



# SHD Group presents VTB301, a unique bio-content epoxy prepreg with exceptionally flexible processing and a 90-day extended out life

Press release

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SHD Group is proud to introduce VTB301, an exceptionally versatile epoxy prepreg system with up to 25% bio-content. Curing can be achieved as low as 65°C while still having a room temperature shelf life of at least 90 days. The system can be processed Out-Of-Autoclave (OOA), through an Autoclave or snap cured at 140°C via a press, delivering unrivalled flexibility for component manufacture.

Development work has showed VTB301 to be extremely capable in multiple forms of processing, across a range of fabric reinforcements and unidirectional formats. Thick section carbon fibre laminates can be produced with low temperature oven cures, delivering low levels of voiding. Equally, snap cures can be achieved in under 10 minutes through compression moulding in heated matched metal tools.

In validating the extended out life of VTB301, SHD manufactured panels, via both vacuum only and autoclave cure, from packs of aged material aged up to 90 days before being mechanically tested. Results showed no degradation in values, demonstrating that VTB301 can be stored for extended periods at room temperature (20°C) without losing performance. When considering OOA processing, however, the extent of the workable life will be dependent on material storage conditions and specific laminate requirements.

With increased bio content, extended out life and versatile cure capabilities, VTB301 once again underlines SHD's commitment to support its customers' progress towards challenging Net-Zero targets. The energy burden associated with the processing and storing of advanced prepreg solutions can be reduced through implementation of this highly novel resin technology.

VTB301 joins other systems in the 300-series which have been developed specifically to enable reduced environmental impact materials whilst still delivering the high performance advanced composite solutions. Initially, VTB301 will be available from SHD's UK manufacturing site, with product rollout from its European and North American manufacturing facilities in early 2024.

SHD Composites Group operates through 4 manufacturing sites in the UK, Europe and USA, and are well-established industry suppliers of high-quality structural and tooling prepreg materials. EN9100:2018 and ISO9001:2015 accredited, SHD pride themselves on their quality, service and responsiveness to local customer needs. For more information, please contact:

**UK**  
[sales@shdcomposites.com](mailto:sales@shdcomposites.com)  
+44 (0) 1529 307629

**USA**  
[us-sales@shdcomposites.com](mailto:us-sales@shdcomposites.com)  
+1 (704) 626-6876

**EU**  
[eu-sales@shdcomposites.com](mailto:eu-sales@shdcomposites.com)  
+386 16 001 472

**SHD Composite Materials Ltd:** [www.shdcomposites.com](http://www.shdcomposites.com)

SHD Composite Materials Ltd, Unit 4, The Reservation, Sleaford Enterprise Park, Sleaford, Lincolnshire, UK, NG34 7BY