

PRODUCT DATA SHEET



TENCATE ADVANCED COMPOSITES

RS-51

PRODUCT TYPE

Ultra High Temperature AFR-PE-4 Resin

PRODUCT FORMS

- AS-4, IM-7, T650 Based Fabrics or Unitapes
- Quartz or Glass Unitapes and Fabrics

TYPICAL APPLICATIONS

- Engine Seal and Ducts
- Aerospace/Missile Structures
- Electromagnetic/Dielectric Structures

SHELF LIFE

Out Life

10 days @ 77°F (25°C)

Frozen Storage Life

6 months @ <0°F (-18°C)

Out life is the maximum time allowed at room temperature before cure.

Revised 1/2017

All data given is based on representative samples of the materials in question. Since the method and circumstances under which these materials are processed and tested are key to their performance, and TenCate Advanced Composites has no assurance of how its customers will use the material, the corporation cannot guarantee these properties.

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PRODUCT DESCRIPTION

RS-51 is a very high temperature resin system based upon AFR-PE-4 resin. Its polyimide chemistry provides extreme thermal oxidative stability for very high temperature jet engine applications such as engine seals, ducts, and composite structure. This resin system is subject to ITAR controls and as such, mechanical and processing data are restricted.

PRODUCT BENEFITS/FEATURES

- Excellent Elevated Temperature Properties
- Excellent Thermal Stability

NEAT RESIN PHYSICAL PROPERTIES

RS-51 RESIN PROPERTIES

Property	RS-51
Density (g/cm ³)	1.39 g/cc
T _g (DMA); Dry	690°F/366°C
Thermal-Oxidative Stability	<1.0% at 700°F/371°C after 100 hours in air

Mechanical data is restricted under ITAR controls..

TYPICAL CURE PARAMETERS

Autoclave cure or compression molded.

TENCATE ADVANCED COMPOSITES

18410 Butterfield Blvd.
Morgan Hill, CA 95037 USA
Tel: +1 408 776 0700

2450 Cordelia Road
Fairfield, CA 94534 USA
Tel: +1 707 359 3400

Amber Drive, Langley Mill
Nottingham, NG16 4BE UK
Tel: +44 (0)1773 530899

www.tencateadvancedcomposites.com
info@tcac-usa.com (USA)
tcacsales@tencate.com (Europe)