

Fireproof prepregs reach highest rating

[Australian Composites Pty Ltd.](#) (Moorabbin, VIC) has successfully developed a range of UV-curing, flame-resistant polyester and vinyl ester prepregs called Auspreg 986T, which have just achieved the highest possible ratings for fire testing on building materials and structures.

Independent testing by Exova Warringtonfire (Warrington, UK) saw the materials meet BS 476 Parts 6 (Class 0) & Parts 7 (index 1) standards, which are widely used for manufacturing interior parts for commuter mass transit that are designed to resist lateral spread of flame and propagation of flame when in contact with radiant heat or actual fire.

Manufacturers of fire-resistant parts for train, tram, and buses have up until now only had the option of using epoxy or phenolic resin systems which have short shelf lives, require refrigeration in shipping and storage, and must be cured under heat and pressure for up to eight hours in autoclaves, according to Australian Composites CEO Daniel Leipnik. “Auspreg 986t does not need any refrigeration, can remain useable at room temperature for over 12 months, and cures in a matter of minutes per layer under standard factory lighting or natural sunlight.” The materials can also be cured in multiple layers in a one-step process for thicker (up to 90 mm) or stronger parts.

Leipnik believes that several large business opportunities that have specified this standard will now proceed with contractualizing their orders. “The global demand for flame-resistant composite parts is substantial and growing as billions of people turn to public transport as their daily travel means. Just think of all the structures such as internal walls, paneling, bulkheads, luggage compartments, and seating in trains, buses, trams, ferries, and even unusual items such as mosque domes themselves that all use composites and must be resistant to flame to protect the public in case of fire.”

“By utilizing our rapid light-curing prepreg technology with flame-resistant properties, we have succeeded in producing a more economical, easier-to-handle, and time-saving option that will likely be of great interest to the global composites industry.” Leipnik adds. Auspreg 986t is available in most glass types (E, C & S), various fiberglass weaves (Uni, Biax, CSM, Triax, DB, Combimat, etc) and in finished weights ranging from 300 gsm to 3500 gsm. — [Stephen Moore](#)



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