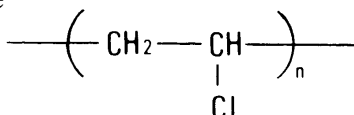


DMA No. 8 MAR.1990

Dynamic Viscoelastic Data of Polyvinyl Chloride

1. Sample Polyvinyl Chloride : PVC
(Brand Name : SHINETSU PVC)

2. Chemical Structure



3. Thermal History Press film ; after pressing at 190 , allowed to cool to room temperature.

4. Instruments SDM5500 Rheol. Station
DMS100 Dynamic Mechanical Spectrometer

5. Conditions Deformation mode : Bending mode
Sample Size : 20.00(l) × 12.00(w) × 1.20(t)mm
Temperature Range : -150 ~ 160
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	86.5 (1Hz)	804	Glass Transition
β Transition	-39.0 (1Hz)	101	Local mode relaxation

7. Thermal Analysis Data

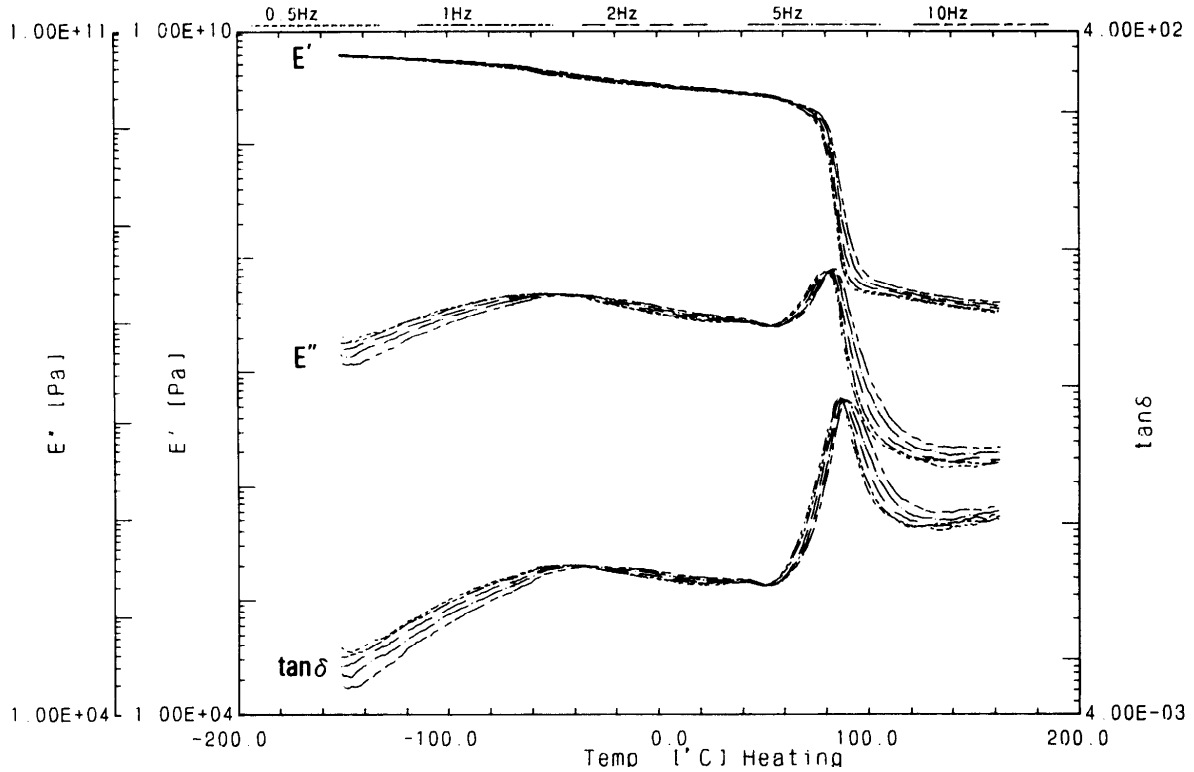
T_g : 82.6 , DSC 10K/min

8. Literature (Concerning this sample)

S.Yano, J. Appl. Polym. Sci., 21, 2645(1977)

DMS

Name		Sample:	PVC
Date:	90/02/18 14:25	Temp. mode:	Ramp
Comment:	2°C/min	Deform:	Flexure rec
		l*w*t:	20.000* 12.000* 1.200 mm
		Frequency:	0.5 ~ 10 Hz



DMS

Name:		Sample:	PVC
Date:	90/02/18 14:25	Temp. mode:	Ramp
Comment:	2°C/min	Deform:	Flexure rec
		l*w*t:	20.000* 12.000* 1.200 mm
		Frequency:	0.5 ~ 10 Hz

