

## PRODUCT SELECTOR GUIDE

Prepreg	Description	Form	Flame Ref.	Cure Temp	Tough-ened	Tg DMA (E')	Service Temp	Applications	Comments
117-1	Flame retardant, Self-adhesive	F, T		250-300°F		125°C	200°F	Aerospace, industrial	Sandwich panel construction. Meets: NASA out-gassing, BMS 879, BMS 8-168 and FAR 25.853
301	General purpose, Toughened	F, T		250-300°F		120°C	200°F	Aerospace, industrial, marine, medical	<b>Industry standard for over 25 years.</b> High performance at low cost. FR and tack variations avail.
301T	General purpose, Aesthetic	F, T		250-300°F		120°C	200°F	Aerospace, industrial, marine, medical	For demanding aesthetics applications, long out-life
304-1	High toughness	F, T		250-300°F		120°C	200°F	Sporting goods, medical, industrial, marine	Excellent impact properties, long out-life
307	High toughness	F, T		250-300°F		115°C	200°F	Aerospace, industrial, marine	Suitable for thick structures, low exotherm
308T	General purpose, Clear aesthetic	F, T		250-300°F		120°C	200°F	Industrial, medical, automotive	Clear transparent aesthetics, long out-life
316	Flame retardant, Toughened	F, T		250-300°F		115°C	180°F	Industrial, electrical & electronics	Meets UL-94V V-0 Class
321	High temperature resistance	F, T		250-300°F		150°C	250°F	Aerospace, industrial	AGATE design allowable database
1100	General purpose epoxy	F		250-300°F		120°C	200°F	Industrial, sporting goods	Excellent for laminating
1101	General purpose, Self-adhesive	F		250-300°F		110°C	200°F	Industrial	Sandwich & laminating
1102	General purpose, Self-adhesive	F		250-300°F		105°C	180°F	Industrial	Long out-life, sandwich & laminating
1106	Flame retardant, Self adhesive	F		250-300°F		105°C	180°F	Aerospace, industrial	Sandwich & laminating, meets: FAR 25.853
4030	Flame retardant, Toughened	F, T		250-300°F		130°C	200°F	Aerospace (aircraft interior)	Flame retardant, meets FAR25.853, Appendix F Part I, IV, V - Smoke density & heat release
4080	General purpose epoxy, High Tg	F, T		250-300°F		155°C	250°F	Aerospace, industrial, commercial, sporting goods	Moderate Tack, high Tg, 30 days out-life at 70°F (21°C)
4300	Low temperature cure	F, T		160-200°F		90°C	140°F	Industrial, marine	Long out-life, suitable for very thick structures, low exotherm
5300	Variable cure temperature range, Toughened	F, T		160-275°F		130°C	200°F	Industrial, sporting goods, marine, tooling	Long out-life, Low temperature cure or 10min cure at 275°F. Fully toughened properties
4400	General purpose, Toughened, Moderate tack	F, T		250-300°F		120°C	200°F	Sporting goods, marine and industrial	High torsional performance
4708	General purpose epoxy High toughness, High wet Tg	F, T		250-300°F		145°C dry 120°C wet	250°F	Aerospace (UAV, rockets), general aviation, industrial	Controlled flow, excellent mechanical properties, long out-life, NCAMP & FAA B-basis design allowable database
6100	General purpose epoxy, High temperature	F, T		350°F		210°C	350°F	Aerospace, industrial, tooling	Med-high flow, excellent mechanical properties
6600	High performance epoxy, High toughness, High Tg	F, T		350°F		210°C dry 165°C wet	350°F	Aerospace, general aviation	High dry and wet Tg, excellent mechanical properties Meets DMS 2224 specification (non-QPL)

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Adhesives	Description	Forms	Flame Ret.	Cure Temp	Tough-ened	Substrates					Service Temp	Applications	Comments
						Metals	Carbon	Balsa	Foams	H-comb			
<b>NB101</b>	General purpose	U, R		235-300°F							200°F	Aerospace, military	Co-curing/bonding sandwich structure. Meets: MMM-A-132 & MIL-A-25463
<b>NB102</b>	General purpose with extended outlife	U, R		250-300°F							180°F	Sports, industrial, medical	Co-curing/bonding sandwich structure. Long out-life, meets: MMM-A-132 & MIL-A-25463
<b>NB106</b>	Flame retardant	U, R		235-300°F							180°F	Aerospace interiors	Co-curing/bonding sandwich structure. Meets: MMM-A-132, MIL-A-25463 & FAR 25.853
<b>NB141U</b>	Reticulating adhesive	U		275-300°F							180°F	Perforated panel assembly	Perforated aluminum skin bonding to honeycomb core
<b>NB321 LS</b>	Lightning strike adhesive Aluminum or copper mesh reinforced	M		275-300°F							250°F	Aerospace outer skins	Lightning strike protection Shielding, high dry and wet Tg, 20 days out-life at 70°F (21°C)
<b>LTC3310</b>	Low temperature adhesive film	U, R		180-250 F							140°F	Marine, tooling	Low temperature adhesive for open and closed cell core
<b>TB3500</b>	High peel strength	U, R		250-300°F							200°F	Aerospace, military	High bond, shear properties, meets: MMM-A-132 & MIL-A-25463
<b>Surfacing Film</b>													
<b>3100</b>	Surfacing film, porosity free. Excellent cured surface cosmetics.	R		250-300°F								General use	Co-curable with 250°F & 300°F cure systems Compatible with various paints Sands easily and compatible with industrial coatings
<b>3800</b>		R											
<b>Core Splice – Foaming Adhesive</b>													
<b>NB51/301</b>	Long out-life syntactic	U		250-300°F							180°F	Core splice, edge inserts	Expandable low density adhesive

\* U= Unsupported, R= Reinforced, M= Metal mesh Reinforced

Towpreg	Description	Flame Ret.	Cure Temp	Tough-ened	Tg DMA (E')	Service Temp	Comments
<b>HMT301</b>	General purpose, toughened		250-300°F		120°C	200°F	Based on NB301 toughened system, wide range of applications. Low cost, high performance.
<b>HMT316</b>	Flame retardant, toughened		250-300°F		140°C	200°F	Meets UL-94V V-0 Class
<b>HMT317</b>	General purpose		250-300°F		125°C	200°F	General epoxy resin
<b>HMT321</b>	High temperature resistance, toughened		250-300°F		150°C	250°F	High service temperature. Great mechanical properties.
<b>HMT321FR</b>	High temperature resistance, flame retardant		250-300°F		150°C	250°F	High service temperature and flame resistance properties.
<b>HMT4030</b>	Flame retardant meets FAR25.853		250-300°F		135°C	200°F	Meets FAR25.853, Appendix F Part I, IV, V. Designed for aircraft interiors.
<b>HMT502</b>	High elongation Designed for pressure vessel applications		250-300°F		115°C	200°F	Very good tank burst and cycle durability.
<b>HMT5300</b>	Variable cure system		160-275°F		130°C	200°F	Ideal for Type 4 cylinders (plastic liners). 10 min cure at high temperature.
<b>HMT701</b>	Low surface tack		250-300°F		120°C	200°F	Low viscosity, low surface tack, processing similar to wet winding resin.
<b>HMT6600</b>	350°F cure, high temperature resistance		350°F		200°C	350°F	High performance aerospace system.

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