

SCE120 is a toughened epoxy prepreg suitable for a range of applications in motorsport, leisure, marine, and industrial sectors. This resin produces excellent composite components following a typical cure profile of 1 hour at 120°C and can be supplied on glass or carbon fibre fabrics.

KEY FEATURES & BENEFITS

- Recommended cure cycle of 1 hour at 120°C
- Excellent surface finish
- Standard carbon fibre fabrics for SCE120 are 2x2 Twill in 205gsm, 245gsm, and 650gsm. Other fabrics are available on request.
- Standard glass fibre fabrics for SCE120 are 2x2 Twill in 290gsm and 870gsm. Other fabrics are available on request.
- Easy to use - pliable with medium tack
- Black pigmented as standard. Non-pigmented available on request.
- Very low solvent content

MATERIAL PERFORMANCE

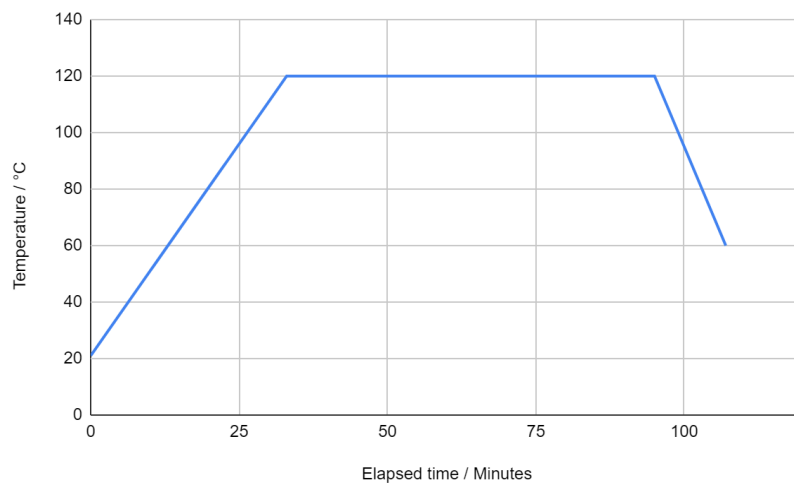
Mechanical test data from flat panels autoclave cured at 120°C for 1 hour. "Carbon 245gsm" - 7 plies 245gsm T300 2x2T 3k at 45%rw SCE120, 2.2mm thickness. "Carbon 650gsm" - 3 plies 650gsm 34-700 2x2T 12k at 35%rw SCE120 2mm thickness. "Carbon 1000gsm" - 2 plies 1000gsm 34-700 2x2T 24k at 35%rw SCE120 2mm thickness.

Test	Test Standard	Unit	Carbon 245gsm	Carbon 650gsm	Carbon 1000gsm
Flexural Strength	EN ISO 14125	MPa	798	826	710
Flexural Modulus	EN ISO 14125	GPa	45.4	54.5	45.1
Interlaminar Shear Strength	EN ISO 14130	MPa	69.9	60.7	58.2
Tensile Strength	BS EN ISO 527-4	MPa	599	692	560

CURE PROFILES

Recommended temperature cure profile for autoclave cure:

- Ramp temperature to 120°C at 3°C/min
- Dwell at 120°C for 60 minutes
- Cool to <60°C at 5°C/min



STORAGE & OUTLIFE

- Outlife at 18°C: 30 days
- Storage life at -18°C: 12 months
- To store material, keep it frozen at -18°C in a polythene bag.
- Material must remain in the unopened bag until fully thawed.
- If all material is not used, then reseal in a polythene bag to prevent moisture absorption.

HEALTH & SAFETY

Please refer to the Safety Data Sheet (SDS) before use. Suitable PPE should be worn when handling epoxy resin products. This material contains resin and fibres which can cause irritation to skin and eyes, and allergic reactions. Ensure adequate ventilation. Exothermic reactions can occur when curing resins, and particular care must be taken when curing thick laminates.

All data and guidance on this datasheet is provided based on typical processing and testing completed by Simcas Composites. Users should conduct their own testing and processing trials to ensure that this material is suitable for their specific process and application.