisionTEC NanoCure RC25 have an opaque peach color appearance.

### Application

EnvisionTEC NanoCure RC25 is ideal for applications requiring superior stiffness and a high heat deflection temperature. Current applications include:

Automotive components, Pump housings, Wind tunnel test parts, Pump impellers, Light reflectors, Injection molds, Hard Chrome Plating

### Mechanical Properties (Metric)

ASTM Method	Description	NanoCure RC25 Postcure
D638M	Tensile Strength Elongation at Break Modulus of Elasticity	46 MPa 2.5 % 4,890 MPa
D790M	Flexural Strength Flexural Modulus	102 MPa 3,860 MPa
D256A	Izod Impact-Notched	0.16 J/cm
D695-02a	Maximum Compressive Strength Compressive Modulus	127 MPa 4,490 MPa
D1004	Hardness (Shore D)	93.1
D570-98	Water Absorption	0.25 %

Tg = Glass Transition Temperature HDT = Deflection Temperature

### Thermal Properties (Metric)

ASTM Method	Description	NanoCure RC25 Postcure (Thermal Cure)
E1545-00	Tg	42°C (70 °C)
D648-98c	HDT @ 0.455 MPa HDT @ 1.82 MPa	67°C (223°C) 53.6°C (102 °C)

Tg = Glass Transition Temperature HDT = Deflection Temperature  
All Data provided is Preliminary data and must be verified by the individual user



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