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APPENDIX

APPENDIX

DIFFERENTIAL SCANNING CALORIMETER

Differential scanning calorimeter was used to determine the glass transition temperature of polymers by looking for the change in heat capacity. For random copolymers, the glass transition temperature vary monotonically with the composition between those of the homopolymers. The DSC thermograms of the copolymer prepared with different monomer composition and carbon black feed level were shown in Figure A-1 to A-6, respectively.

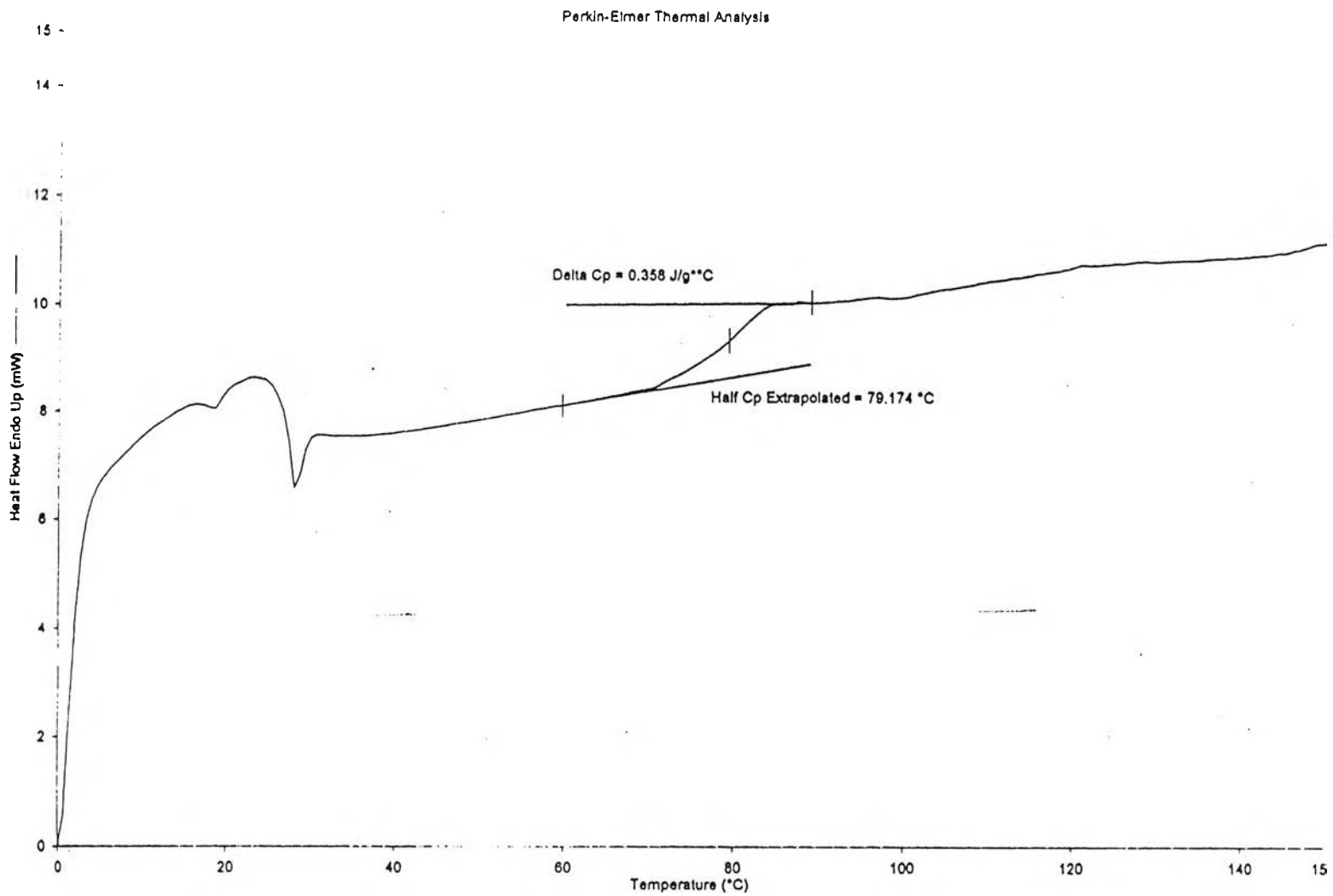


Figure A-1 DSC thermogram of the copolymer prepared with St/nBA (90/10) mol%

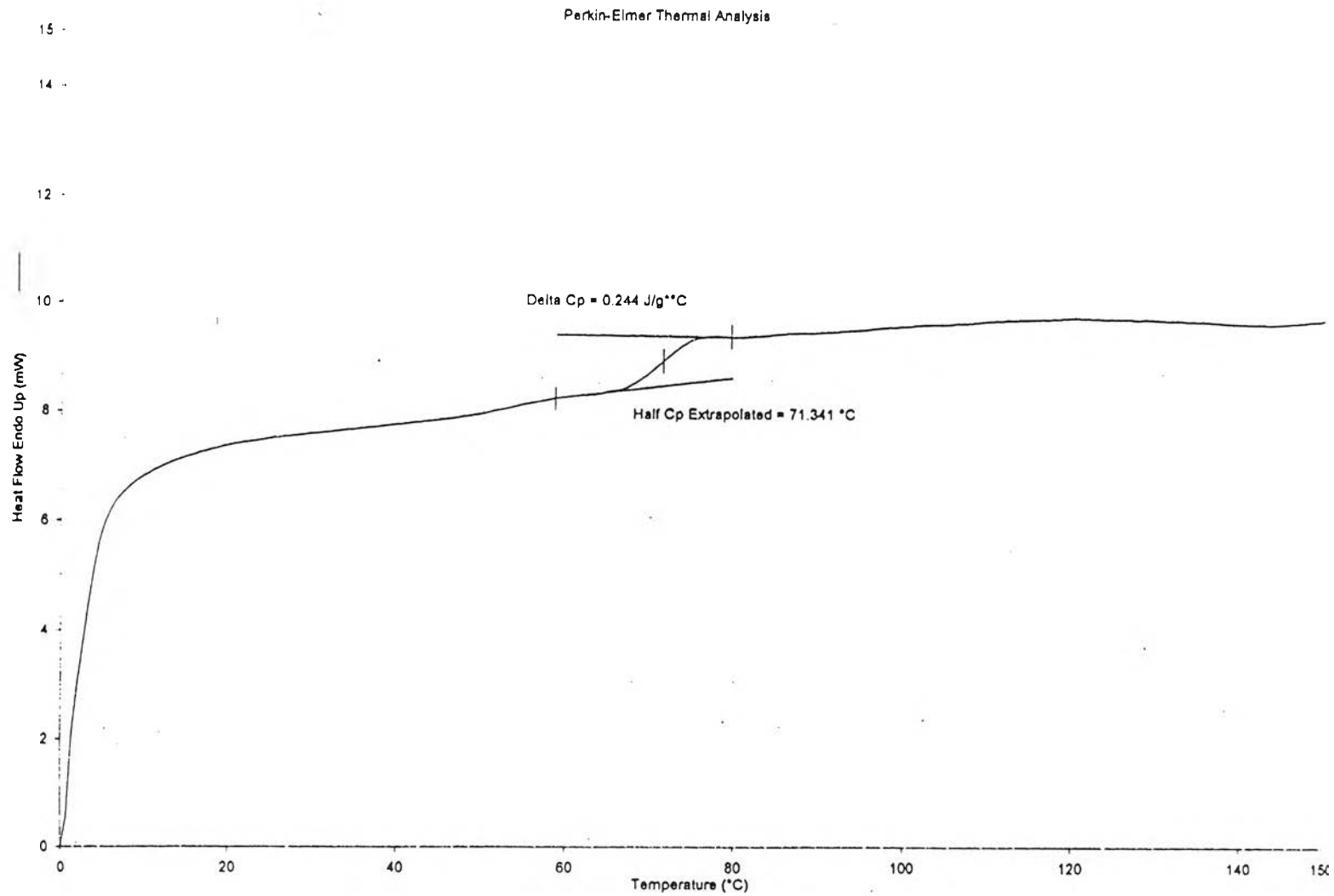


Figure A-2 DSC thermogram of the copolymer prepared with St/nBA (85/15) mol%

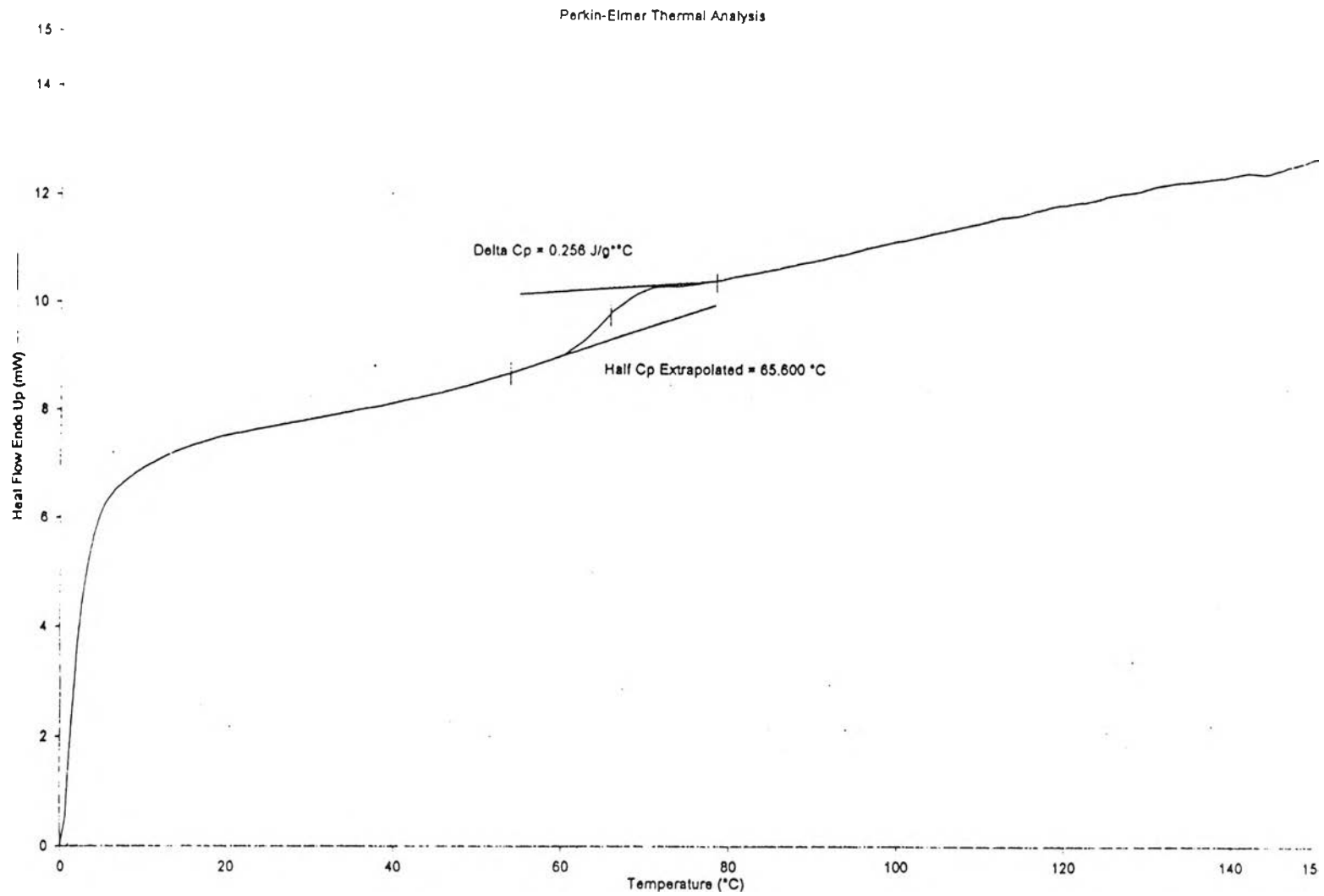


Figure A-3 DSC thermogram of the copolymer prepared with St/nBA (80/20) mol%

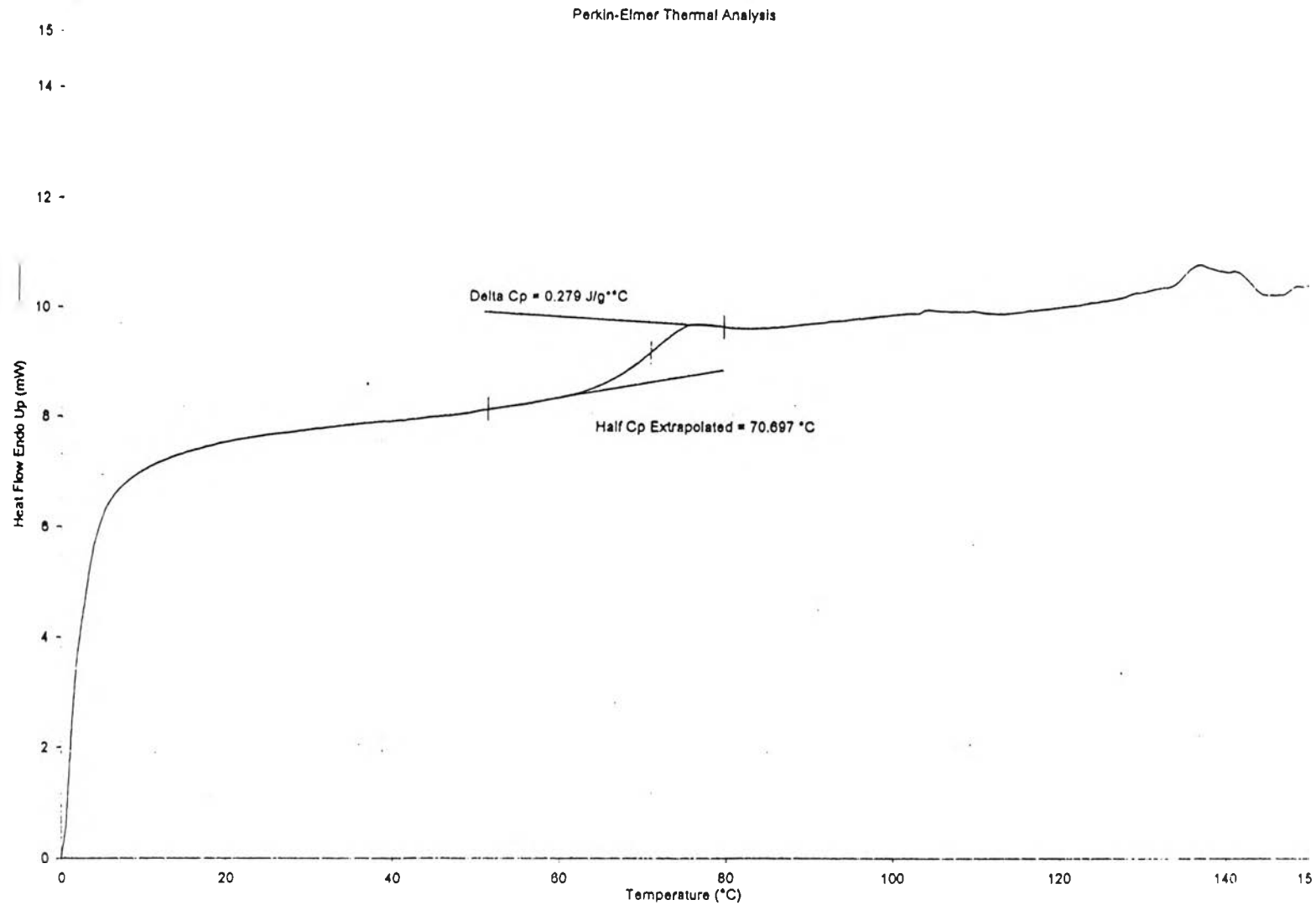


Figure A-4 DSC thermogram of the copolymer prepared with St/nBA (80/20) mol% in the presence of carbon black feed level 1 wt%

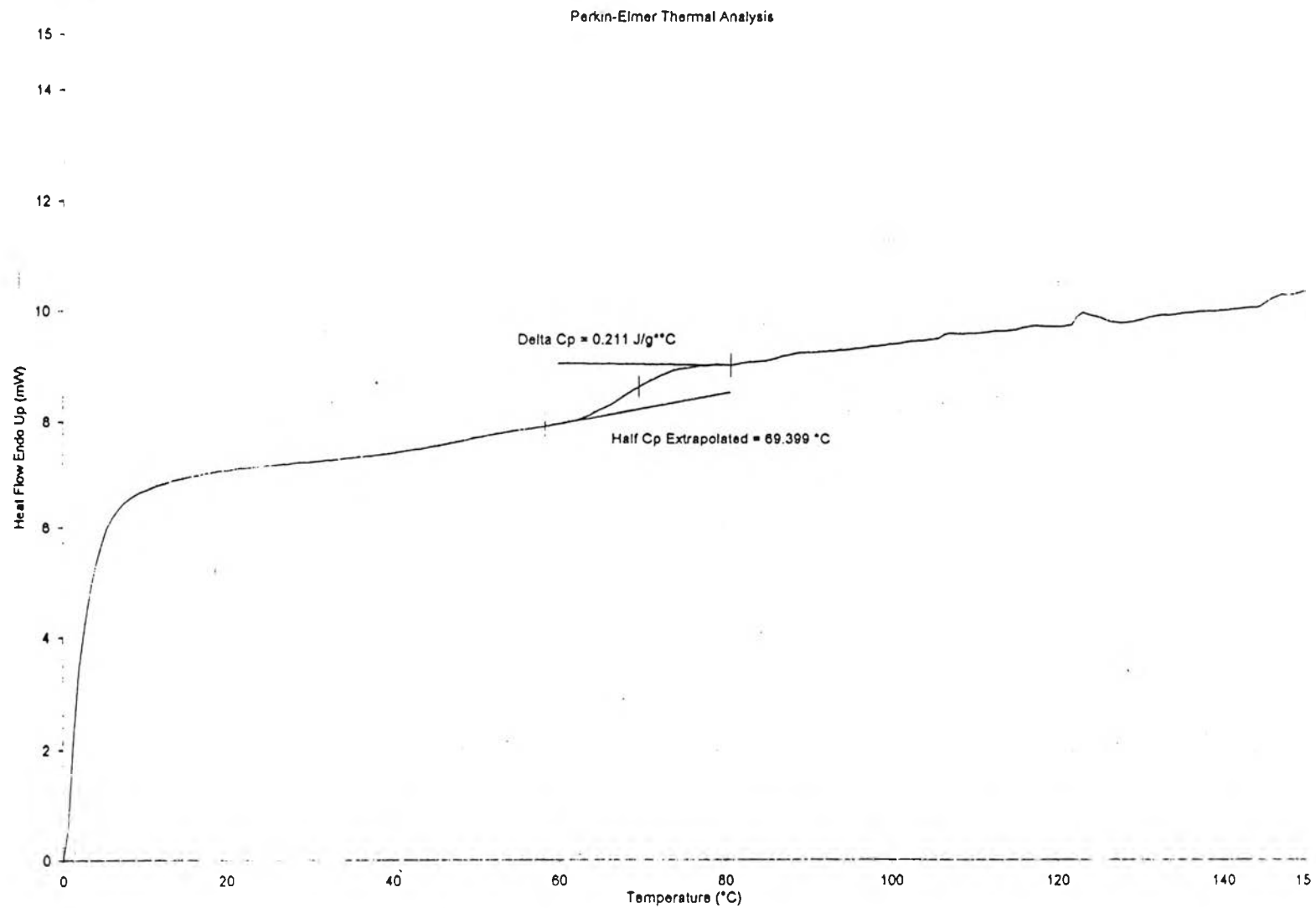


Figure A-5 DSC thermogram of the copolymer prepared with St/nBA (80/20) mol% in the presence of carbon black feed level 3 wt%

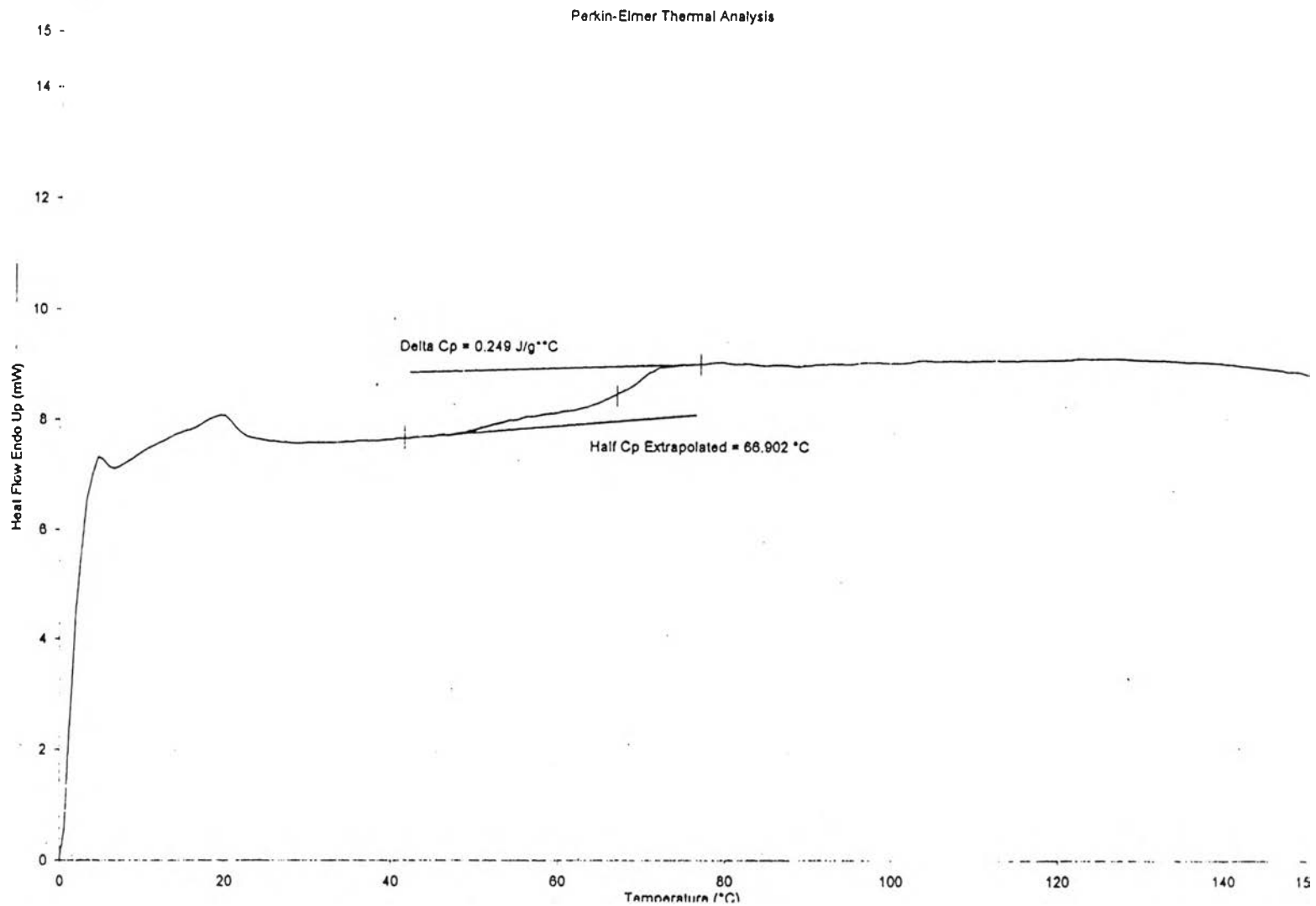


Figure A-6 DSC thermogram of the copolymer prepared with St/nBA (80/20) mol% in the presence of carbon black feed level 5 wt%



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