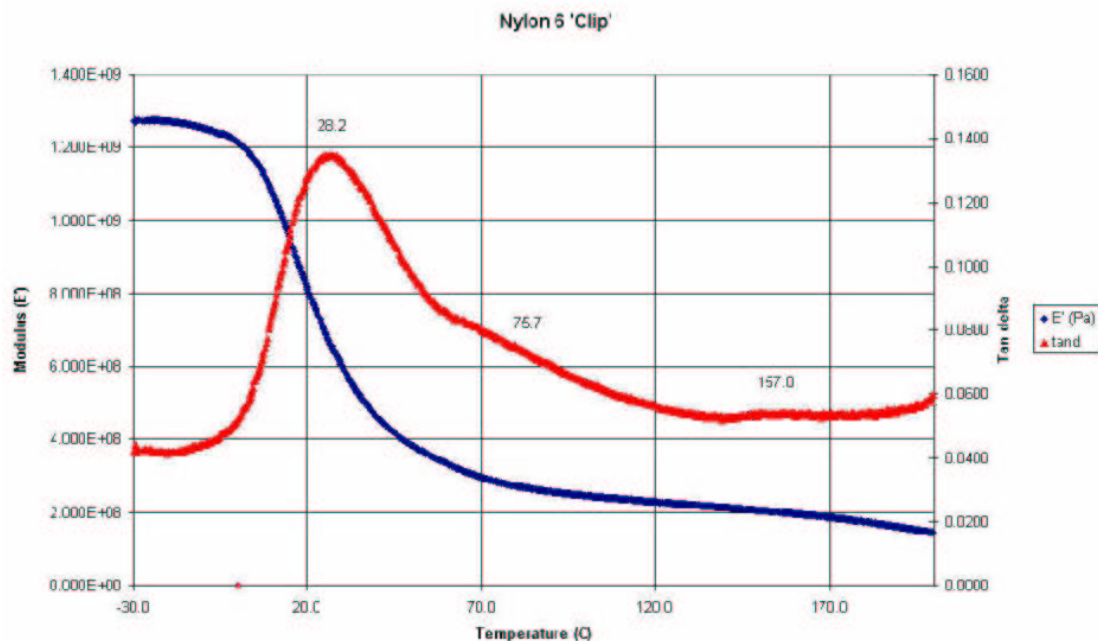




10. Nylon 6

Instrument: Tritec 2000 Dynamic Mechanical Analyser
Sample: Nylon 6 'clip' used to secure car door rubber seal
Geometry: Single cantilever bending 10mm x 5mm x 1.5mm
%RMS strain: 0.075
Frequencies (Hz): 1.0



Thermal profile: 2°C/minute to 200°C

Comments:

This example shows the typical profile for Nylon 6. It is worth noting that this sample is highly plasticised which has the effect of moving the Tg maximum down to 28 degs.C from perhaps a more usual value 20 - 30 degrees higher in temperature. The effect of plasticisation is easily shown with Nylons by immersion of dry material in water. Within a very short time span, this material can absorb between 6 and 9% by weight of water. This can result in the effect seen above.