

S.No	Composite	E ₁ (GPa)	E ₂ (GPa)	G ₁₂ (GPa)	X _T (MPa)	X _C (MPa)	Y _T (MPa)	Y _C (MPa)	S ₁₂ (MPa)	σ _{1T} (MPa)	σ _{1C} (MPa)	σ _{2T} (MPa)	σ _{2C} (MPa)	τ ₁₂ (MPa)
1	Carbon AS4 /Epoxy 3501-6	126	11	6.6	1950	1480	48	200	79	1738	1480	48	220	132
2	Carbon T300/Epoxy BSL914C	138	11	5.5	1500	900	27	200	80	1500	900	27	200	220
3	E-Glass 21xK43 / LY556/HY917/DY063 Epoxy	53.5	17.7	5.83	1140	570	35	114	72	1140	570	34.8	114	221.5
4	E-Glass 1200tex / MY750/HY917/DY063 Epoxy	45.6	16.2	5.83	1280	800	40	145	73	952	800	39.5	195	233
5	Carbon T300 / Epoxy 5208	181	10.3	7.17	1448	1448	44.8	248	62.1	1500	1500	40	246	68
6	Boron B4 / Epoxy 5505	204	18.5	5.59	1586	2482	62.7	241	82.7	1260	2500	61	202	67
7	Graphite AS / Epoxy 3501	138	8.96	7.1	1448	1172	48.3	248	62.1	1447	1447	51.7	206	93
8	E-Glass(Scotchply)/Epoxy	36.6	8.27	4.14	1103	621	27.6	138	82.7	1062	610	31	118	72
9	Kevlar 49/Epoxy	76	5.5	2.3	1379	276	27.6	64.8	60	1400	235	12	53	34
10	Carbon IM7/Epoxy 8552	165	9	5.6	2560	1590	73	185	90	2560	1815	72.9	288	280
11	Carbon G40-800/Epoxy 5260	173	10	6.94	2750	1700	75	210	90	2751	1695	75	300	347
12	Carbon AS4/Epoxy 3501-6	126	11	6.6	1950	1480	48	200	79	1739	1480	48	220	132
13	E-Glass / Epoxy LY556	45.6	16.2	5.83	1280	800	40	145	73	1280	800	40	195	233
14	Carbon T300 / Epoxy 5208	145	9.4	4.8	1350	1180	47.6	200	94.5	1348	1244	48	196	326
15	Carbon IM6/Epoxy 5245C	173	8.5	5.5	2610	1280	60	220	118	2595	1360	61.2	280	555
16	Carbon IM6/Epoxy 1806	156	7.9	4.1	1850	1180	40.7	200	91	1872	1251	40.3	205	365
17	Carbon IM6/Epoxy F584	176	8.8	5.5	2550	1340	47.6	232	122	2552	1251	48.4	249	545
18	E-Glass/Epoxy	45	12	5.5	1020	620	40	140	70	1338	816	47.6	204	175
19	S-Glass/Epoxy	55	16	7.6	1060	690	40	140	80	1595	715	64	176	228
20	Kevlar 49/Epoxy	76	5.5	2.1	1240	280	30	140	60	1216	1596	27.5	137.5	73.5
21	Graphite / Epoxy (high mod)	220	6.9	4.8	760	690	28	170	70	660	660	27.6	193	144
22	Boron/Epoxy	210	19	4.8	1240	3310	70	280	90	1260	3360	76	285	144
23	Alumina/Epoxy	230	21	7	520	2340	55	140	41	460	2300	84	126	210

Composite Material Propertiese