2. Modified bitumin blend

Instrument: Tritec 2000 Dynamic Mechanical Analyser

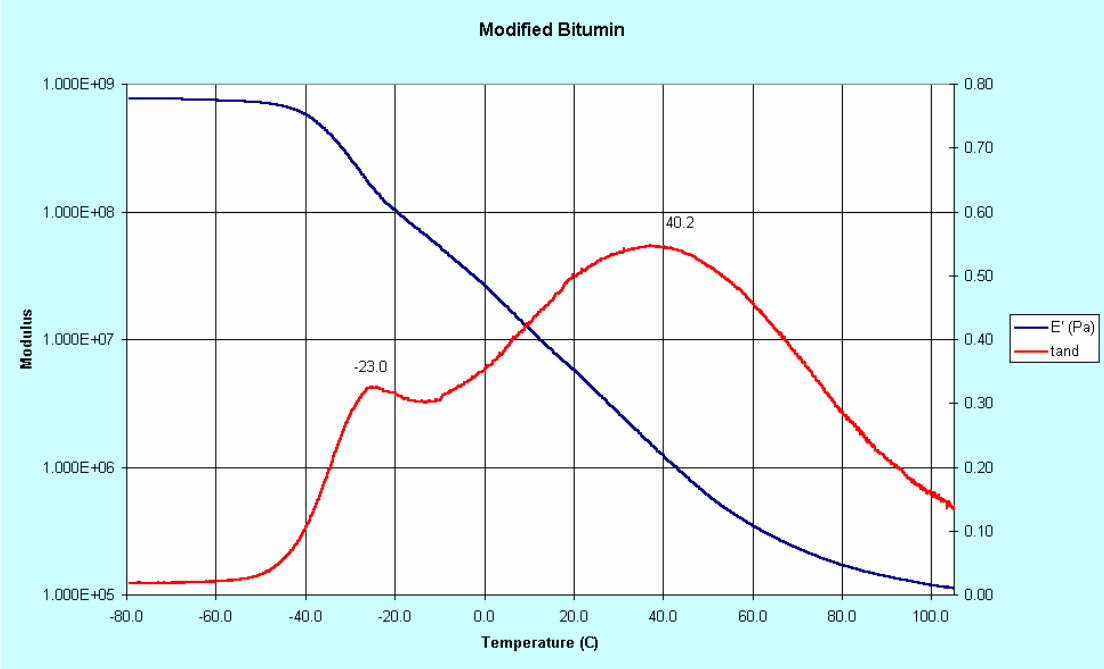
Sample: Modified Bitumin with polymer additive

Geometry: Single cantilever bending

%RMS strain: 0.736

Frequencies (Hz): 1.0

Thermal profile: 2°C/minute to 110°C



Comments:

The following data was obtained by mounting a strip of bitumen in a single cantilevered bending configuration. The sample was cooled down to -80°C and re-clamped prior to commencing the run. -80°C was re-established and the run commenced.
The damping and thermal performance of this material can easily be determined by dynamic mechanical analysis enabling either rapid development of new formulations or quality control/assurance. This test was conducted at 2°C/min at 1 Hz. This rate of heating provides a reasonably precise indication of the Tg etc. at 1Hz but the whole experiment took 1.5hrs including cooling. If a QA/QC style experiment was required, the heating rate could be raised to around 5°C/min without too much shifting of the glass transition information. A good reference at this heating rate would be required for comparative purposes. By raising the heating rate to 5°C/min. the analytical time would be less than 30 minutes.