



8. HDPE and thermal control

Instrument: Tritec 2000 Dynamic Mechanical Analyser

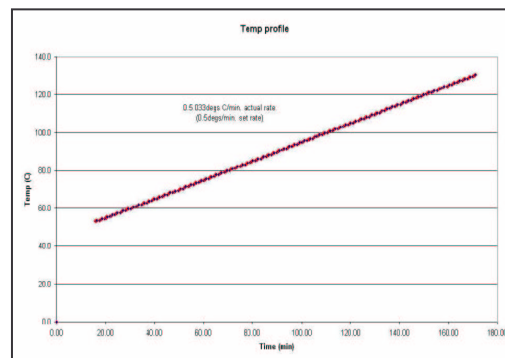
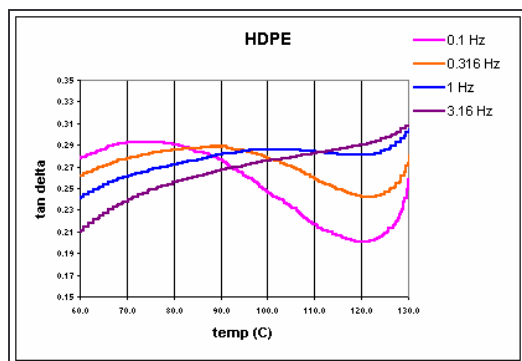
Sample: HDPE Milk Carton

Geometry: Single Cantilevered Bending

%RMS strain: 0.080

Frequencies (Hz): 1.0

Thermal profile: 2°C/minute to 200°C



Comments:

This High Density Polyethylene (HDPE) sample was taken from a Milk Carton and run in single cantilever at 0.5degC/min. This example also illustrates the multifrequency capabilities. The sample was analysed at 0.1Hz to 3.16 Hz

It is worth noting that the transition clearly evident at 0.1 Hz is not easily recognisable at 3.16 Hz as it shifts towards melt onset.

Note the precision of heating control on the second diagram.