

JA9826439
Revised manuscript received
November 16, 1998
Privileged document
Communication

Supplementary Material

for the manuscript entitled

**Sugar-Containing Polyamines Prepared Using Galactose Oxidase Coupled with
Chemical Reduction**

by

Xiao-Chuan Liu^{1,¶} and Jonathan S. Dordick^{1,†,*}

¹Department of Chemical and Biochemical Engineering
University of Iowa, Iowa City, IA 52242

[¶]Present Address: Department of Chemistry
Austin Peay State University

[†]Present Address: Department of Chemical Engineering
Rensselaer Polytechnic Institute
Troy, NY 12180

Polymers I-IV:

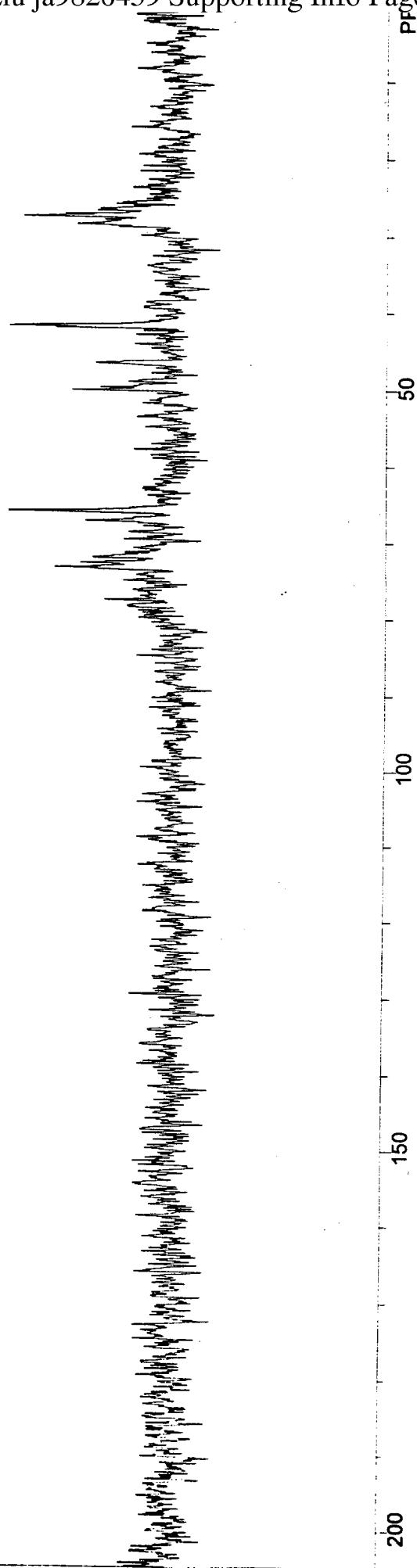
- (a) ¹³C-NMR. Chemical shifts are expressed in ppm. NMR spectra were recorded in DMSO-d₆ with tetramethylsilane as the internal standard at 360 MHz on a Bruker MW 360 spectrometer. Polymers **I**, **II**, and **IV** are solution spectra. Polymer **III** is a solid-state spectrum recorded on a Bruker MSL300 NMR spectrometer equipped with a 7 mm broadband double bearing magic angle spinning (MAS)

probehead and ZrO_2 rotors. Cross polarization and MAS with a rotational speed of 5.5 kHz were used.

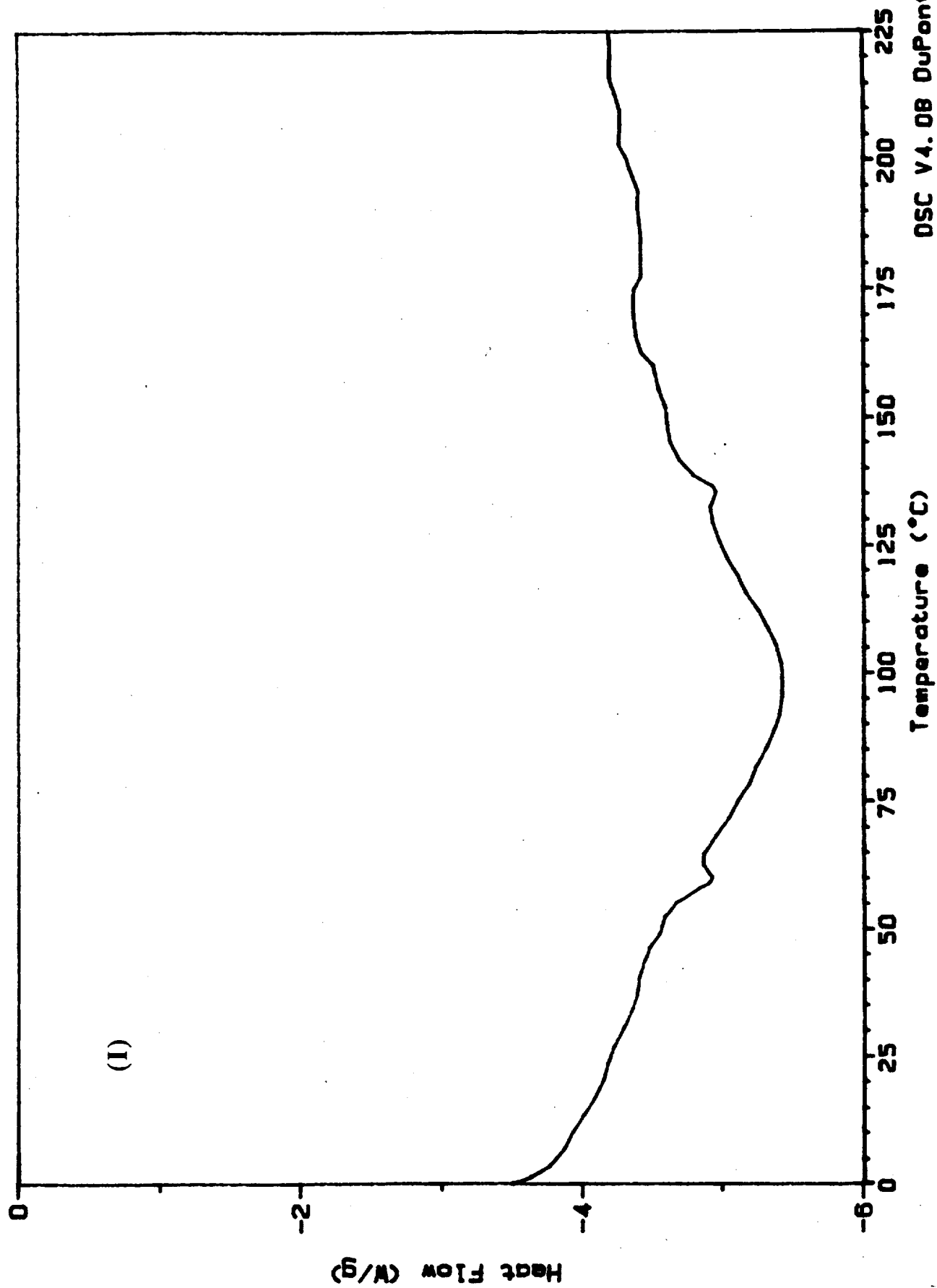
- (b) **Differential Scanning Calorimetry.** Performed on a DSC 2910 instrument (DuPont Instruments) with a sample size of 3.0 mg and heating rate of $10^\circ\text{C}/\text{min}$.
- (c) **Thermal Gravimetric Analysis.** Performed on a TGA 1950 instrument (DuPont Instruments) with a sample size of 3.0 mg and heating rate of $10^\circ\text{C}/\text{min}$.

(I)

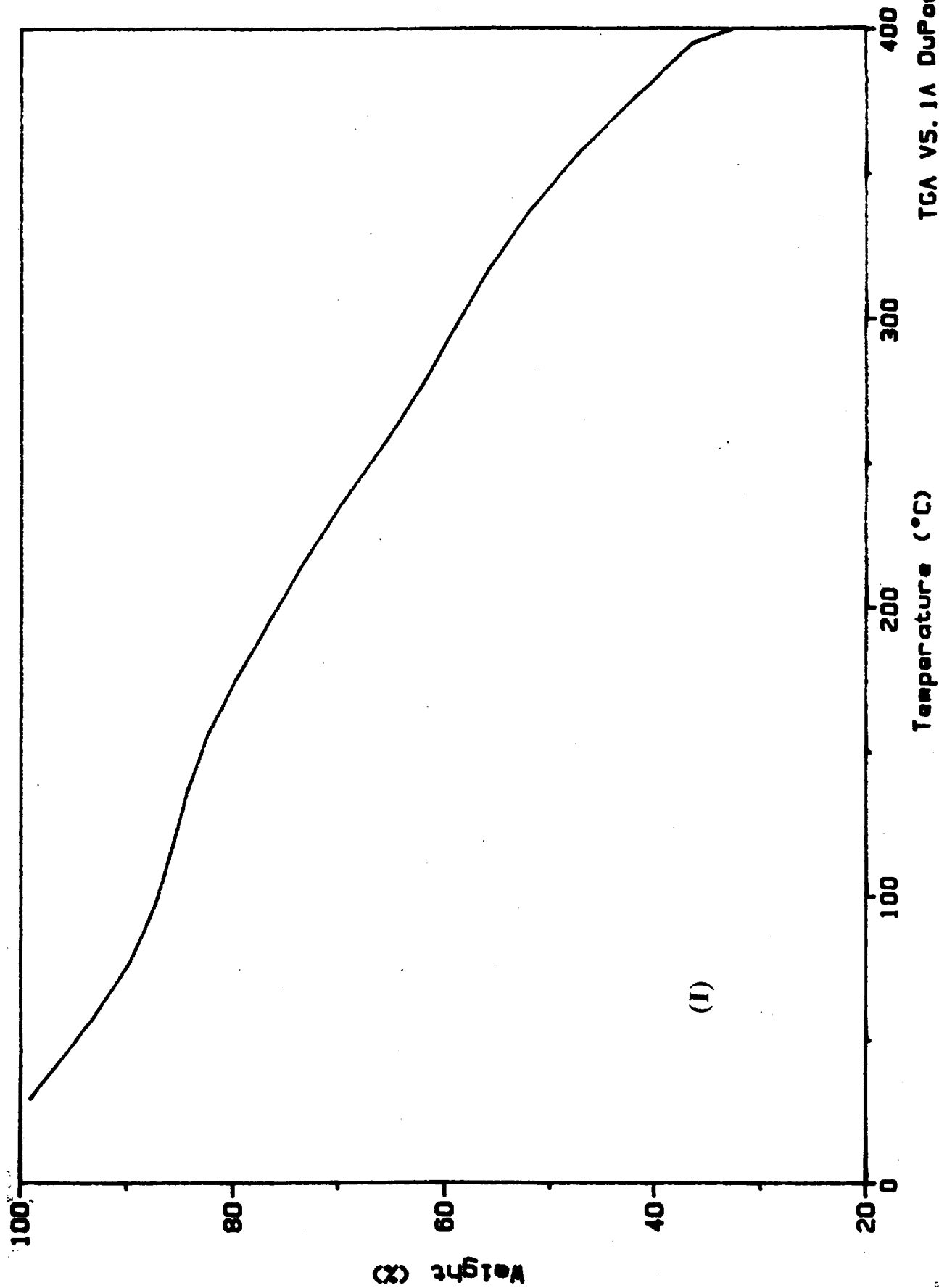
S3



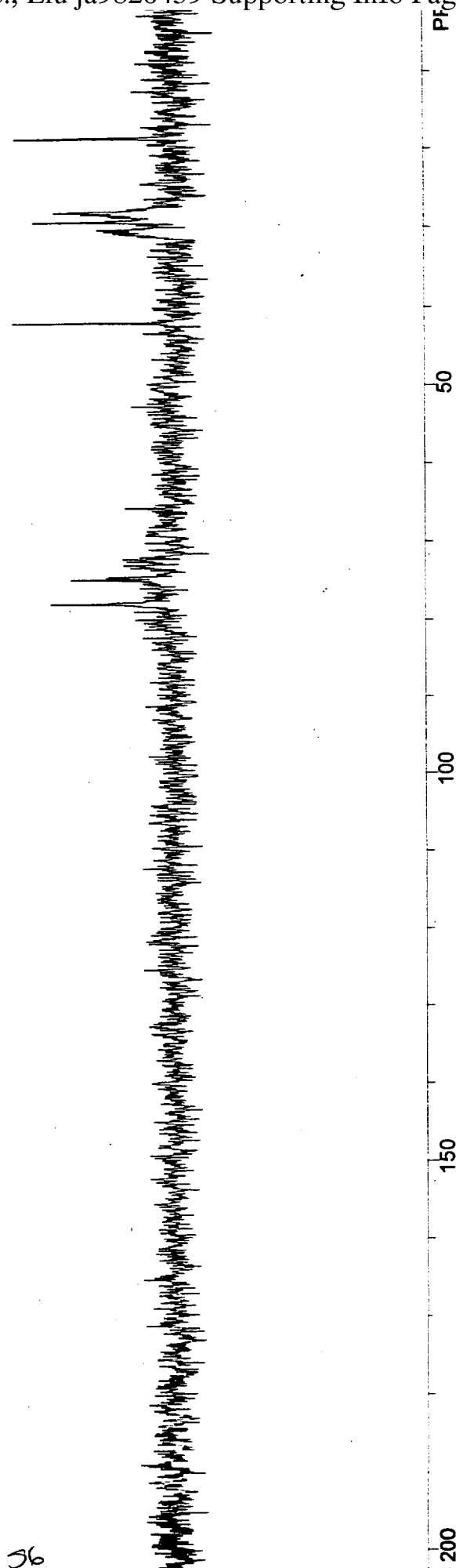
DSC



TGA

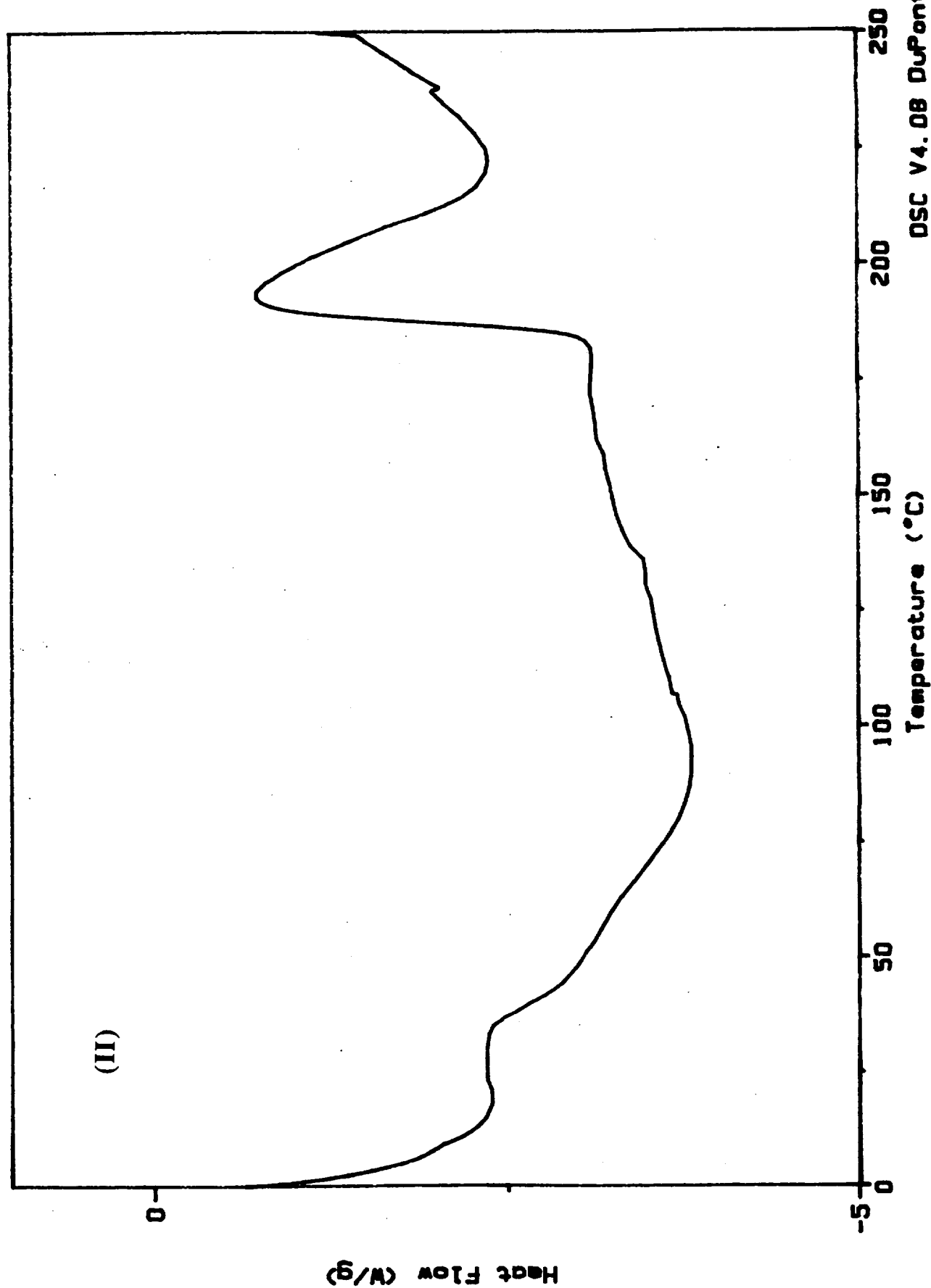


(II)

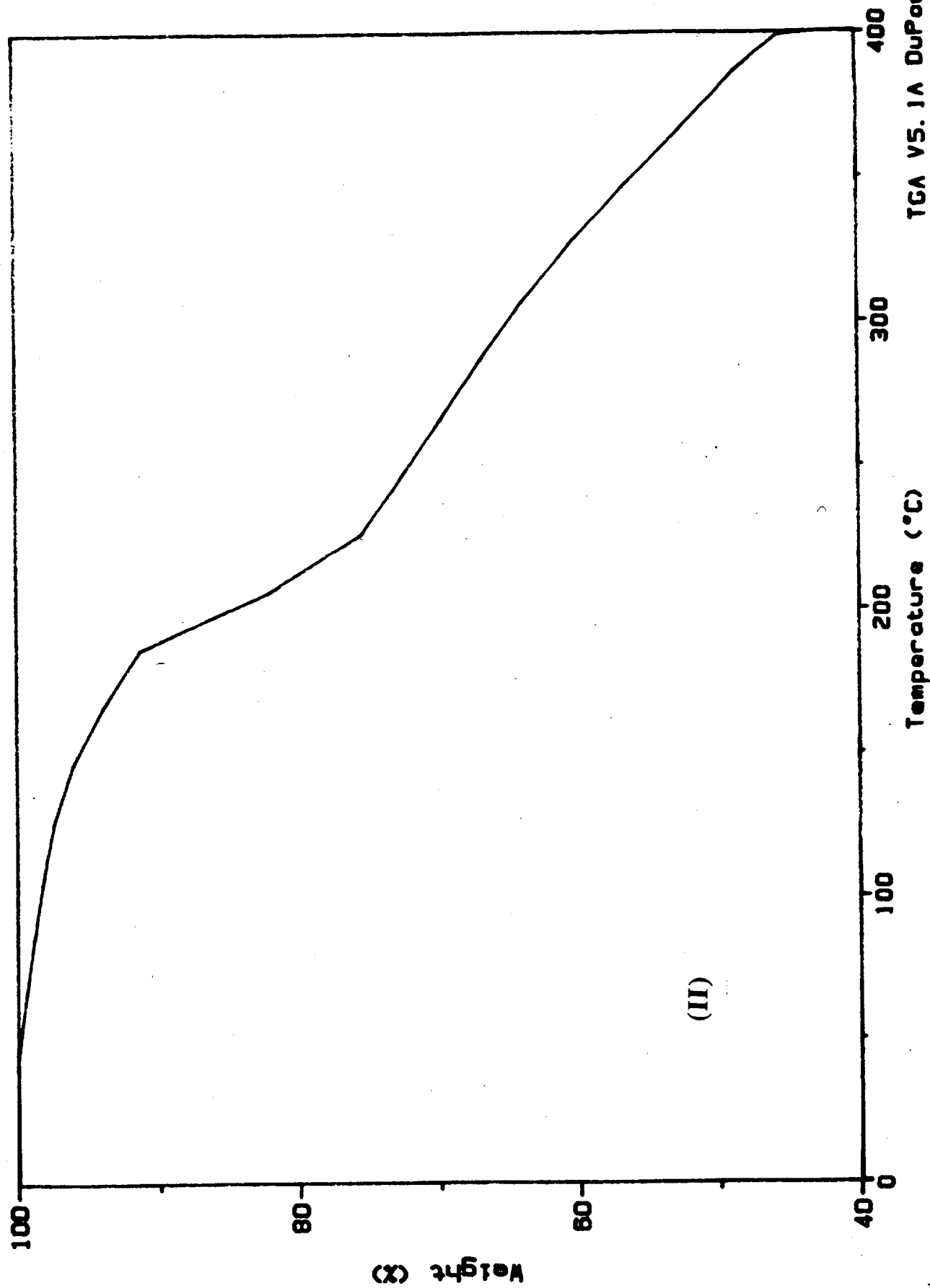


36

DSC



TGA



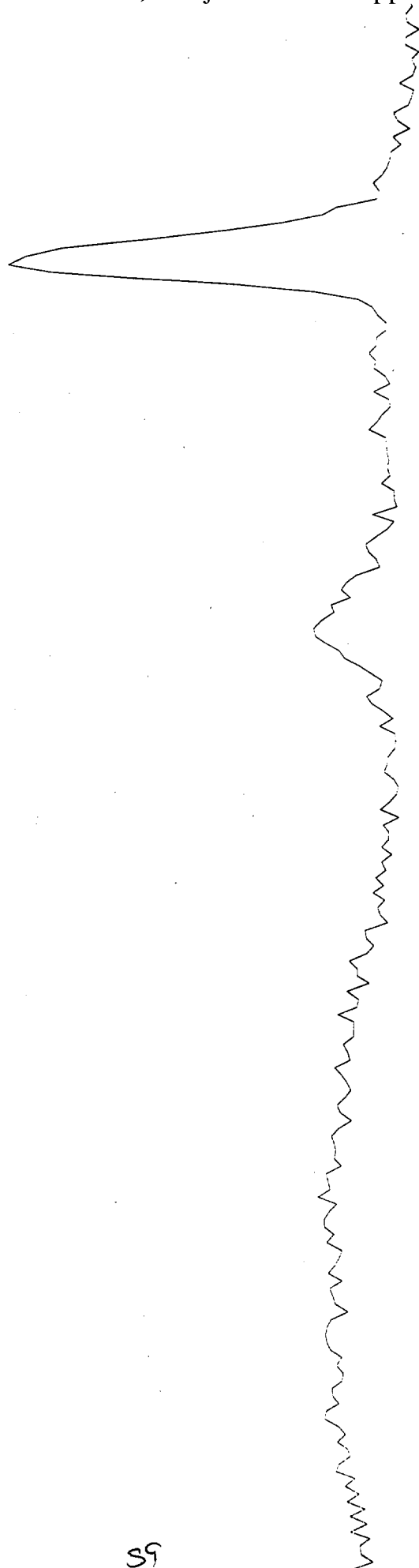
P

50

100

150

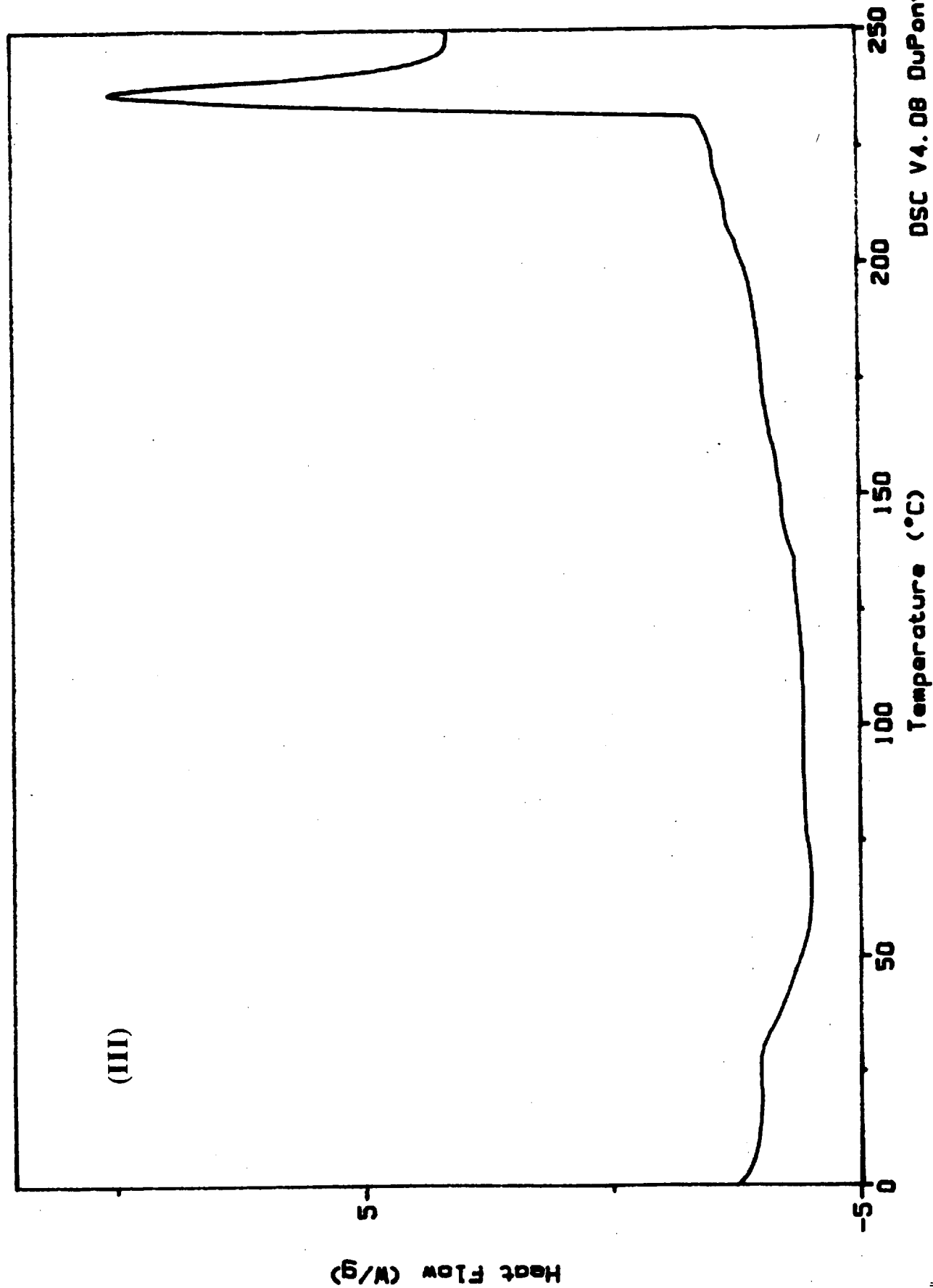
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(III)

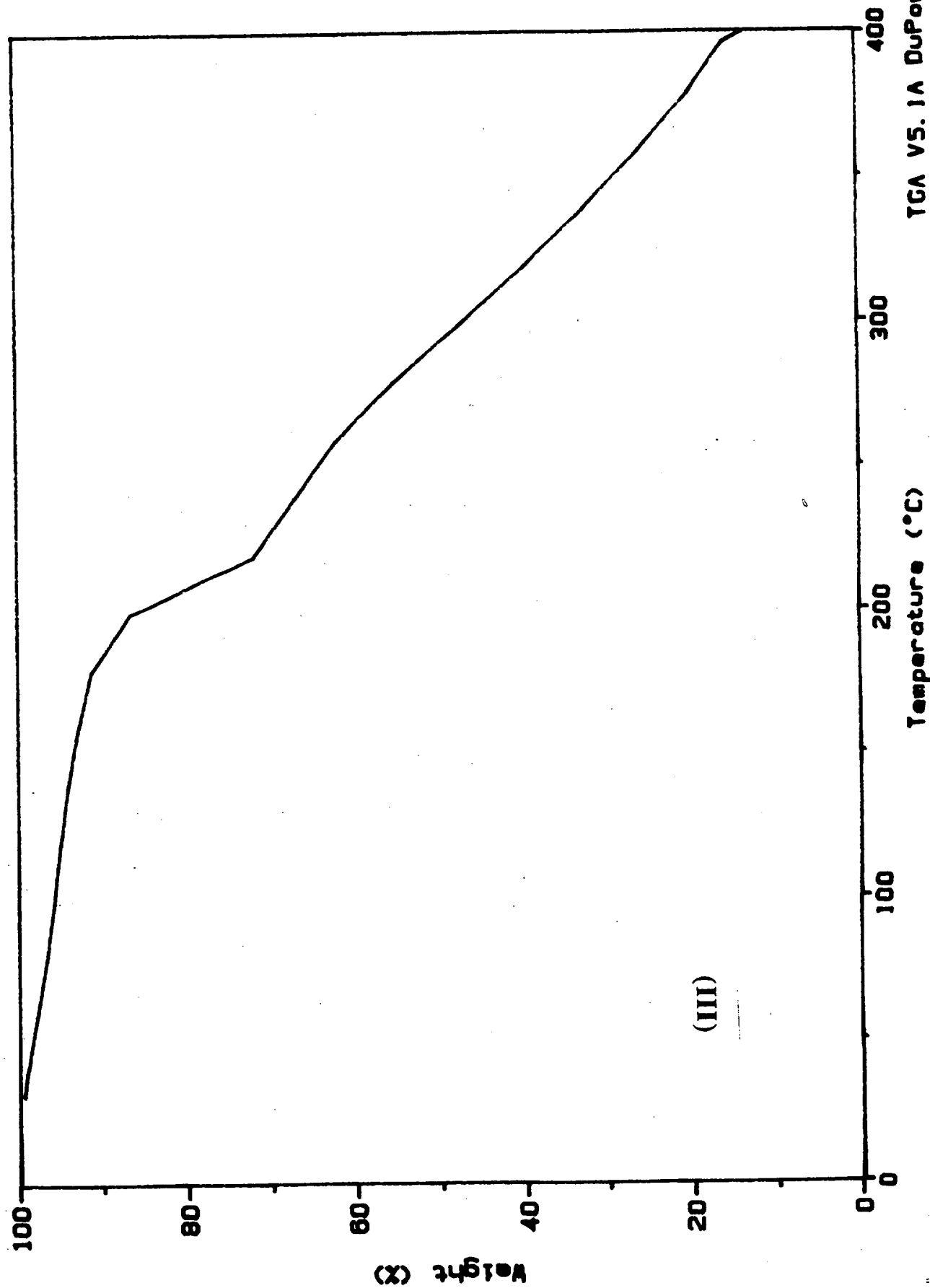
59

DSC



010

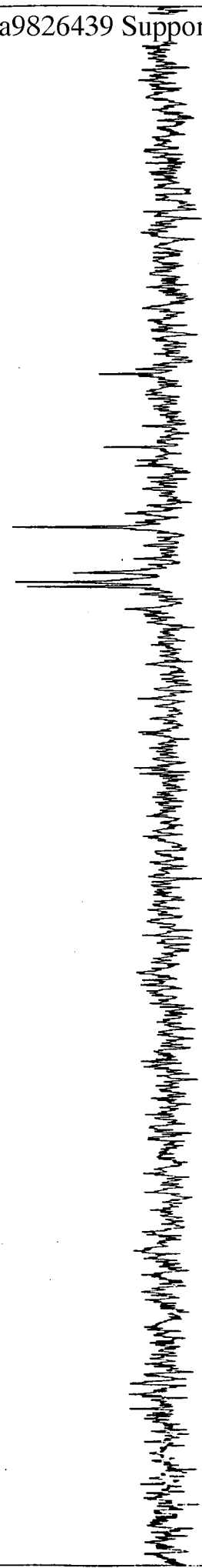
TGA



P 1

(IV)

S12



50

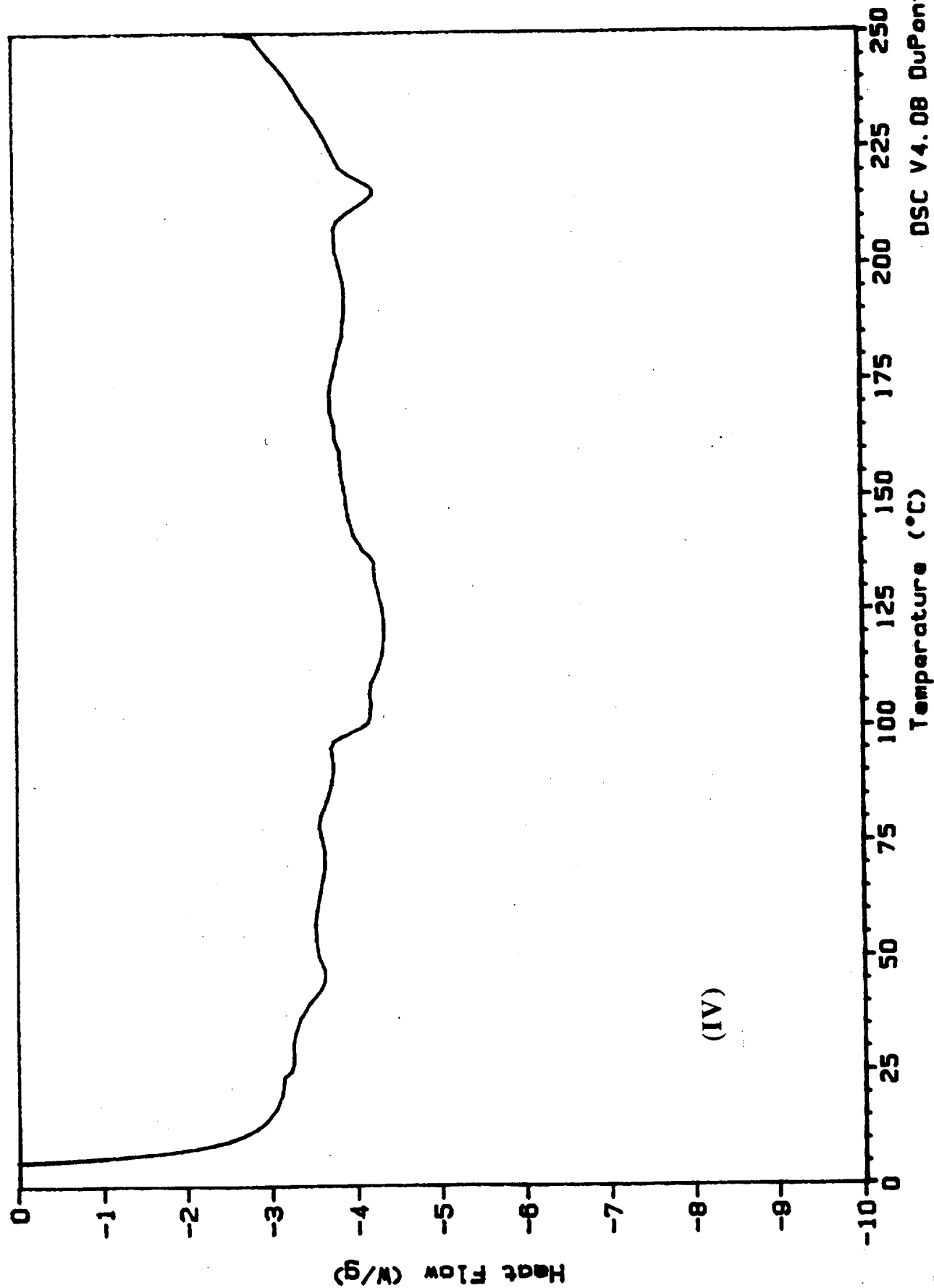
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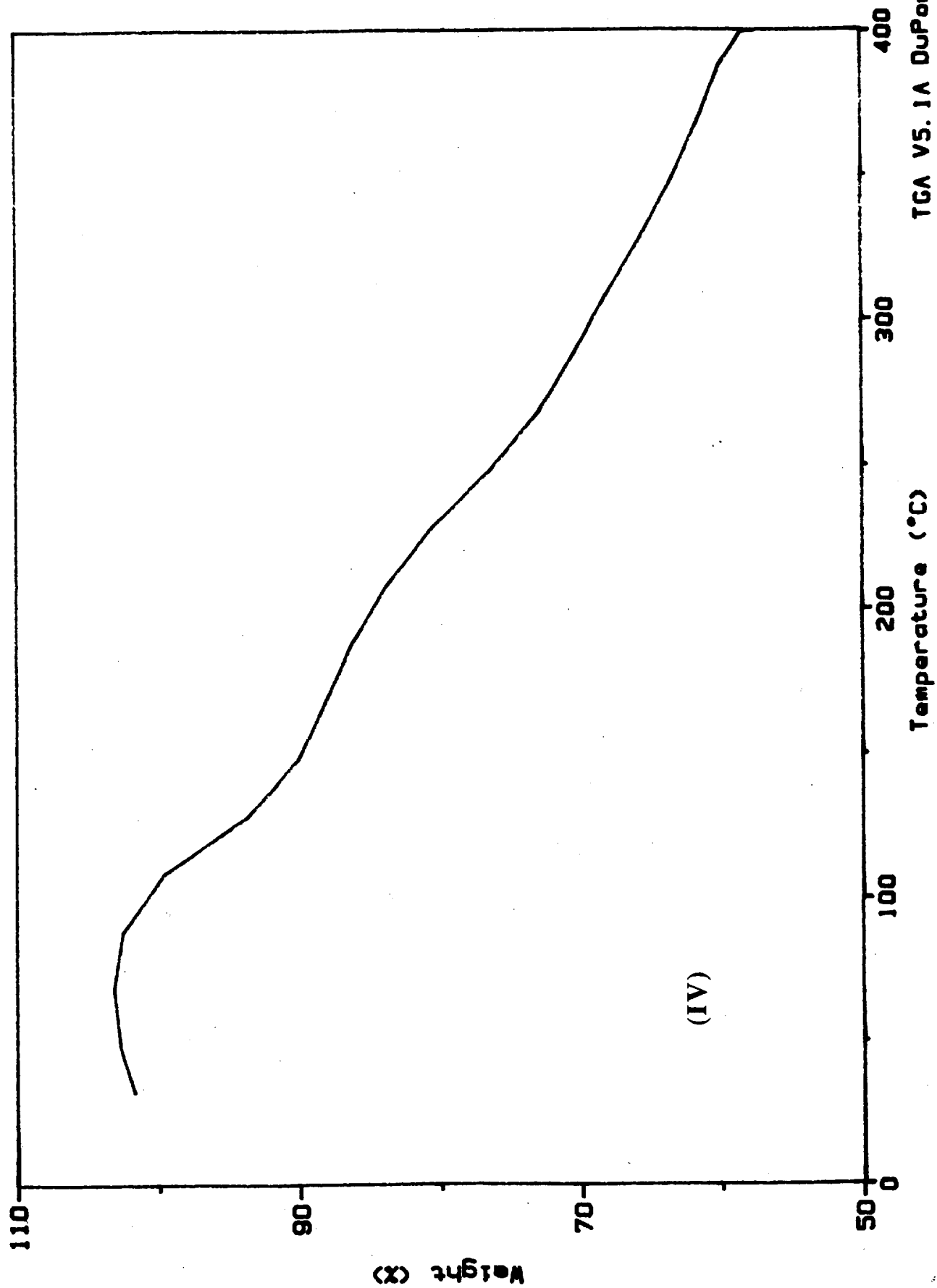
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DSC

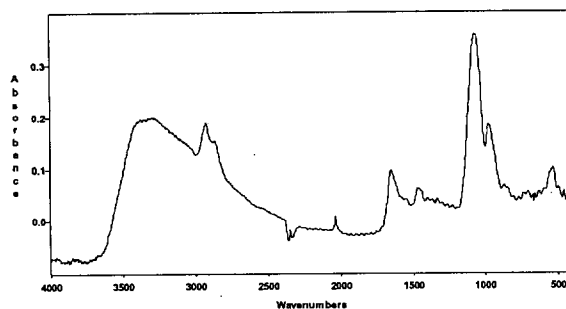


TGA

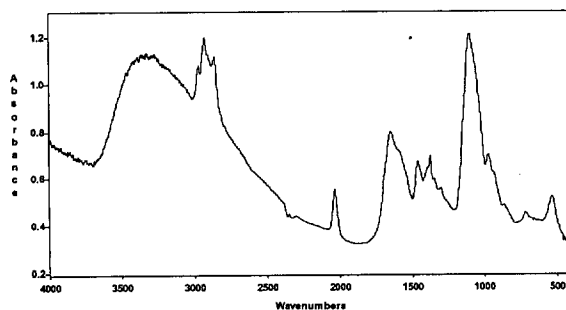


S14

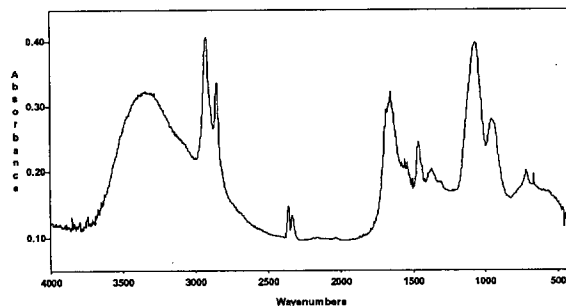
Figure 1



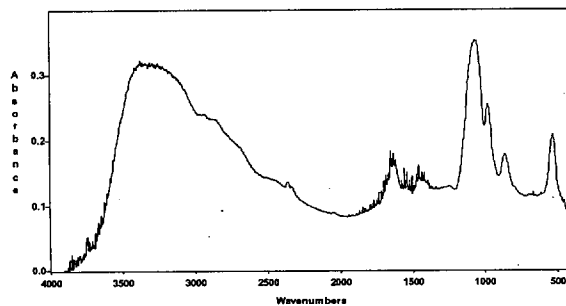
(A)



(B)



(C)



(D)