

R5 130 is a toughened thermosetting epoxy prepreg resin system designed specifically for a wide range of structural components in sports goods, automotive and industrial applications.

R5 130 offer good tack and drapability for complex geometry component manufacturing. It can be processed via autoclave or press cure.

R5 130 offers great toughness and after suitable cure cycles, a DMA Tg onset over 140°C can be obtained after a standard cure and post cure.

R5 130 prepregs exhibit good mechanical performance combined with great impact resistance.

PRODUCT VARIANTS

R5 130: Hotmelt version

SHELF LIFE



OUT LIFE
30 days @ 21 °C



STORAGE LIFE
12 months @ -18 °C

TYPICAL APPLICATIONS



**SPORTS
GOODS**



AUTOMOTIVE



INDUSTRIAL

FEATURES



EXCELLENT TACK AND HANDLEABILITY



FLEXIBLE CURE PROCESSING



HIGH IMPACT RESISTANCE



GOOD MECHANICAL PERFORMANCE

NOTE: All technical information contained in this document are given in good faith and are based on tests believed to be reliable, but their accuracy and completeness are not guaranteed. They do not constitute an offer to any person and shall not be deemed to form the basis of any contract. Accordingly, the user shall determine the suitability of the products for their intended use prior to purchase and shall assume all risk and liability in connection therewith. The information contained herein is under constant review and liable to be modified. All products are sold subject to Microtex Composites Srl terms and conditions of sale. Copyright 2020 - Microtex Composites Srl. All rights reserved worldwide. All trademarks or registered trademarks are the property of their respective owners.

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TDS Prepreg R5 130 ENG v 1.1



Quality system certified
ISO 9001:2015
by TUV Italia s.r.l.
cert. no. 50 100 12429



Quality system certified
EN 9100:18
By TUV Italia s.r.l.
cert. no. 50 100 17721

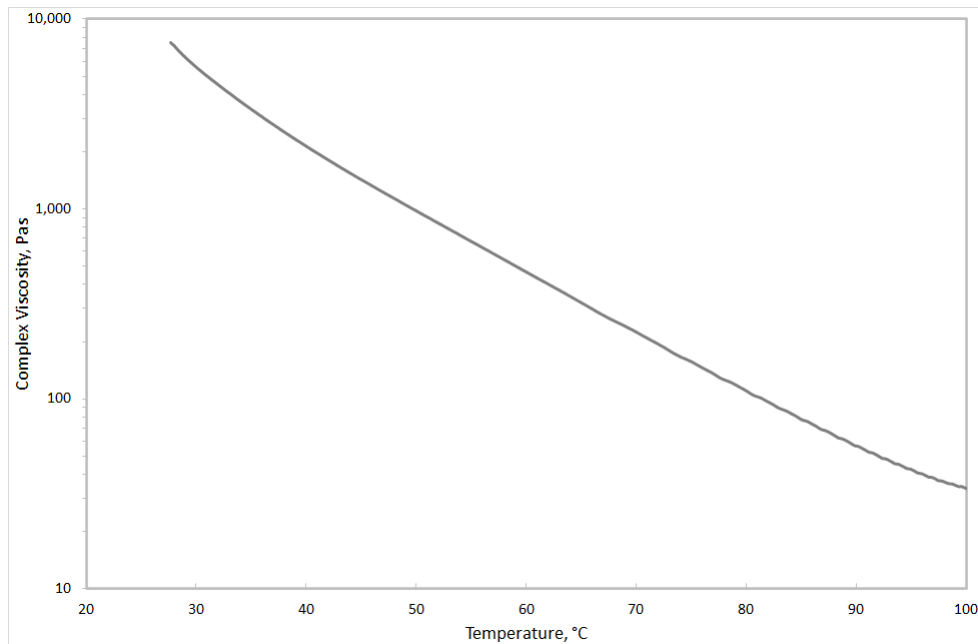


Quality system certified
IATF 16949:16
by TUV SUD Management Service GmbH
cert. no. 0447526

MATRIX PROPERTIES

Cured resin density @ RT: (average value) 1.20 g/cm³.

Resin viscosity: ramp rate = 2 °C/min, ω = 10 rad/sec.



Recommended cure cycle

1. Apply full vacuum (min -0.85bar);
2. Apply autoclave pressure to 6 bar gradually;
3. Heat to 120°C \pm 3°C at between 1°C /min and 2°C /min;
4. Hold for 30 minutes;
5. Cool to 60°C at between 1°C /min and 5°C /min;
6. Release pressure.

Above is the suggested standard cure cycle. For advice on bespoke cure cycles for specific components, please consult Microtex Composites technical service.

THERMAL PROPERTIES

R5 130 /GG200T-42

Cure cycle	DMA Tg onset / PTD (°C)
30 min @ 120°C	144 / 155

MECHANICAL PROPERTIES

R5 130 - 30 min @ 120 °C, 6 bar		GG200T-42 #	GG150 UD-38 ##
Property	Test Method	Value*	Value**
0° ILSS [MPa]	ASTM D2344	74	88
0° Flexural strength [MPa]	ASTM D790	1143	1714
0° Flexural modulus [GPa]		61	129

* Test conditions: room temperature, dry . Normalized values at 55% VF.

** Test conditions: room temperature, dry . Normalized values at 60% VF

Carbon fabric 200 gsm twill 2/2 3K AS4C, RC 42%.

Carbon fabric 150 gsm UD 24K T700S, RC 38%.

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AVAILABILITY

R5 130 series prepregs are available in a wide range of reinforcing fabrics, including carbon, aramid, glass and special fabrics.

STORAGE CONDITIONS

This prepreg should be stored as received in a cool dry place or in a refrigerator.

After removal from refrigerated storage, prepreg should be allowed to reach room temperature before opening the polyethylene bag, thus preventing condensation (a full roll in its packaging can take more than 1 day).

PRECAUTIONS FOR USE

The usual precautions when handling uncured resins and fibrous materials should be observed, and a Safety Data Sheet is available for this product.

SDS Reference Codes: R5 130 : SDS-474