

SCT55 is a low-temperature-cure epoxy resin tooling prepreg available on carbon fibre or glass fibre reinforcements. It has a medium tack finish for ease of use and will produce composite tooling with an excellent surface finish. When SCT55 is subjected to a suitable post cure it will develop a usage temperature of 180°C.

KEY FEATURES & BENEFITS

- Initial cure temperature of 40°C to 80°C
- Excellent surface finish
- Usage temperature of 180°C with a suitable post cure

CURE PROFILES

Initial Cure Temperature / °C	Dwell Time / hrs
40	18
45	12.5
50	8.5
60	5
70	4
80	3

POST CURE PROFILES

After initial cure it is essential to post cure the material to increase glass transition temperature (T_g). Post cure should be conducted with a minimum dwell time of 6 hours at a minimum temperature of 10°C above the use temperature of the tool. Ramp rate should be a maximum of 0.3°C/min.

STORAGE & OUTLIFE

- Outlife at 18°C: 65 hours (Tack Life) 75 hours (Outlife)
- Storage life at -18°C: 6 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. This material contains resin and fibres which can cause irritation to skin and eyes, and allergic reactions. Wear appropriate PPE including impervious gloves and 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.