

PRODUCT DATA SHEET



TENCATE ADVANCED COMPOSITES

EX-1545 RTM & VARTM System

PRODUCT TYPE

350°F (177°C) Curing,
Toughened Cyanate Ester for
RTM Applications

SERVICE TEMPERATURE

325°F (163°C) Dry
300°F (149°C) Wet

TYPICAL APPLICATIONS

- Aircraft Structures
- Radomes and Antennae
- Low Observables
- Missile Structures
- High Performance and High Heat Commercial Applications

ADVANTAGES

- Low Viscosity
- No Post Cure Required
- Low Moisture Absorption
- Extreme Toughness
- Resistant to Aviation Fluids

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

EX-1545 is a 2-part highly modified, tough Cyanate Ester resin formulated to have extremely low viscosity at room temperature. The low viscosity allows RTM processing with minimal heat to the resin, which extends resin pot life and mold filling time for difficult and/or large RTM'd structures. EX-1545 displays both excellent mechanical and thermal properties in addition to low moisture absorption. Finally, the material is unique in that it develops full mechanical properties from its initial 350°F (177°C) Cure.

NEAT RESIN PROPERTIES

Specific Gravity.....	1.25 gm/cc
Tg (350° F Cure) (177°C).....	345°F (173°C)
Moisture Absorption.....	0.85 % after 24 hour water boil
Flexural Strength.....	21 ksi (145 mPa)
Flexural Modulus.....	0.50 Msi (3.4 GPa)
Flexural Strain.....	7.5 %

PHYSICAL PROPERTIES

Viscosity

Temperature	Viscosity (cps) @	
	0 days outtime	7 days outtime
77°F (25°C)	466	486
110°F (43°C)	62	141
150°F (66°C)	34	41
250°F (121°C)	34	-

PARAMETERS

Pot Life	24 Hrs Minimum @ 77°F (25°C)
Cure Schedule	2 Hrs @ 350°F (177°C) in Mold
Mix Ratio (A:B)	1:1 by weight

TENCATE ADVANCED COMPOSITES

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