ptp.

Kit DMA 2013

Technical Definition

DMA – Dynamic Mechanical Analysis
Carbon Fiber Composite

Instructions to participant laboratories

Please read carefully these instructions **BEFORE** starting the tests.

1. Three 35x10mm composite specimens are supplied to each participant – 3 results must be provided.

2. Participants shall ensure all test specimens (calibrant materials and test materials) are dried. Drying conditions : 1 week at 105°C

3. All tests shall be performed in accordance with the requirements of PrEN 6032 (1995) and AITM 1-0003 issue 3.

4. Tests shall be performed under single cantilever geometry at 1Hz frequency, 15μm total amplitude (peak to peak) and 5°C/min temperature increase.

5. Each participant is required to determine the following parameters:
   - **Tg-onset**
     The Tg-onset is defined as the temperature of the intersection of extrapolated tangents to the storage modulus curve before and after the beginning of the glass transition event.
   - **Tg-loss**
     The Tg-loss is defined as the temperature where the diagram loss modulus versus temperature has its maximum.
   - **Tg-peak**
     The Tg-peak is defined as the temperature where the diagram tanδ (damping) versus temperature has its maximum.

6. The following information is to be reported:
   - DMA equipment brand and model
   - Sample dimensions and holding technique (if different from standard request)
   - Test results, obtained on each tested sample, of the temperatures as detailed in section 5

7. Testing shall commence as soon as test specimens are received. All participant laboratories must supply results by December 31st 2013.

8. Instructions for submission of results are detailed on the website:

   https://ptpscheme.com/

9. To ensure confidential treatment of results in the final report, each participant lab will be provided with a unique identity number at the moment of his registration to the program.

10. The sponsors could ask you proofs of your records and analyses, so be sure to conserve data, curves and specimens.