

## SHD COMPOSITES PRODUCT SELECTOR GUIDE



Resin System	Description	Cure Temp (°C)	Cure Time (Hours)	Outlife at 20°C (Days)	Tg Onset (°C - DMA)	Tg Peak (°C - DMA)	Service Temp (°C)	Toughened	Cure	Application
<b>TOOLING PREPREG - Low Temperature Cure</b>										
LTC102	Carbon / Glass Tooling	30 - 65	45 - 5	3	214	232	210	No	Autoclave	Low Temperature Cure, Motorsport
LTC150	Carbon / Glass Tooling	30 - 70	40 - 3	2	186	210	180	No	Autoclave	Low Temperature Cure, Motorsport
LTC210	Carbon / Glass Tooling	45 - 70	40 - 4	4	202	221	200	No	Autoclave	General Purpose
LTC216	Carbon / Glass Tooling	45 - 70	50 - 5	7	220	235	210	No	Autoclave	General Purpose
LTC400 (DF314)	Long Outlife Tooling	55 - 70	72 - 12	21	230	245	220	No	Autoclave	General Purpose, Long Outlife
LTC410 (DF285)	Long Outlife Tooling, Fast Cure Component	65 - 80	16 - 4	21	190	206	180	Yes	Autoclave / Oven / Press	Tooling / General Purpose Component
OTS65	Oven Cure Tooling	65 - 90	Consult Data Sheet	Up to 21	129	143	125	No	Oven	Out of Autoclave Structures
<b>ADHESIVE FILM</b>										
MTFA500	Adhesive Film	80 - 120	16 - 1	30	141	150	135	Yes	Autoclave	General Purpose
VTFA400	Adhesive Film	65 - 120	16 - 1	21	135	147	130	Yes	Autoclave	General Purpose
<b>COMPONENT PREPREG - Low to Medium Temperature Cure</b>										
LTC250-2XL	Low Temp Cure	50 - 75	40 - 4	5	130	144	125	Yes	Autoclave / Oven	General Purpose (Visual)
MTC275	Med Temp Cure, Out of Autoclave	85 - 120	16 - 1	30	121	135	115	Yes	Oven / Autoclave	General Purpose (Visual)
MTC400	Med Temp Cure	85 - 135	16 - 1	30	227	238	220	Yes	Autoclave	Motorsport / Aerospace
MTC400-1	Med Temp Cure	85 - 135	16 - 1	30	207	223	200	Yes	Autoclave	Motorsport / Aerospace
MTC510	Med Temp Cure	80 - 120	16 - 1	30	140	148	135	Yes	Autoclave	General Purpose (Visual)
MTC801	Med Temp Cure, Core Bondable	90 - 120	14 - 1	60	124	132	115	Yes	Autoclave	General Purpose (Visual)
MTC9800	Graphene Enhanced	90 - 120	14 - 1	60	119	132	115	Yes	Autoclave	Increased Durability
<b>COMPONENT PREPREG - High Service Temperature</b>										
HTC400	High Temp Cure	180	6	30	263	272	255	Yes	Autoclave	Aerospace / Automotive
CEM100	Cyanate Ester, High Service Temp	120 - 135	3 - 2	21	345	400	340	No	Autoclave	Aerospace / Motorsport
CEM160	Cyanate Ester, High Service Temp, Available on UD reinforcements	120 - 135	3 - 2	Up to 21	275	300	270	No	Autoclave	Aerospace / Motorsport
CEL100-1	Cyanate Ester, High Service Temp	70 - 90	22 - 6	2	296	311	290	No	Autoclave	Aerospace / Motorsport
<b>VERSATILE PREPREG</b>										
VTC212 (DF212)	Oven Component System	65 - 120	16 - 1	21	135	140	130	Yes	Oven	Cosmetic
VTC401	General Purpose, Core Bondable	65 - 120	16 hrs - 45 mins	21	143	151	135	Yes	Autoclave / Oven / Press	General Purpose (Visual)
LTC410 (DF285)	Long Outlife Tooling, Fast Cure Component	65 - 140	16 hrs - 15 mins	21	190	206	180	Yes	Autoclave / Oven / Press	Tooling / General Purpose Component
OPS75	Oven Panel System	65 - 130	Consult Data Sheet	Up to 21	140	160	135	Yes	Autoclave / Oven	Body Panel / Prototype Tooling
APS75	Autoclave Panel System	65 - 130	Consult Data Sheet	21	170	191	160	Yes	Autoclave	Body Panel / Prototype Tooling
<b>FLAME RETARDANT</b>										
FRVC410	Flame Retardant, Core Bondable	65 - 120	16 - 2	21	160	176	155	Yes	Autoclave / Oven	Flame Retardant, Aerospace / Rail
MTC510FRB	Flame Retardant, Med Temp Cure	80 - 120	16 - 1	30	130	148	125	Yes	Autoclave	Flame Retardant, General Purpose

**Disclaimer:** Technical advice, instruction or recommendation, whether verbal or in writing, is given in good faith but SHD Composites Ltd (SHD Composites) gives no warranty, express or implied. SHD Composites recommends that customers make their own tests to determine the quality and suitability of the product for their particular application and circumstances. Such testing should be performed under conditions as close as possible to those to which the final component may be subjected. Values listed here are for typical properties and should not be considered minimum or maximum, nor being used for specifications.

SHD Composites continuously reviews and updates its Product Selector Guide and Technical Data Sheets. Please ensure that you have the current version, by contacting your SHD Composites sales contact and quoting the issue date.

www.shdcomposites.com  
+44 1529 307629  
sales@shdcomposites.com

SHD/918

Issue 4 - 24th August 2017