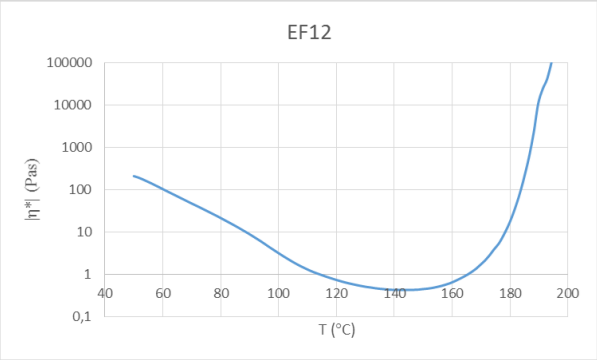
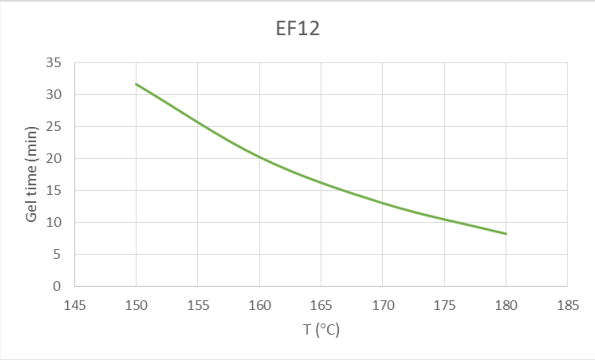
KORDSA | THE REINFORCER

TECHNICAL DATA SHEET

Resin System	EF12
Applications	Aerospace
Key Features	Structural; high temperature and performance applications
Cure Temperature	180°C
Work Life	28 days @ RT
Storage Life	1 year @ -18°C
Fiber	Carbon, S2 glass
Weaving Style	Plain, twill, UD
Dry Fabric Areal Weight (gsm)	193 - 600
%Resin Content (by weight)	34 - 44 ± 2

Resin Matrix Properties





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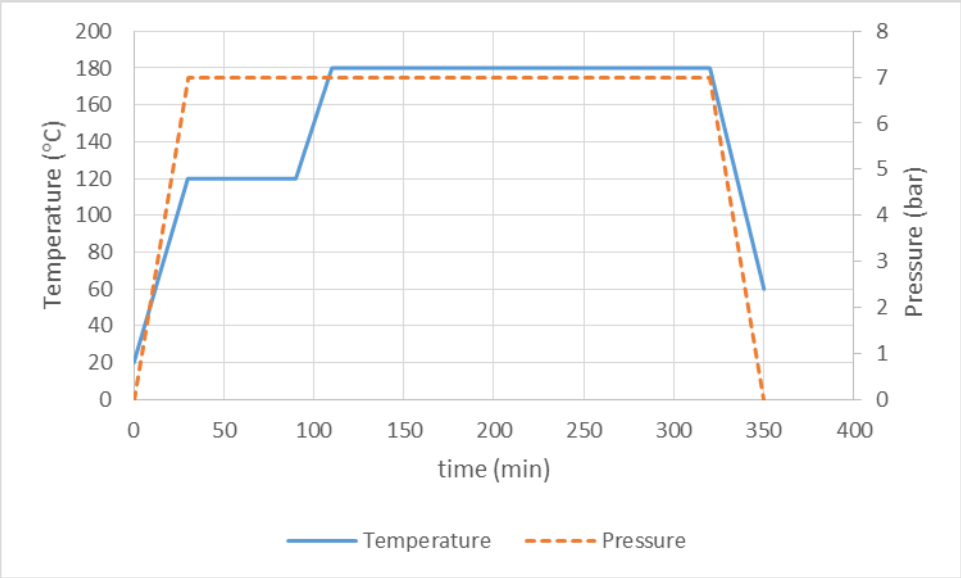
Cure Profile

Autoclave Molding

Recommended Curing Cycle at 180 ºC

A typical autoclave cure cycle for a thin laminate is 60 minutes at 120°C.

1) Apply full vacuum (1 bar).
2) Apply 7 bar gauge autoclave pressure.
3) Reduce the vacuum to a safety value of 0.2 bar when the autoclave pressure reaches approximately 1 bar gauge.
4) Heat-up at 1 – 3 °C/minute to 120°C.
5) Hold at 120°C for 60 minutes ± 5 minutes.
6) Heat-up at 1 – 3 °C/minute to 180°C.
7) Hold at 180°C for 120 minutes ± 5 minutes.
8) Cool at 2 – 5 °C per minute.
9) Vent autoclave pressure when the component reaches 60°C or below.



CFRP Panels (Autoclave Cured Laminates)

Fabric	Fiber	Prepreg Resin Content %
KCF3K PL193	Toray T300	38

Test	Standard	Property	KCF3K PL193
0° Tensile	**ASTM D3039**	**Strength (MPa)**	844
		Modulus (GPa)	62
		Strain (%)	1.3
		Poisson's ratio	0.05
0° Compression	**ASTM D3410**	**Strength (MPa)**	623
		Modulus (GPa)	59
		Strain (%)	2.6
0° 4 Pt Bending	**ASTM D790**	**Strength (MPa)**	1000
		Modulus (GPa)	85
		Strain (%)	1.2
0° ILSS	**ASTM D2344**	**Strength (MPa)**	75
0° V-notch shear	**ASTM D5379**	**Strength (MPa)**	100
90° Tensile	**ASTM D3039**	**Strength (MPa)**	723
		Modulus (GPa)	60
		Strain (%)	1.2
90° Compression	**ASTM D3410**	**Strength (MPa)**	590
		Modulus (GPa)	63
		Strain (%)	2.1
90° 4 Pt Bending	**ASTM D790**	**Strength (MPa)**	908
		Modulus (GPa)	90
		Strain (%)	1.1
90° ILSS	**ASTM D2344**	**Strength (MPa)**	77
90° V-notch shear	**ASTM D5379**	**Strength (MPa)**	104
DMA Tg	**ASTM D7028**	**Tg (°C)**	220

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