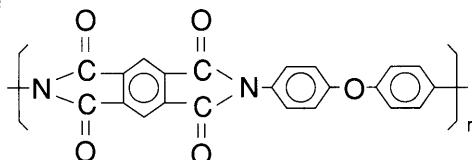


DMA No. 11 AUG.1991

Dynamic Viscoelastic Data of Polyimide

1. Sample Polyimide : PI
 (Brand Name : Kapton 30H)

2. Chemical Structure



3. Thermal History Measured a commercial sample as it is.

4. Instruments SDM5600 Rheol. Station
 DMS200 Dynamic Mechanical Spectrometer

5. Conditions Deformation mode : Tensile mode
 Sample Size : 10.00(ℓ) × 8.00(w) × 0.01(t)mm
 Temperature Range : -150 ~ 520
 Heating Rate : 2K/min
 Atmosphere : N₂
 Frequency : 0.5,1,2,5,10Hz

6. Transition temperature and activation energy based on tanδ

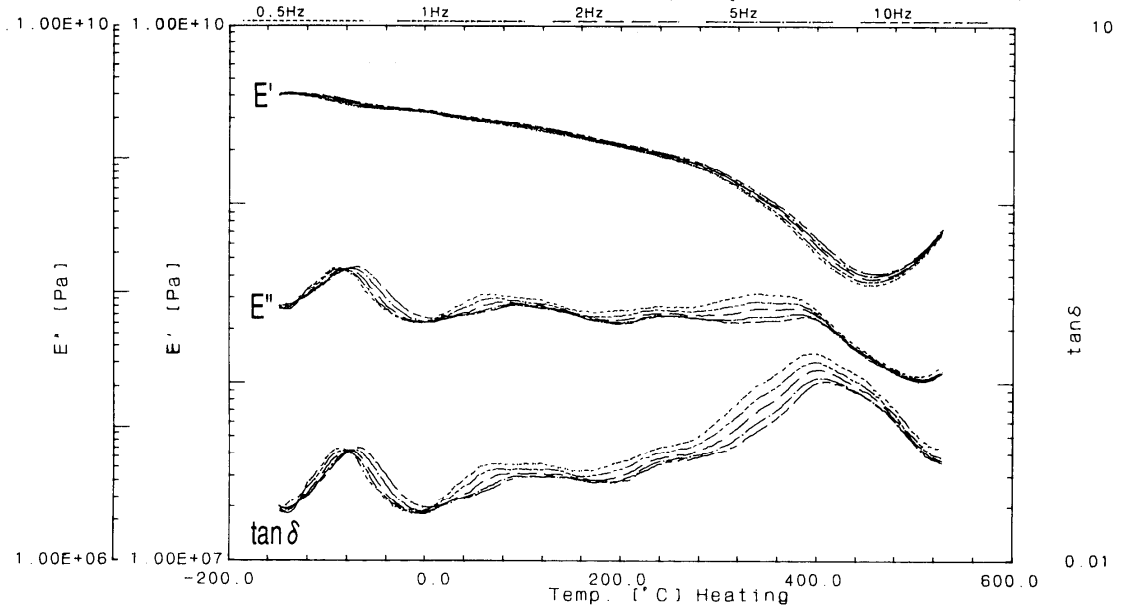
	Transition Temperature ()	ΔEa (kJ/mol)	Comments
α Transition	400 (1Hz)	929	Glass Transition
	238 (1Hz)	-	
	73 (1Hz)	-	
	-83 (1Hz)	50	

7. Thermal Analysis Data

T_g : 324.8
 Thermal Expansion Coefficient β_{100~200} : 2.27 × 10⁻⁵(1/)
 β_{200~300} : 2.40 × 10⁻⁵(1/)
 TMA 5K/min

DMS

Name: Sample: PI
 Date: 91/06/12 14:52 Temp. mode: Ramp
 Comment: 2°C/min Deform: Tension
 1*s: 10.000 mm * 0.080 mm2
 Frequency: 0.5 ~ 10 Hz



DMS

Name: Sample: PI
 Date: 91/06/12 14:52 Temp. mode: Ramp
 Comment: 2°C/min Deform: Tension
 1*s: 10.000 mm * 0.080 mm2
 Frequency: 0.5 ~ 10 Hz

