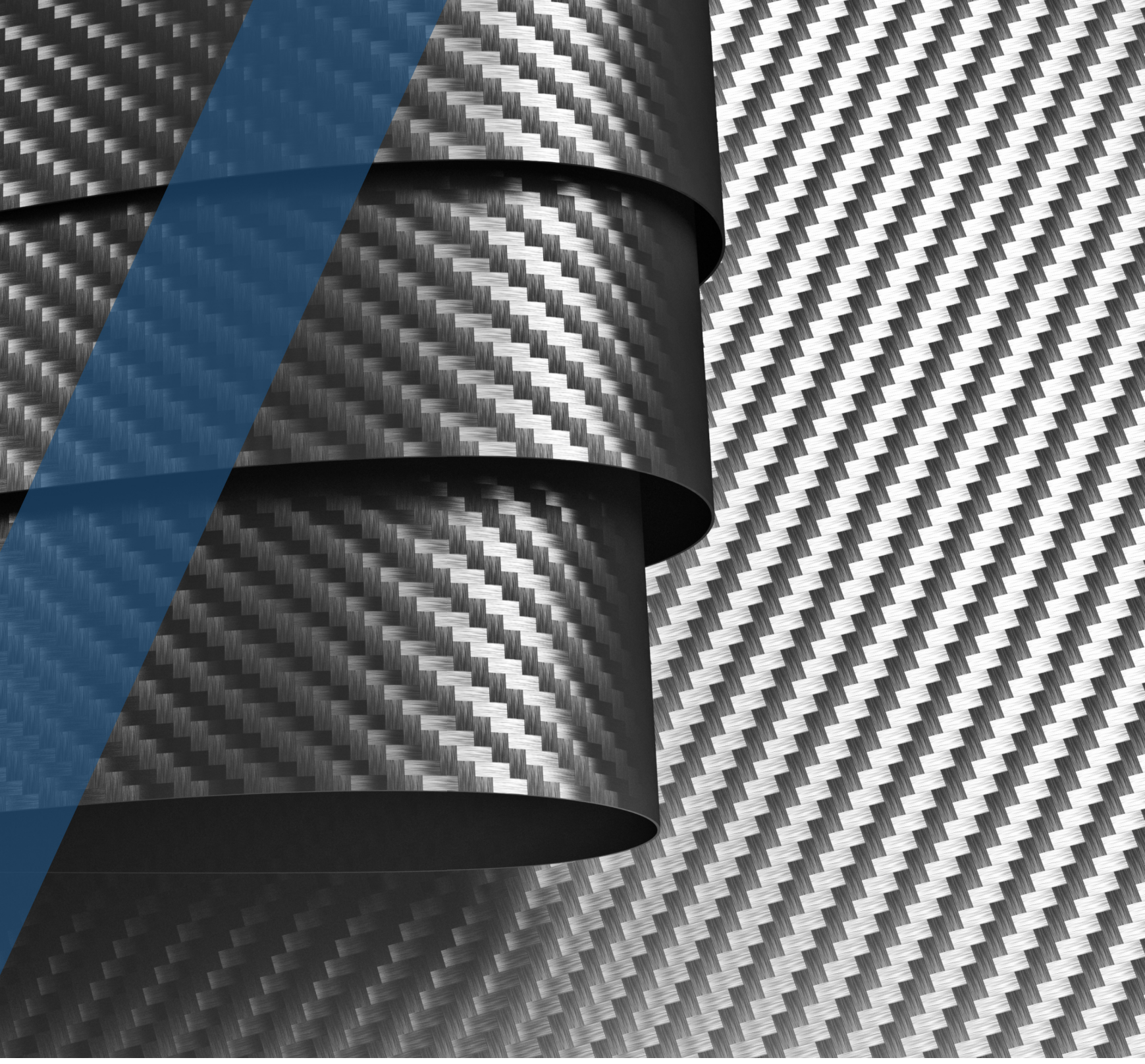


M3EM

PREPREGS FOR SURFACE AND CONSTRUCTION APLICATION

FLAME RETARDANT PREPREGS

TOOLING PREPREGS

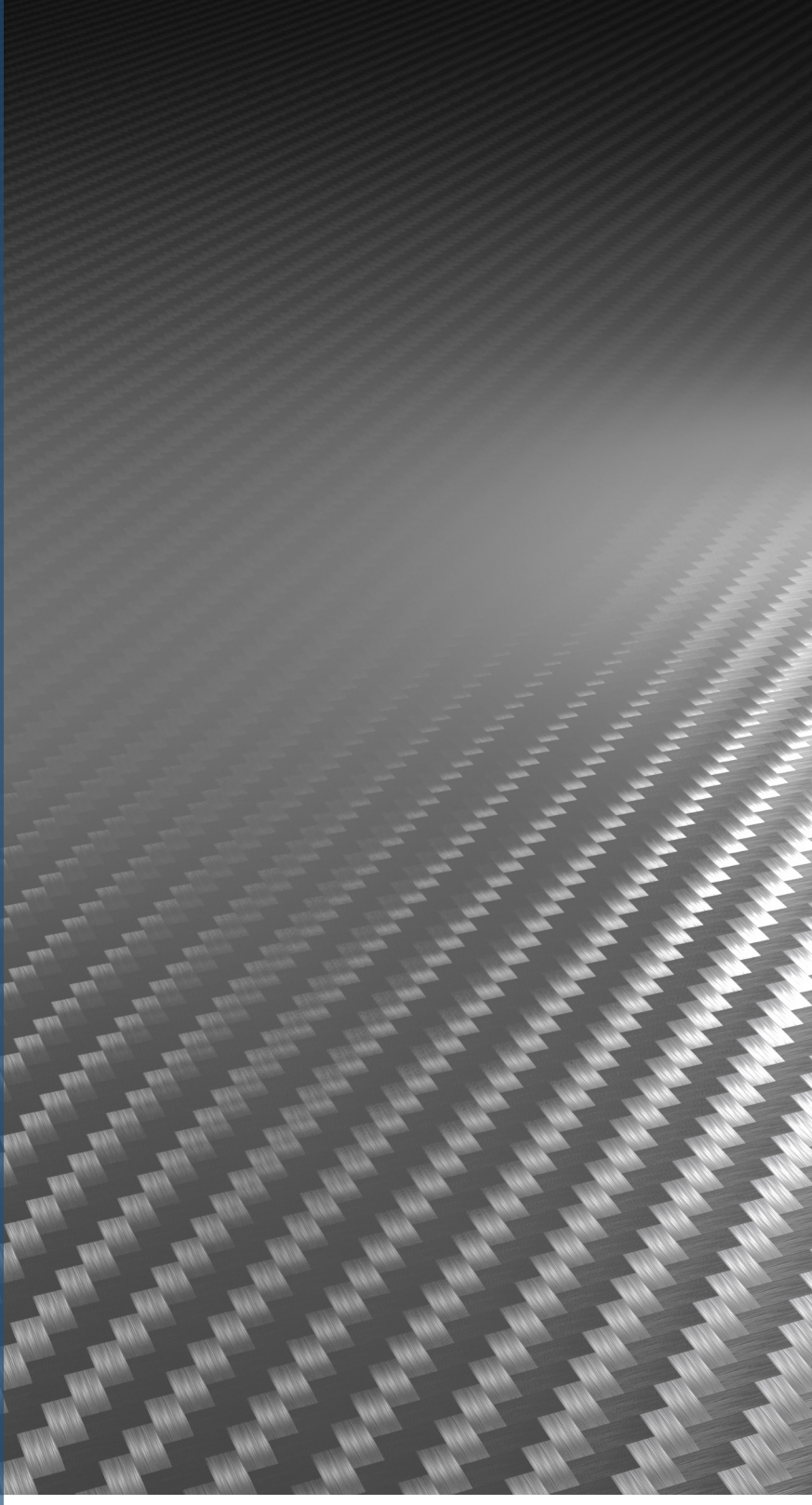
SKI AND MOLDING PREPREGS

CYANATE ESTER PREPREGS

PIGMENTED RESIN

BALLISTIC PREPREGS

COATING AND IMPREGNATION





PREPREGS FOR SURFACE AND CONSTRUCTION APLICATION

ER 38

ER 38

Is formulated UV stabilized HOTMELT epoxy resin, specifically designed for prepreg system with LONG SHELF LIFE and GOOD TACK. It is a very versatile matrix which could be pre-impregnated into carbon, glass, aramid or basalt fibers.

SYSTEM CURING CONDITIONS

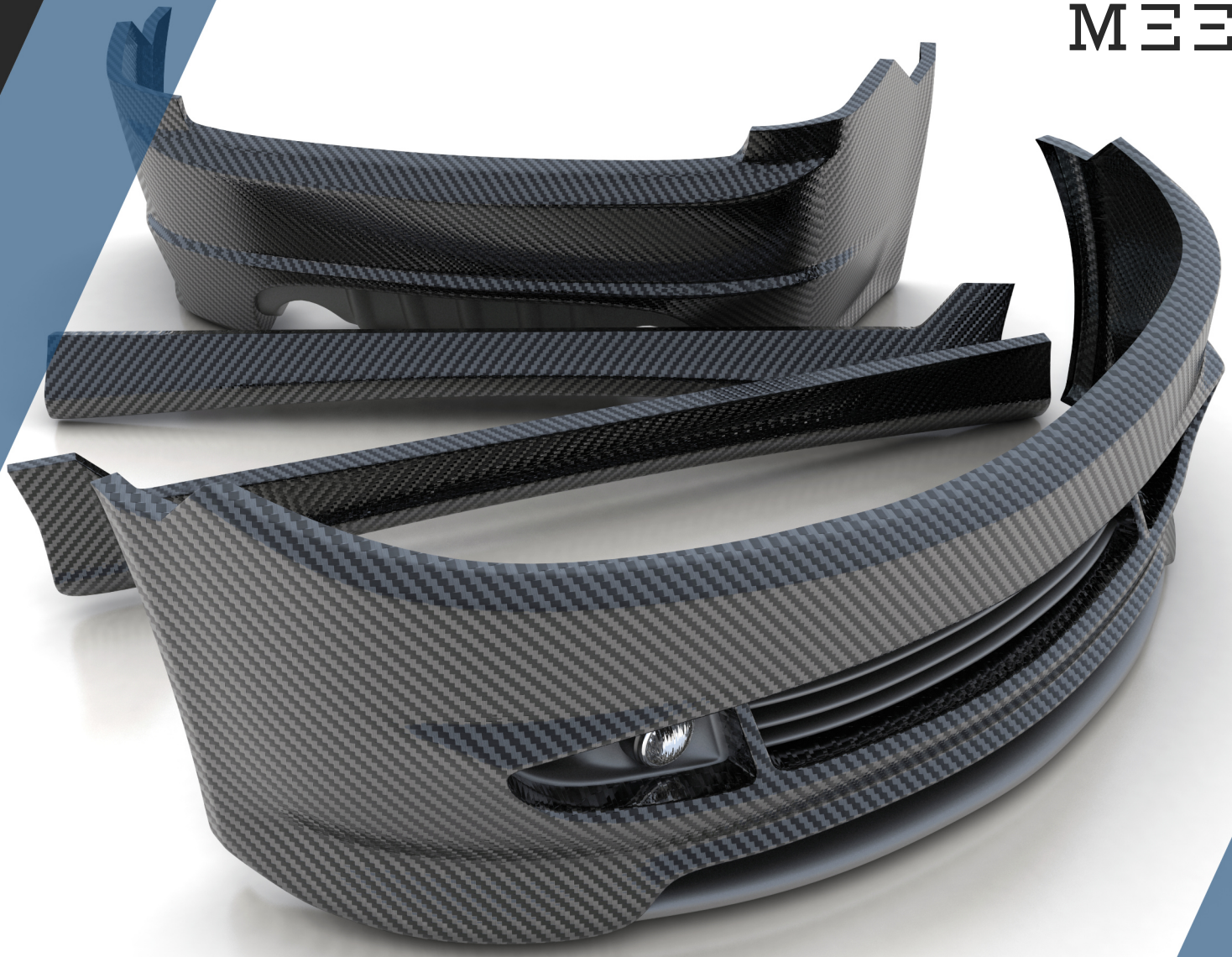
Curing Temp.	Gel Time	Curing Time	Tg - DSC
100 °C	22 min.	120min.	125 °C +-5
120 °C	7 min.	60 min.	125 °C +-5
130 °C	6 min.	50 min.	125 °C +-5

CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC93	93	Plain	1k	7.0	7.0	1000	50-100
CC120	120	Plain	1k	9.0	9.0	1000-1200	50-100
CC160	160	Plain-twill	3k	4.0	4.0	1000	50
CC200	200	Plain-twill	3k	4.9	5.0	1000-1250	50
CC245	245	Plain-twill	3k	6.0	6.0	1250	50
CC285	285	Twill 4/4	3k	7.0	7.0	1000-1250	50
CC400	400	Plain-twill	12k	2.5	2.5	1000-1270	25-33
CC600	600	Twill	12k	3.8	3.8	1000-1270	25-33
ARAMID WOVEN FABRICS							
AA60	61	Plain	22tex	13.5	13.5	1000	50-100
AA170	170	Twill	127tex	6.5	6.5	1200	50
AA220	220	Twill	161tex	6.5	6.5	1200	50
AA300	300	Twill-Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain	336tex	6.3	6.3	1000-1500	50
GLASS WOVEN FABRICS							
GG25	24.5	Plain	5.5tex	25.0	25.0	1000-1280	50-200
GG50	50	Plain	11tex	25.0	20.0	1000	50-200
GG110	110	Twill	33tex	24.0	24.0	1000	100
GG163	163	Twill-Satin	68tex	12.0	11.5	1000	100
GG200	200	Plain-twill	66tex	14.3	14.3	1000	50-100
GG280	280	Twill	168tex	11.5	11.5	1000	50
GG390	390	Twill	330tex	6.4	6.3	1000	50
GG580	580	Plain-twill	1200tex	2.5	2.5	1000	25-33
HYBRID WOVEN FABRICS							
CA210	210	Twill	3k-130tex	6.0	6.5	1200	50
CA285	285	Twill	3k-300tex	5.4	5.6	1000	50

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



PREPREGS FOR SURFACE AND CONSTRUCTION APLICATION

ER 58

ER 58

Is formulated UV stabilized HOTMELT epoxy resin, specifically designed for prepreg system with LONG SHELF LIFE and GOOD TACK. It is a very versatile matrix which could be pre-impregnated into carbon, glass, aramid or basalt fibers and is allowing a range of processing temperatures.

SYSTEM CURING CONDITIONS

Curing Temp.	Gel Time	Curing Time	Tg - DMA (2K/min.)
100 °C	22 min.	120min.	138 °C +-5
120 °C	6 min.	60 min.	138 °C +-5
130 °C	5 min.	45 min.	138 °C +-5

CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC93	93	Plain	1k	7.0	7.0	1000	50-100
CC120	120	Plain	1k	9.0	9.0	1000-1200	50-100
CC160	160	Plain-twill	3k	4.0	4.0	1000	50
CC200	200	Plain-twill	3k	4.9	5.0	1000-1250	50
CC245	245	Plain-twill	3k	6.0	6.0	1250	50
CC285	285	Twill 4/4	3k	7.0	7.0	1000-1250	50
CC400	400	Plain-twill	12k	2.5	2.5	1000-1270	25-33
CC600	600	Twill	12k	3.8	3.8	1000-1270	25-33
ARAMID WOVEN FABRICS							
AA60	61	Plain	22tex	13.5	13.5	1000	50-100
AA170	170	Twill	127tex	6.5	6.5	1200	50
AA220	220	Twill	161tex	6.5	6.5	1200	50
AA300	300	Twill-Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain	336tex	6.3	6.3	1000-1500	50
GLASS WOVEN FABRICS							
GG25	24.5	Plain	5.5tex	25.0	25.0	1000-1280	50-200
GG50	50	Plain	11tex	25.0	20.0	1000	50-200
GG110	110	Twill	33tex	24.0	24.0	1000	100
GG163	163	Twill-Satin	68tex	12.0	11.5	1000	100
GG200	200	Plain-twill	66tex	14.3	14.3	1000	50-100
GG280	280	Twill	168tex	11.5	11.5	1000	50
GG390	390	Twill	330tex	6.4	6.3	1000	50
GG580	580	Plain-twill	1200tex	2.5	2.5	1000	25-33
HYBRID WOVEN FABRICS							
CA210	210	Twill	3k-130tex	6.0	6.5	1200	50
CA285	285	Twill	3k-300tex	5.4	5.6	1000	50

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



FLAME RETARDANT PREPREGS

UL 94 V0

ER 88

ER 88

Is formulated HOTMELT flame retardant epoxy resin system pass requirements for UL 94V0, specifically designed for prepreg system with LONG SHELF LIFE and GOOD TACK. It is a very versatile matrix which could be pre-impregnated into carbon, glass, aramid or basalt fibers and is allowing a range of processing temperatures.

SYSTEM CURING CONDITIONS

Curing Temp.	Gel Time	Curing Time	Tg - DMA (2K/min.)
120℃	10min.	75 min.	120℃
130℃	6 min.	60 min.	120℃
145℃	5 min.	50 min.	120℃

CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC200	200	Plain-twill	3k	4.9	5.0	1000-1250	50
CC245	245	Plain-twill	3k	6.0	6.0	1250	50
ARAMID WOVEN FABRICS							
AA60	61	Plain	22tex	13.5	13.5	1000	50-100
AA170	170	Twill	127tex	6.5	6.5	1200	50
AA220	220	Twill	161tex	6.5	6.5	1200	50
AA300	300	Twill-Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain	336tex	6.3	6.3	1000-1500	50
GLASS WOVEN FABRICS							
GG163	163	Twill-Satin	68tex	12.0	11.5	1000	100
GG280	280	Twill	168tex	11.5	11.5	1000	50
GG390	390	Twill	330tex	6.4	6.3	1000	50
HYBRID WOVEN FABRICS							
CA210	210	Twill	3k-130tex	6.0	6.5	1200	50
CA285	285	Twill	3k-300tex	5.4	5.6	1000	50

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



TOOLING PREPREGS

ER 78T

ER 78T

Is formulated HOTMELT epoxy resin, specifically designed for molding and tooling parts with LONG SHELF LIFE, GOOD TACK and SHORT PRODUCTION CYCLE-TIME. It is a very versatile matrix which could be pre-impregnated into carbon, glass, aramid or basalt fibers and is allowing a range of processing temperatures.

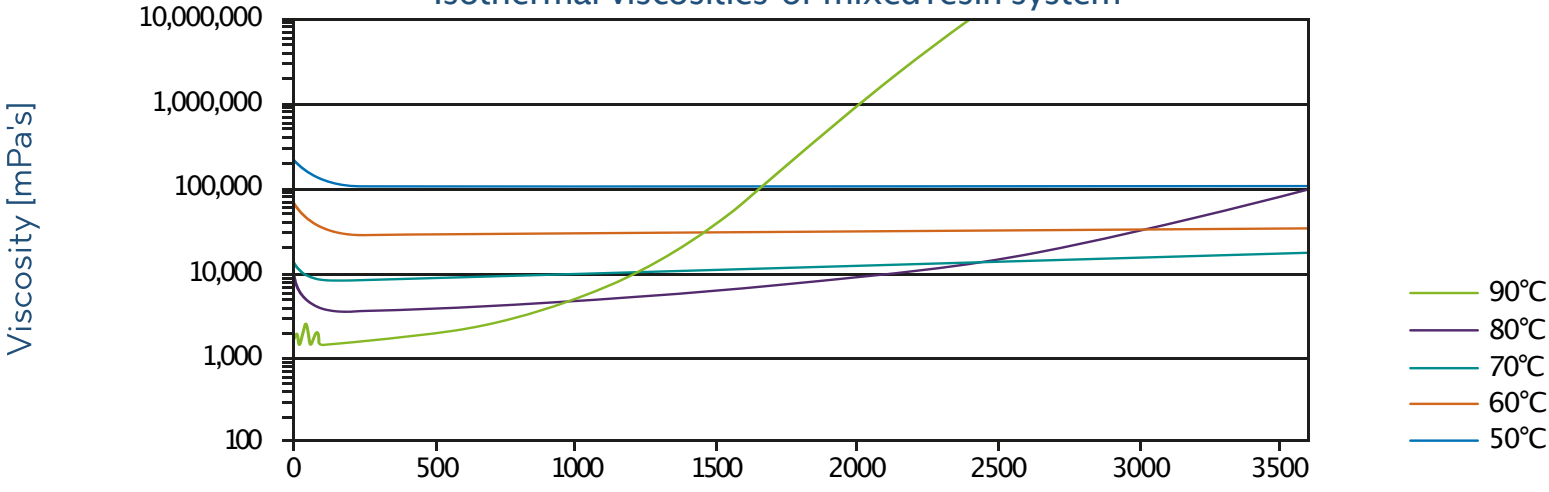
BENEFITS

- Good chemical resistance
- Glass transition temperature (up to 150°C)
- Good mechanical performance
- High surface quality parts

SYSTEM CURING CONDITIONS

Steps	Curing Temp.	Gel Time	Curing Time
Cure	70-75 °C	60 min.	240-360 min.
Post-cure 1	95 °C	——	60 min.
Post-cure 2	125 °C	——	60 min.
Post-cure 3	150 °C	——	120 min.

Isothermal viscosities of mixed resin system

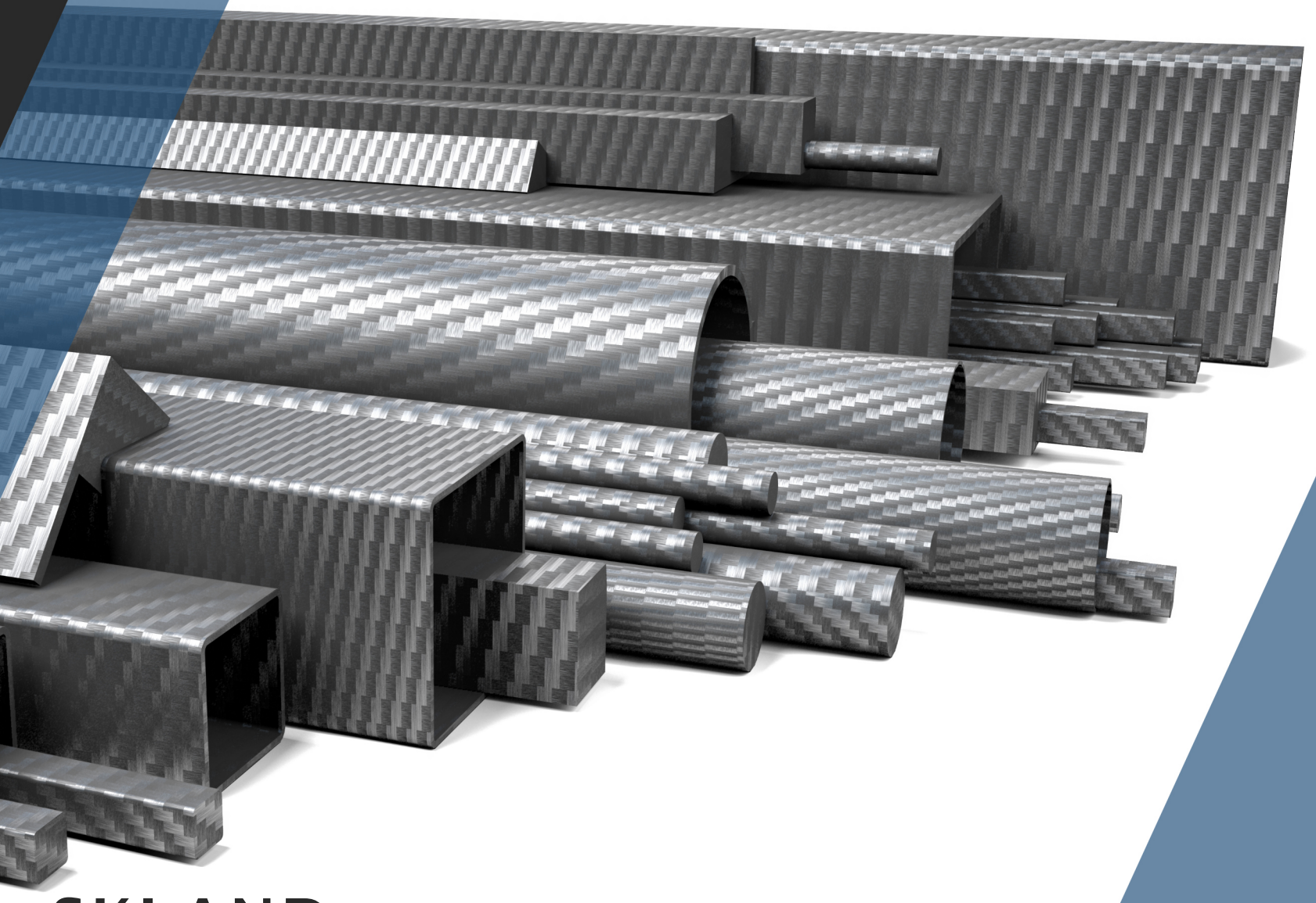


CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC93	93	Plain	1k	7.0	7.0	1000	50-100
CC200	200	Plain-twill	3k	4.9	5.0	1000-1250	50
CC245	245	Plain-twill	3k	6.0	6.0	1250	50
CC600	600	Twill	12k	3.8	3.8	1000-1270	25-33

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



SKI AND MOLDING PREPREGS

ER 68

ER 68

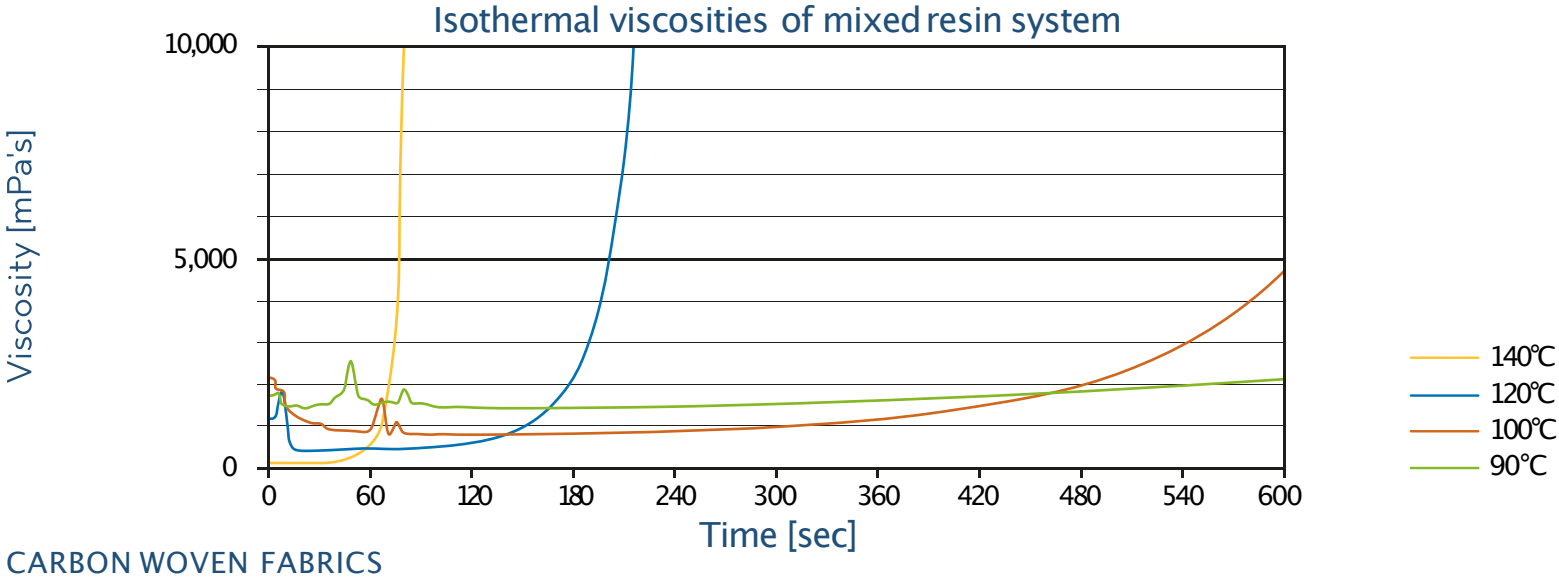
Is formulated UV stabilized HOTMELT epoxy resin, specifically designed for compression molding structural and exterior parts with LONG SHELF LIFE, GOOD TACK, SHORT PRODUCTION CYCLE-TIME. It is a very versatile matrix which could be pre-impregnated into carbon, glass, aramid or basalt fibers and is allowing a range of processing temperatures.

BENEFITS

- Good chemical resistance
- Good mechanical performance
- High surface quality parts

SYSTEM CURING CONDITIONS

Curing Temp.	Gel Time	Curing Time	Tg - DMA (2K/min.)
120 °C	3 min.	10 min.	140 °C
140 °C	1,5 min.	5 min.	140 °C



CARBON WOVEN FABRICS

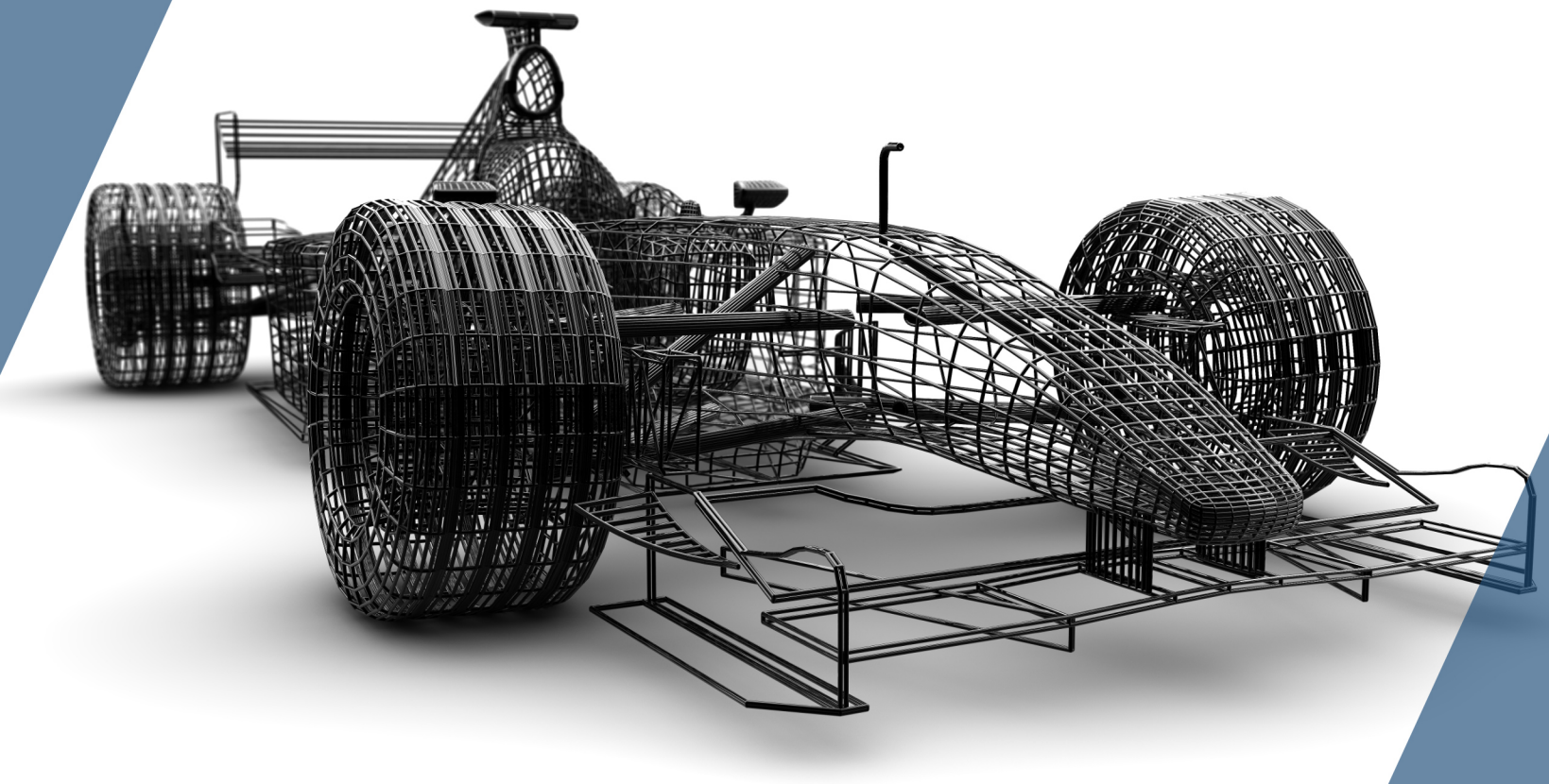
Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC200	200	Plain-twill	3k	4.9	5.0	1000-1250	50
CC245	245	Plain-twill	3k	6.0	6.0	1250	50

GLASS Biax and Triax FABRICS

Name	g/m2	Weave	Yarn tipe	Warp	Weft	Width mm	Length lm
GG542+Fleece	542	Biax 0/90	E-glass	1200tex	68tex	1200	33
GG622+Fleece	622	Biax 0/90	E-glass	1200tex	68tex	635	33-50
GG837	837	Triax 0/45/45	E-glass	———	———	1270	21
GG933	933	Triax 0/45/45	E-glass	———	———	1270	21

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



CYANATE ESTER PREPREGS

CER 405

CER 405 –Delivering High Tg and Inherent Flame Retardancy

Cyanates are a novel class of high performance thermoset resins. They are characterized by glass transition temperatures up to 405°C, brilliant dielectric and mechanical properties and epoxy-like processing. Areas of use are electronics, aerospace, automotive and industrial composites and compounds.

SYSTEM MODIFICATION

1.Curing Temp.	Curing Time	1.Curing Temp.	Curing Time
150 °C	60 min.	200 °C	180min.

Postcure Temp.	Curing Time	Tg – DMA (2k/min.)	Gel Time at 200°C
260 °C	60 min.	405 °C	70 – 240 min.

CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC93	93	Plain	1k	7.0	7.0	1000	50–100
CC120	120	Plain	1k	9.0	9.0	1000–1200	50–100
CC160	160	Plain–twill	3k	4.0	4.0	1000	50
CC200	200	Plain–twill	3k	4.9	5.0	1000–1250	50
CC245	245	Plain–twill	3k	6.0	6.0	1250	50
CC285	285	Twill 4/4	3k	7.0	7.0	1000–1250	50
CC400	400	Plain–twill	12k	2.5	2.5	1000–1270	25–33
CC600	600	Twill	12k	3.8	3.8	1000–1270	25–33

ARAMID WOVEN FABRICS

AA60	61	Plain	22tex	13.5	13.5	1000	50–100
AA170	170	Twill	127tex	6.5	6.5	1200	50
AA220	220	Twill	161tex	6.5	6.5	1200	50
AA300	300	Twill–Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain	336tex	6.3	6.3	1000–1500	50

GLASS WOVEN FABRICS

GG25	24.5	Plain	5.5tex	25.0	25.0	1000–1280	50–200
GG50	50	Plain	11tex	25.0	20.0	1000	50–200
GG110	110	Twill	33tex	24.0	24.0	1000	100
GG163	163	Twill–Satin	68tex	12.0	11.5	1000	100
GG200	200	Plain–twill	66tex	14.3	14.3	1000	50–100
GG280	280	Twill	168tex	11.5	11.5	1000	50
GG390	390	Twill	330tex	6.4	6.3	1000	50
GG580	580	Plain–twill	1200tex	2.5	2.5	1000	25–33

NEXTEL CERAMIC FABRICS

NAF290	290	Satin	Nextel 312	18.0	18.0	970	10–90

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



PIGMENTED RESIN

PIGMENTED RESIN

Is formulated UV stabilized HOTMELT epoxy resin, specifically designed for PIGMENTED prepreg system with LONG SHELF LIFE and GOOD TACK.

BENEFITS

- Grey
- White
- Yellow
- Black
- Red

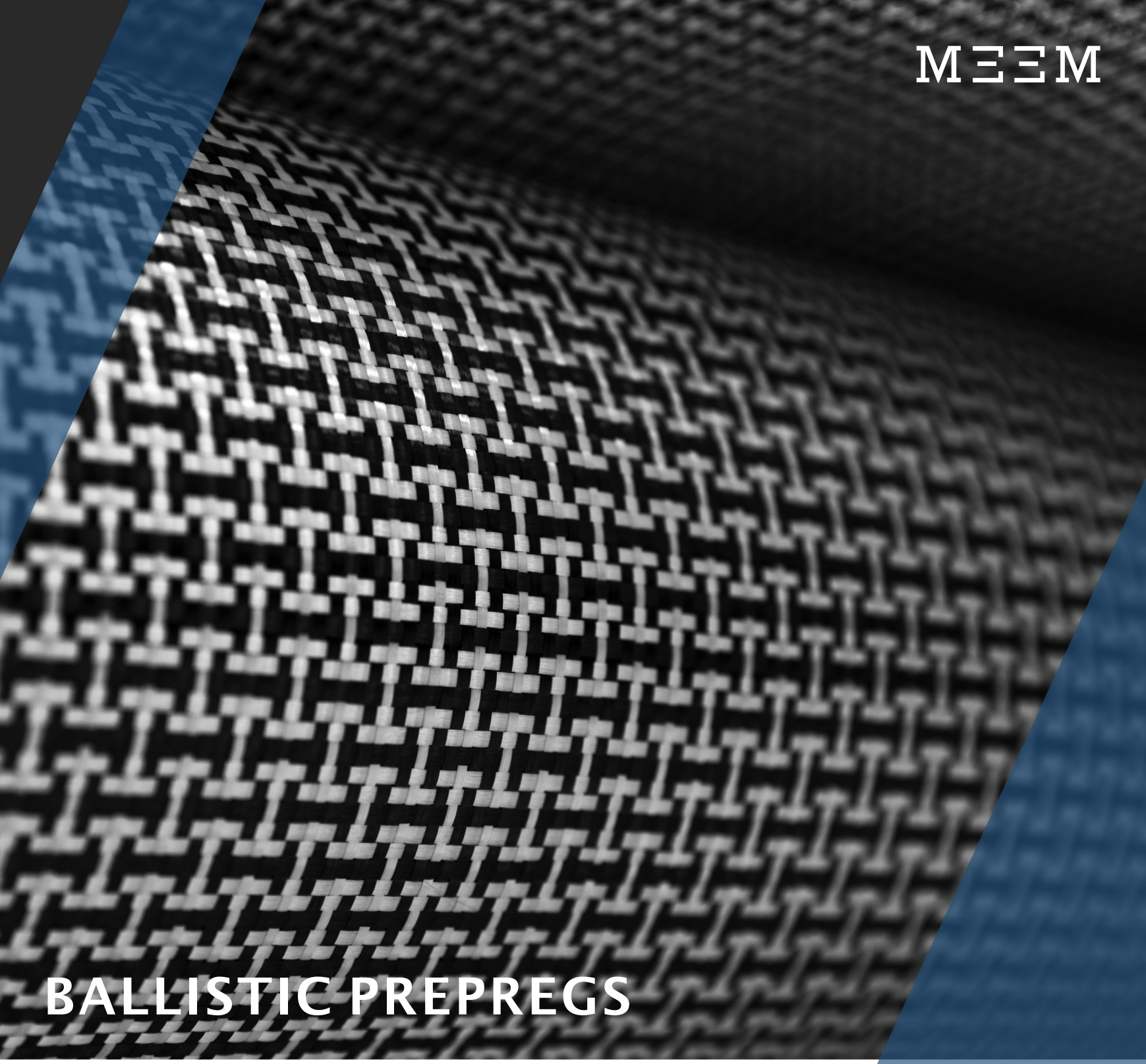
SYSTEM CURING CONDITIONS

Curing Temp.	Gel Time	Curing Time	Tg - DSC
100 °C	22 min.	120min.	120 °C +-5
120 °C	7 min.	60 min.	120 °C +-5
130 °C	6 min.	50 min.	120 °C +-5

ARAMID WOVEN FABRICS							
AA60	61	Plain	22tex	13.5	13.5	1000	50-100
AA170	170	Twill	127tex	6.5	6.5	1200	50
AA220	220	Twill	161tex	6.5	6.5	1200	50
AA300	300	Twill-Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain	336tex	6.3	6.3	1000-1500	50
GLASS WOVEN FABRICS							
GG25	24.5	Plain	5.5tex	25.0	25.0	1000-1280	50-200
GG50	50	Plain	11tex	25.0	20.0	1000	50-200
GG110	110	Twill	33tex	24.0	24.0	1000	100
GG163	163	Twill-Satin	68tex	12.0	11.5	1000	100
GG200	200	Plain-twill	66tex	14.3	14.3	1000	50-100
GG280	280	Twill	168tex	11.5	11.5	1000	50
GG390	390	Twill	330tex	6.4	6.3	1000	50
GG580	580	Plain-twill	1200tex	2.5	2.5	1000	25-33
HYBRID WOVEN FABRICS							
CA210	210	Twill	3k-130tex	6.0	6.5	1200	50
CA285	285	Twill	3k-300tex	5.4	5.6	1000	50

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



BALLISTIC PREPREGS

ER 38

Is formulated UV stabilized HOTMELT epoxy resin, specifically designed for prepreg system with LONG SHELF LIFE and GOOD TACK. It is a very versatile matrix which could be pre-impregnated into carbon, glass, aramid or basalt fibers.

SYSTEM CURING CONDITIONS

Curing Temp.	Gel Time	Curing Time	Tg - DSC
100 °C	22 min.	120min.	125 °C +-5
120 °C	7 min.	60 min.	125 °C +-5
130 °C	6 min.	50 min.	125 °C +-5

CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC200	200	Plain-twill	3k	4.9	5.0	1000-1250	50
CC245	245	Plain-twill	3k	6.0	6.0	1250	50
CC285	285	Twill 4/4	3k	7.0	7.0	1000-1250	50

ARAMID WOVEN FABRICS

AA120	120	Plain	55tex	11.0	11.0	1000-1500	50-100
AA190	190	Plain	110tex	8.5	8.5	1000-1500	50
AA200	200	Plain-Satin	93tex	10.5	10.5	1000-1500	50
AA260	260	Plain	168tex	7.8	7.8	1000-1500	50
AA280	280	Plain	168tex	8.4	8.4	1000-1500	50
AA300	300	Twill-Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain-twill	336tex	6.3	6.3	1000-1500	50
AA460	460	Plain	336tex	6.7	6.7	1000-1500	25-50
AA635	635	Twill	336tex	9.2	9.2	1000-1500	25-33

GLASS WOVEN FABRICS

GG390	390	Twill	330tex	6.4	6.3	1000	50
GG580	580	Plain-twill	1200tex	2.5	2.5	1000	25-33

HYBRID WOVEN FABRICS

CA210	210	Twill	3k-130tex	6.0	6.5	1200	50
CA285	285	Twill	3k-300tex	5.4	5.6	1000	50

GLASS Biax and Triax FABRICS

Name	g/m2	Weave	Yarn tipe	Warp	Weft	Width mm	Length lm
GG996	996	Biax 45/45	E-glass	———	———	1270	21
GG837	837	Triax 0/45/45	E-glass	———	———	1270	21
GG933	933	Triax 0/45/45	E-glass	———	———	1270	21

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.

MEEM



COATING AND IMPREGNATION SERVICE

COATING AND IMPREGNATION SERVICE

CARBON WOVEN FABRICS

Name	g/m2	Weave	Yarn tipe	Warp ends/cm	Weft ends/cm	Width mm	Length lm
CC93	93	Plain	1k	7.0	7.0	1000	50–100
CC120	120	Plain	1k	9.0	9.0	1000–1200	50–100
CC160	160	Plain–twill	3k	4.0	4.0	1000	50
CC200	200	Plain–twill	3k	4.9	5.0	1000–1250	50
CC245	245	Plain–twill	3k	6.0	6.0	1250	50
CC285	285	Twill 4/4	3k	7.0	7.0	1000–1250	50
CC400	400	Plain–twill	12k	2.5	2.5	1000–1270	25–33
CC600	600	Twill	12k	3.8	3.8	1000–1270	25–33

ARAMID WOVEN FABRICS

AA60	61	Plain	22tex	13.5	13.5	1000	50–100
AA170	170	Twill	127tex	6.5	6.5	1200	50
AA220	220	Twill	161tex	6.5	6.5	1200	50
AA120	120	Plain	55tex	11.0	11.0	1000–1500	50–100
AA190	190	Plain	110tex	8.5	8.5	1000–1500	50
AA200	200	Plain–Satin	93tex	10.5	10.5	1000–1500	50
AA260	260	Plain	168tex	7.8	7.8	1000–1500	50
AA280	280	Plain	168tex	8.4	8.4	1000–1500	50
AA300	300	Twill–Satin	332tex	6.8	6.8	1000	50
AA410	410	Plain–twill	336tex	6.3	6.3	1000–1500	50
AA460	460	Plain	336tex	6.7	6.7	1000–1500	25–50
AA635	635	Twill	336tex	9.2	9.2	1000–1500	25–33

GLASS Biax and Triax FABRICS

Name	g/m2	Weave	Yarn tipe	Warp	Weft	Width mm	Length lm
GG542+Fleece	542	Biax 0/90	E–glass	1200tex	68tex	1200	33
GG622+Fleece	622	Biax 0/90	E–glass	1200tex	68tex	635	33–50
GG837	837	Triax 0/45/45	E–glass			1270	21
GG933	933	Triax 0/45/45	E–glass			1270	21
GG996	996	Biax 45/45	E–glass			1270	21

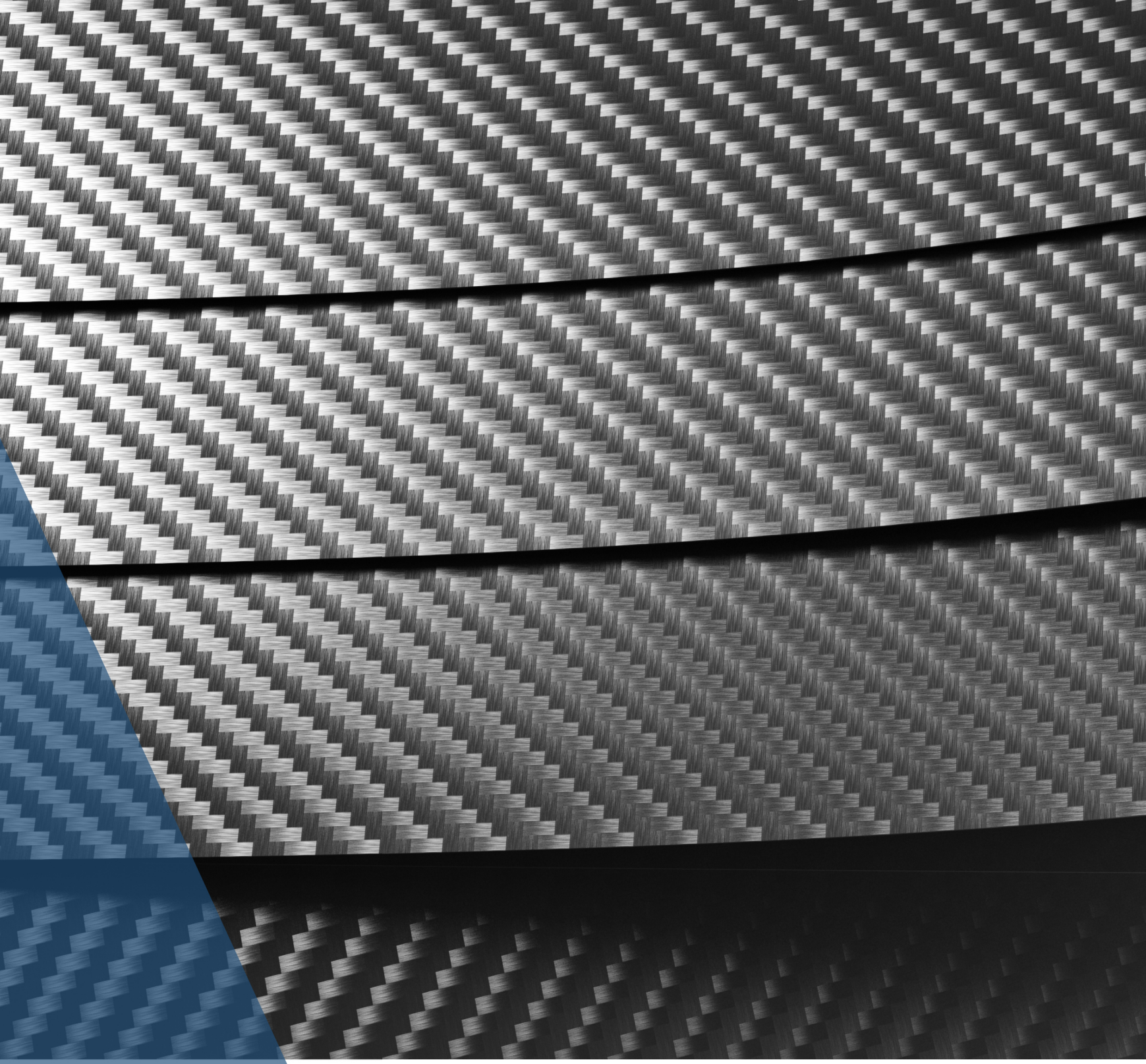
GLASS WOVEN FABRICS

GG25	24.5	Plain	5.5tex	25.0	25.0	1000–1280	50–200
GG50	50	Plain	11tex	25.0	20.0	1000	50–200
GG110	110	Twill	33tex	24.0	24.0	1000	100
GG163	163	Twill–Satin	68tex	12.0	11.5	1000	100
GG200	200	Plain–twill	66tex	14.3	14.3	1000	50–100
GG280	280	Twill	168tex	11.5	11.5	1000	50
GG390	390	Twill	330tex	6.4	6.3	1000	50
GG580	580	Plain–twill	1200tex	2.5	2.5	1000	25–33

HYBRID WOVEN FABRICS

CA210	210	Twill	3k–130tex	6.0	6.5	1200	50
CA285	285	Twill	3k–300tex	5.4	5.6	1000	50

According to the needs of the customers, MEEM can offer many other fabrics and UD crimp materials.



MEEM

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