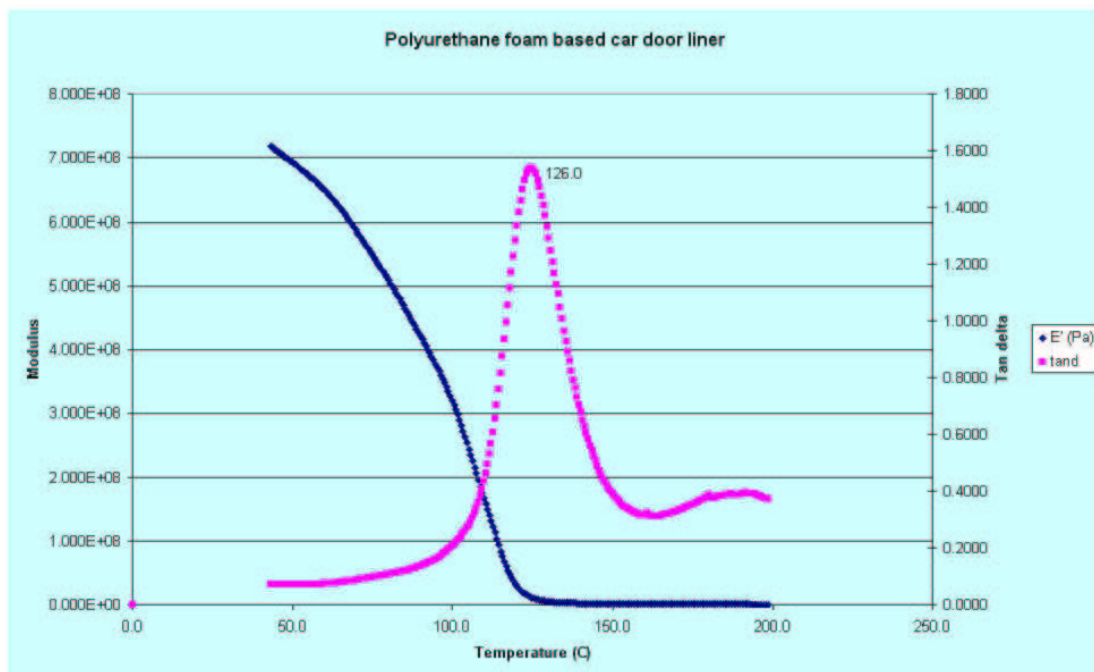




### 3. High density Polyurethane foam

**Instrument:** Tritec 2000 Dynamic Mechanical Analyser  
**Sample:** Polyurethane foam based car door liner  
**Geometry:** Single cantilever bending  
**%RMS strain:** 0.27  
**Frequencies (Hz):** 1.0  
**Thermal profile:** 2°C/minute to 200°C



**Comments:**

This sample is a high density foam backing used in a luxury car door liner. Note the minor relaxation just below 200 degrees C. This is probably from adhesive used to glue the decorative surface finish in place.

This material, ideal for the purpose when in situ, fails due to a tendency to 'snap' on installation. The material requires a more 'rubbery' nature around ambient temperature. This is clearly not evident from the DMA data shown here. The material is tending towards a more 'glassy' behaviour.