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APPENDIX

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

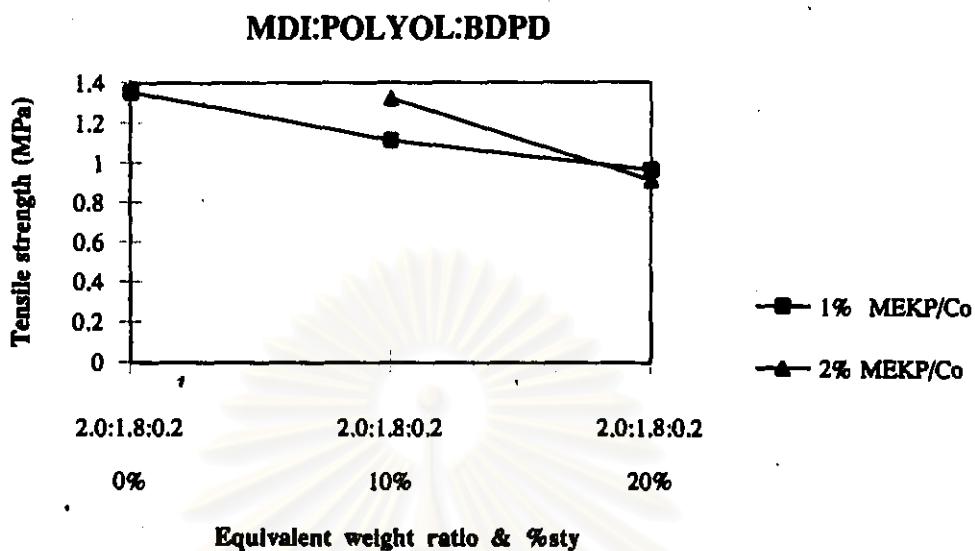


Figure A1 Tensile strength of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

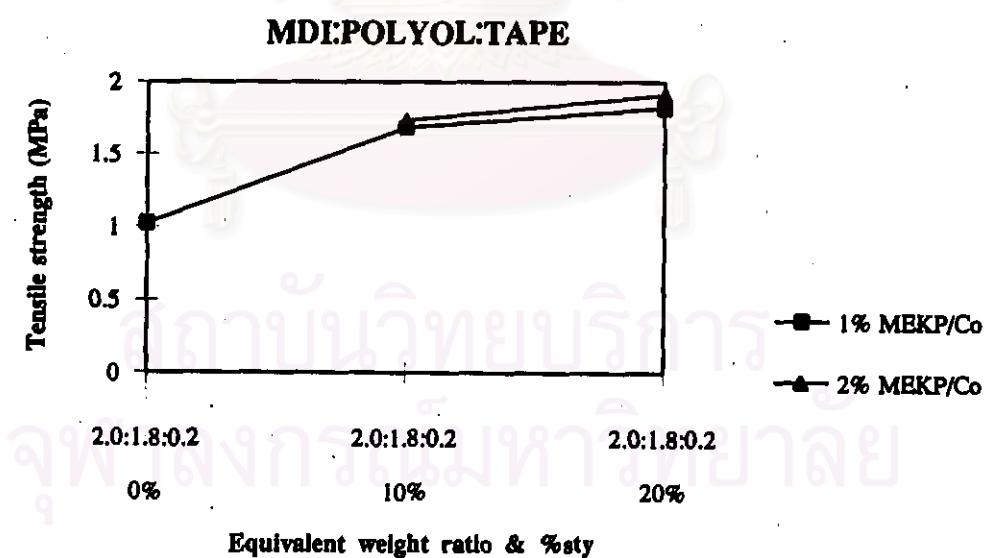


Figure A2 Tensile strength of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

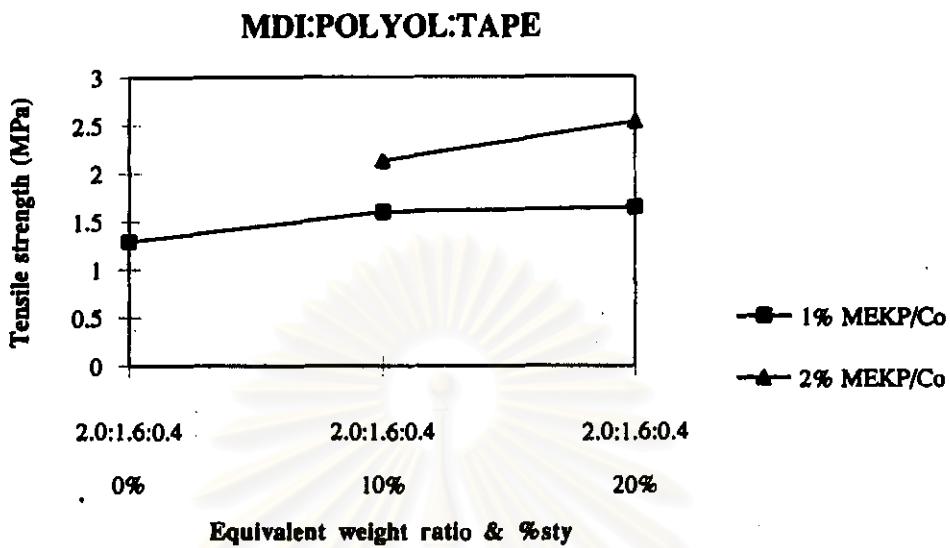


Figure A3 Tensile strength of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.6:0.4, 0-20 % styrene, and 1-2 % of MEKP/Co

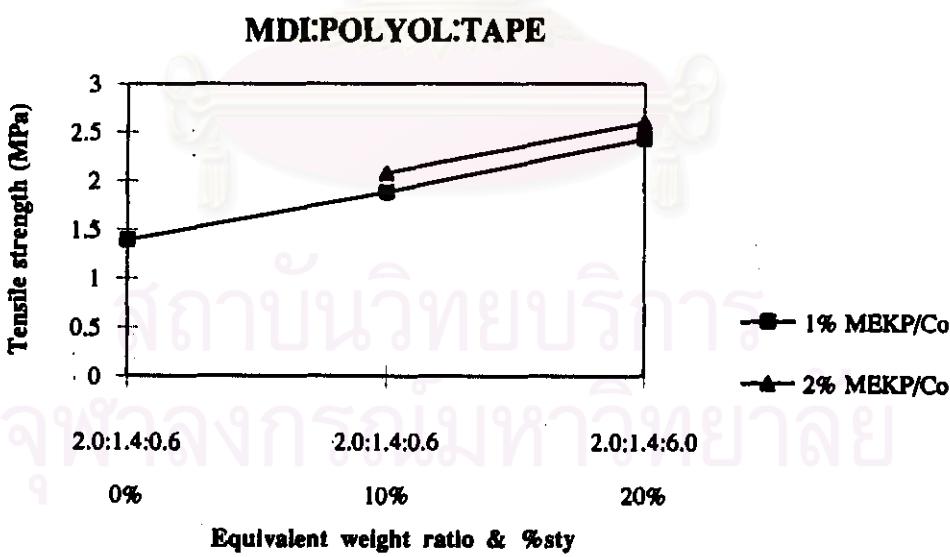


Figure A4 Tensile strength of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 1-2 % of MEKP/Co

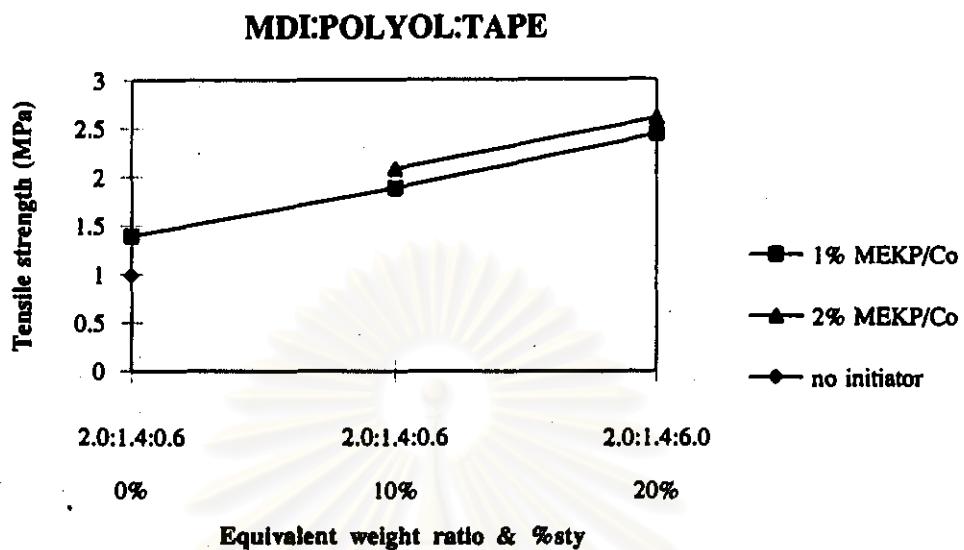


Figure A5 Tensile strength of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 0-2 % of MEKP/Co

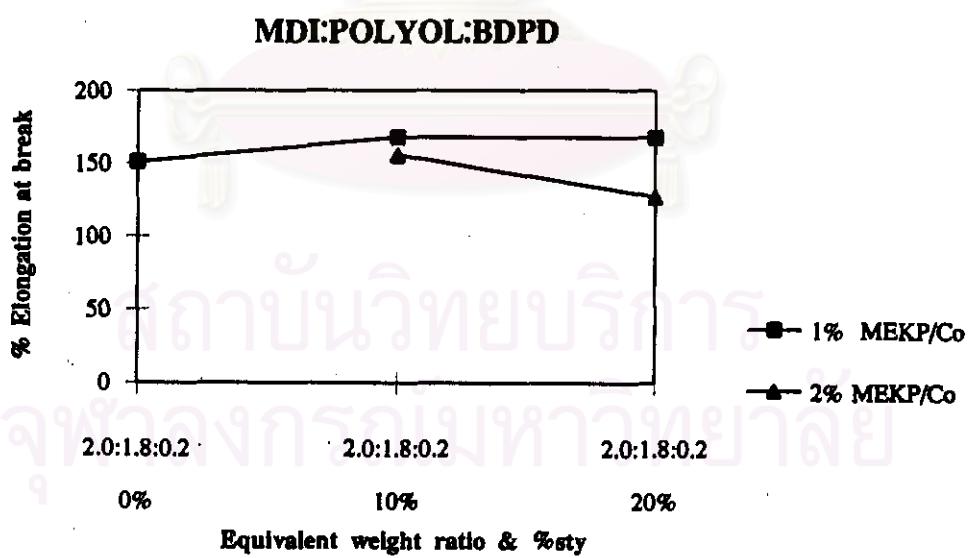


Figure A6 Elongation at break of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

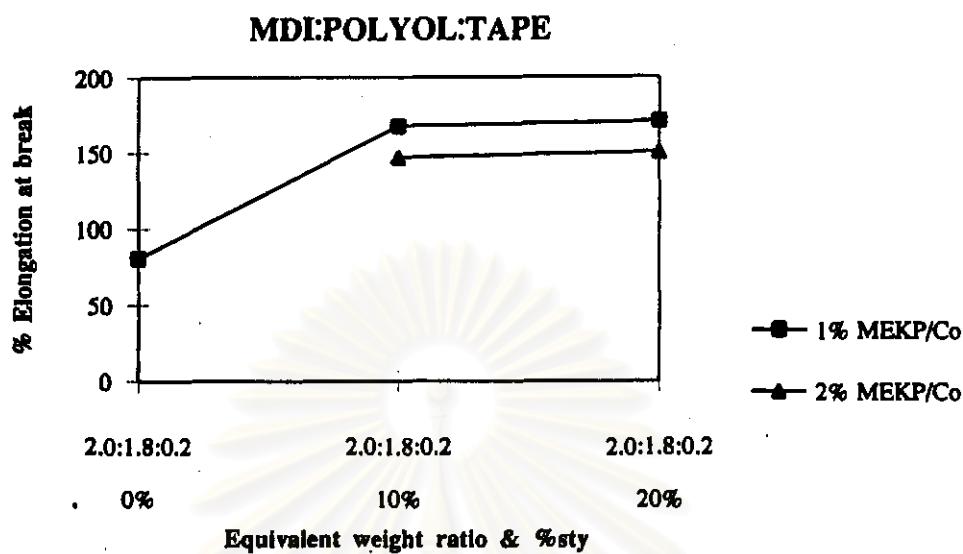


Figure A7 Elongation at break of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

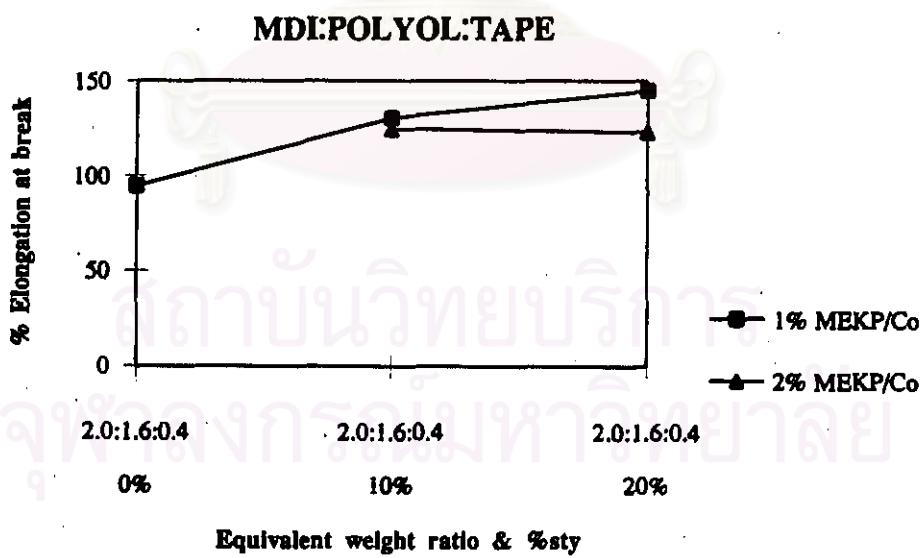


Figure A8 Elongation at break of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.6:0.4, 0-20 % styrene, and 1-2 % of MEKP/Co

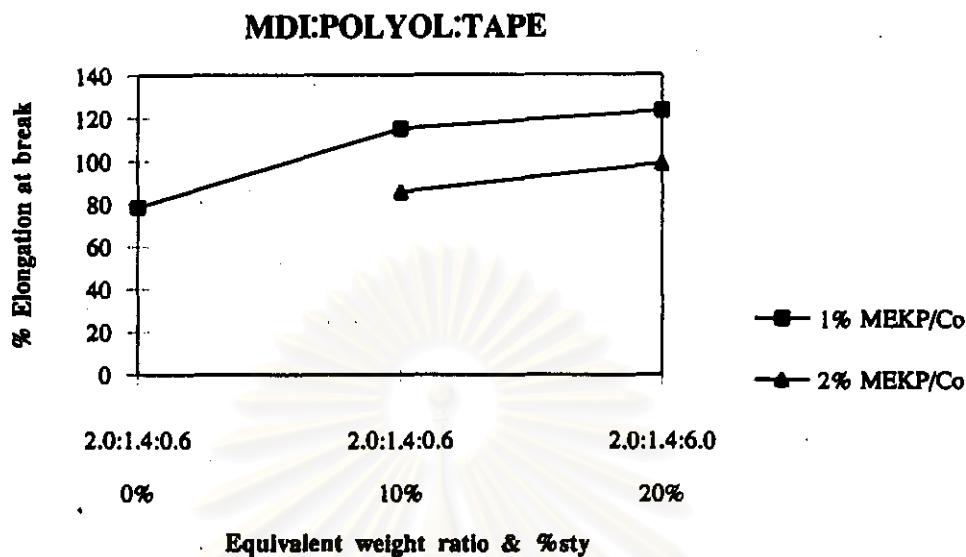


Figure A9 Elongation at break of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 1-2 % of MEKP/Co

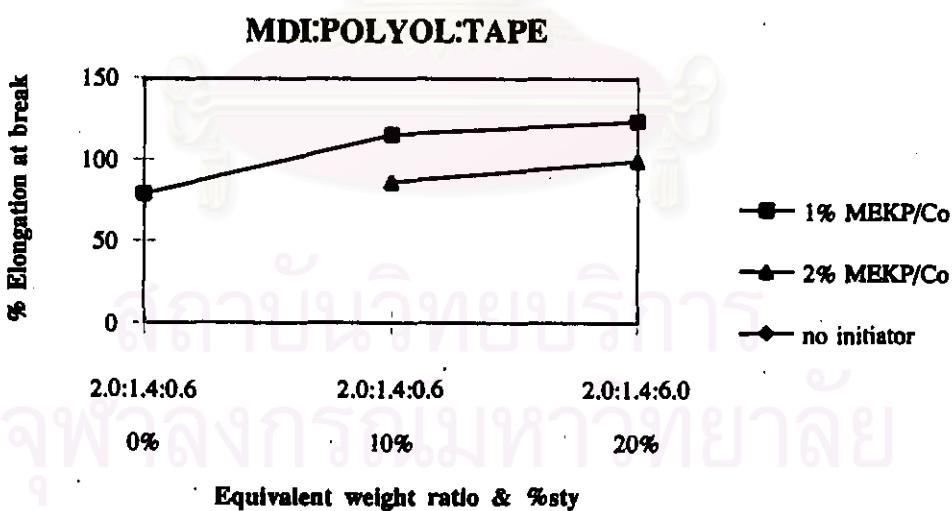


Figure A10 Elongation at break of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 0-2 % of MEKP/Co

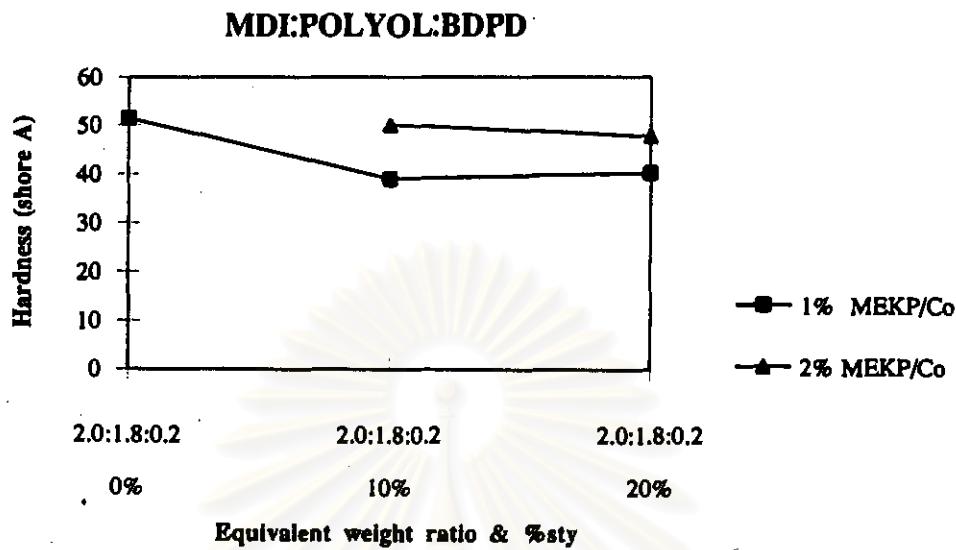


Figure A11 Hardness (shore A) of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

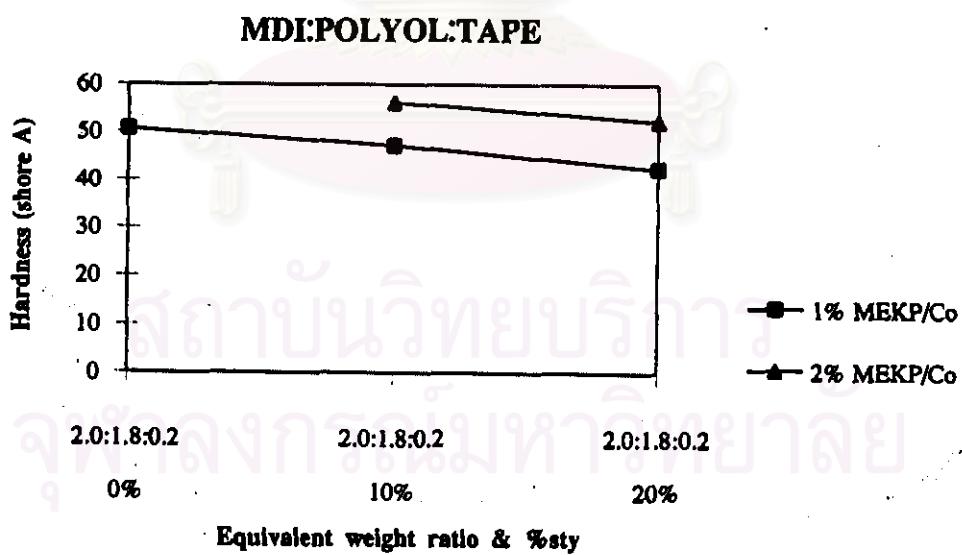


Figure A12 Hardness (shore A) of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

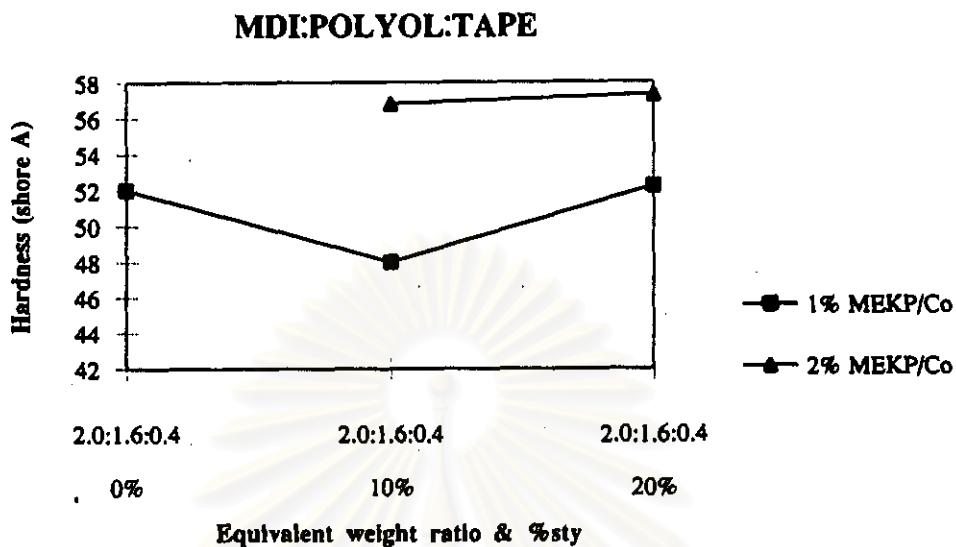


Figure A13 Hardness (shore A) of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.6:0.4, 0-20 % styrene, and 1-2 % of MEKP/Co

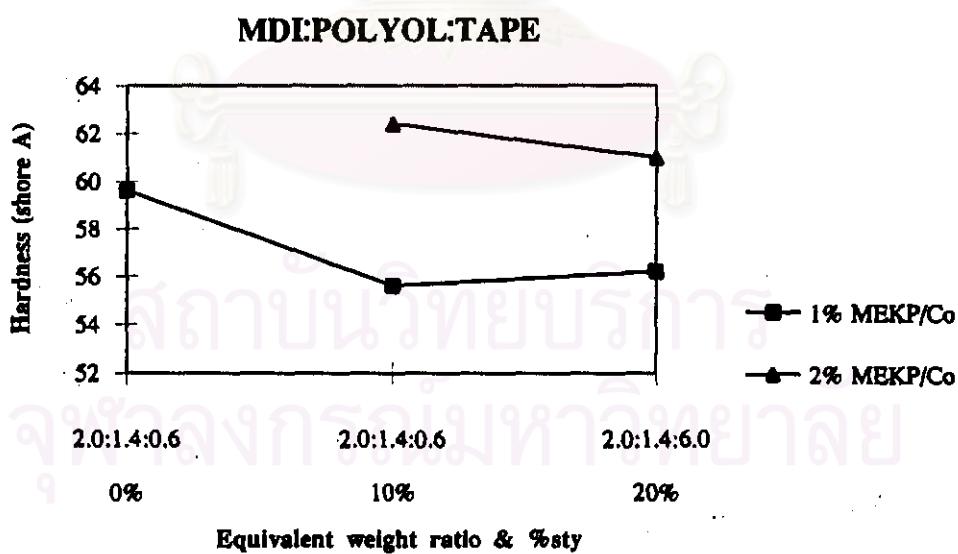


Figure A14 Hardness (shore A) of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 1-2 % of MEKP/Co

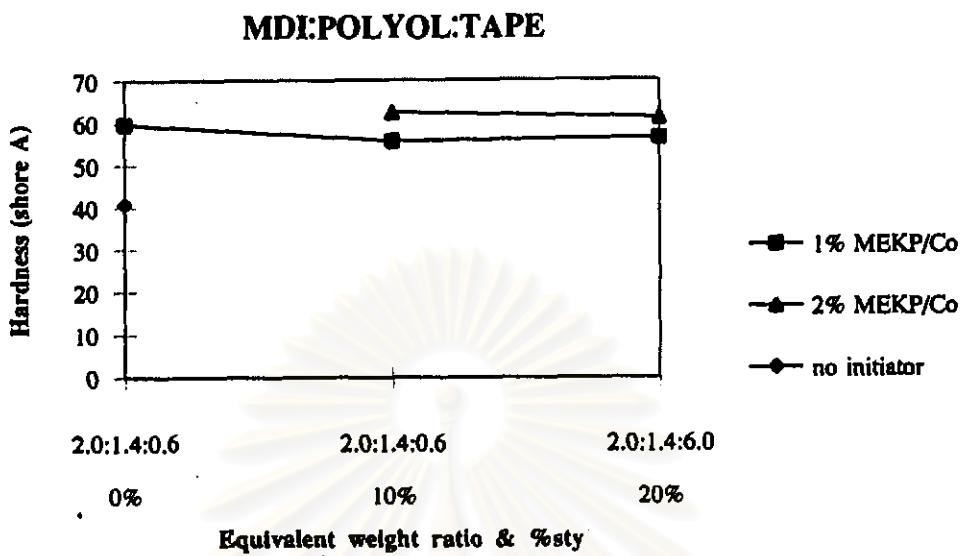


Figure A15 Hardness (shore A) of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 0-2 % of MEKP/Co

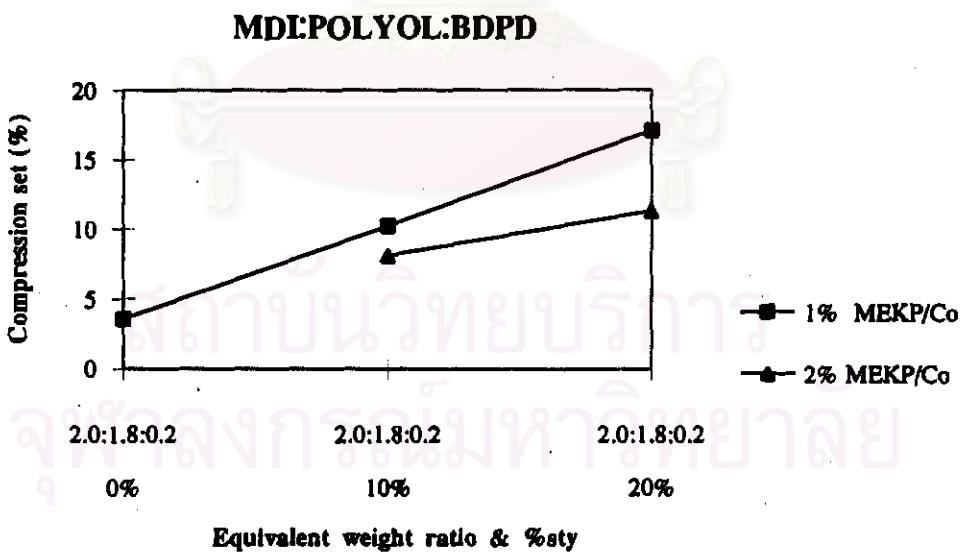


Figure A16 Compression set of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

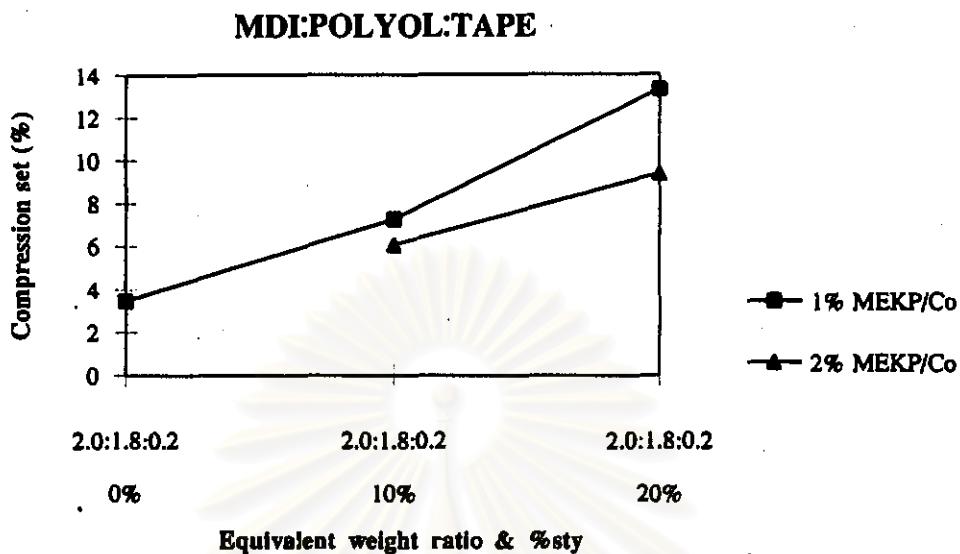


Figure A17 Compression set of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.8:0.2, 0-20 % styrene, and 1-2 % of MEKP/Co

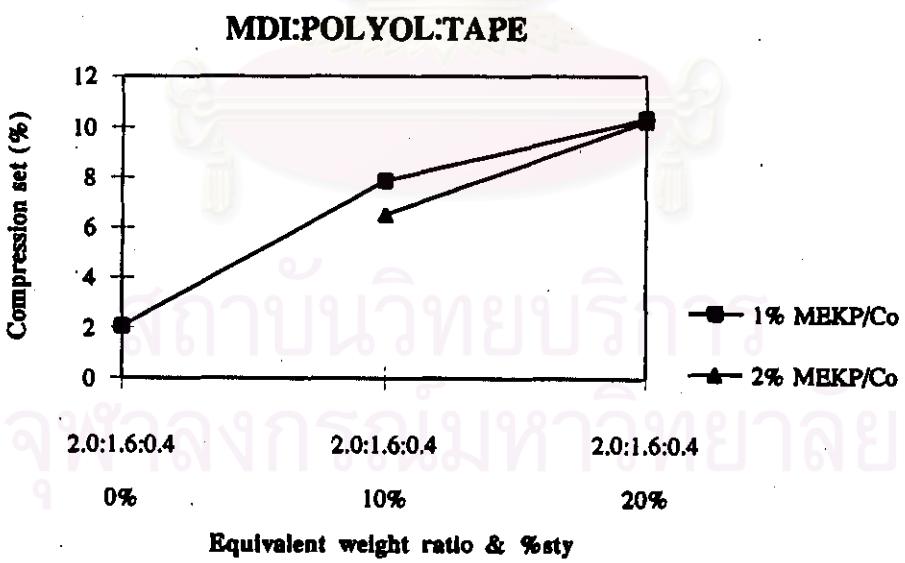


Figure A18 Compression set of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.6:0.4, 0-20 % styrene, and 1-2 % of MEKP/Co

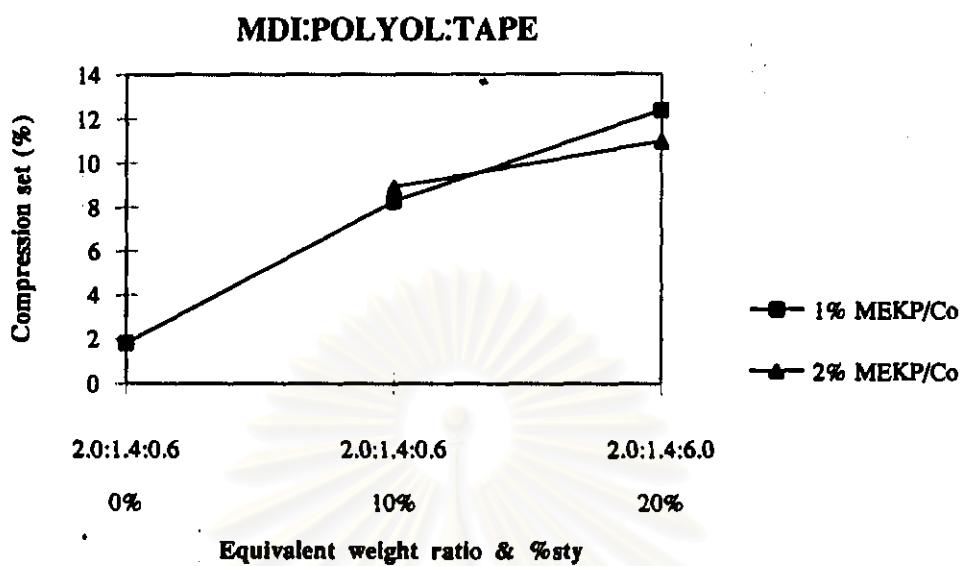


Figure A19 Compression set of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 1-2 % of MEKP/Co

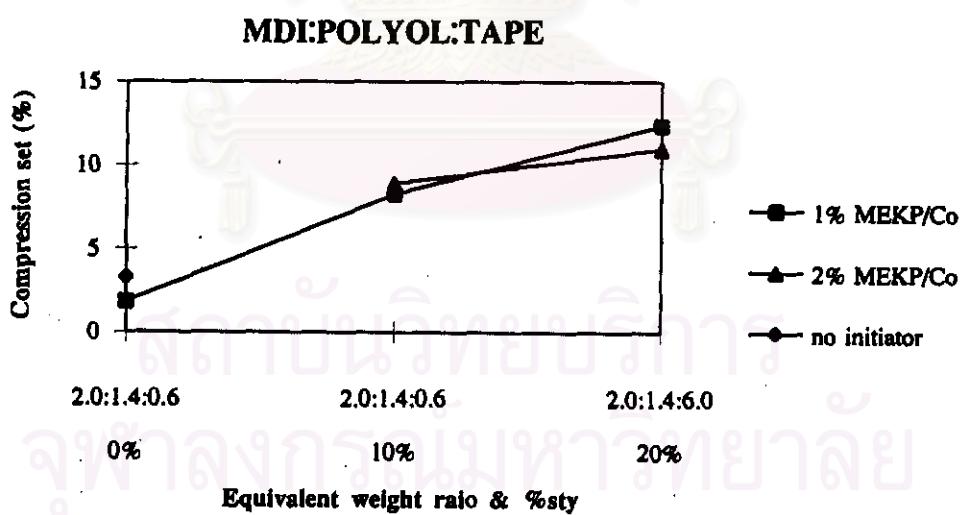


Figure A20 Compression set of PU and PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE=2:1.4:0.6, 0-20 % styrene, and 0-2 % of MEKP/Co



Figure A21 SEM micrograph of PU elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, and 1 wt% of MEKP/Co.

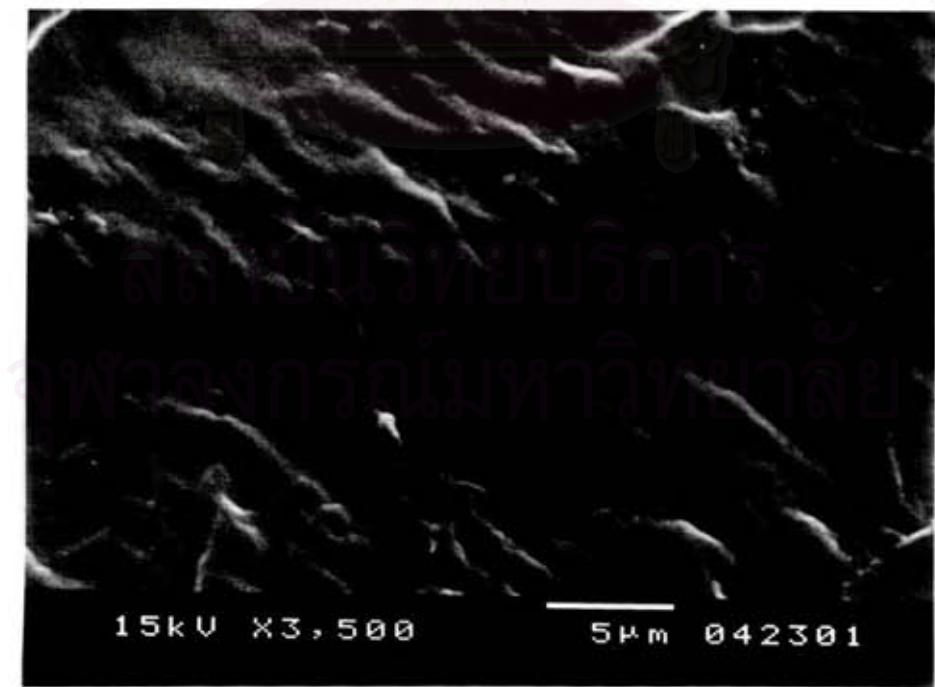


Figure A22 SEM micrograph of PU elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, and 1 wt% of MEKP/Co.

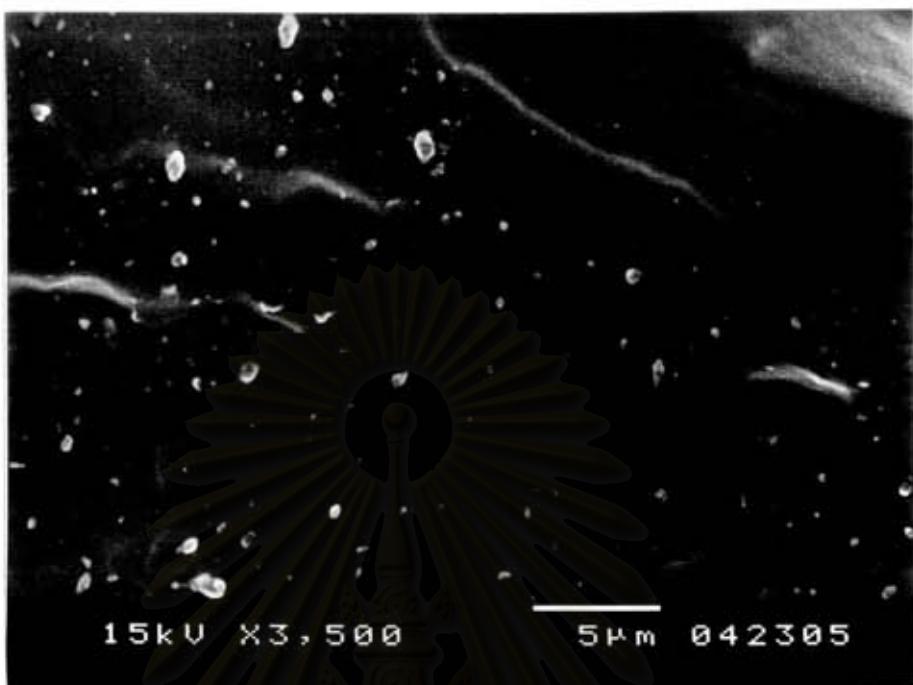


Figure A23 SEM micrograph of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 1 wt% of MEKP/Co.



Figure A24 SEM micrograph of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 1 wt% of MEKP/Co.

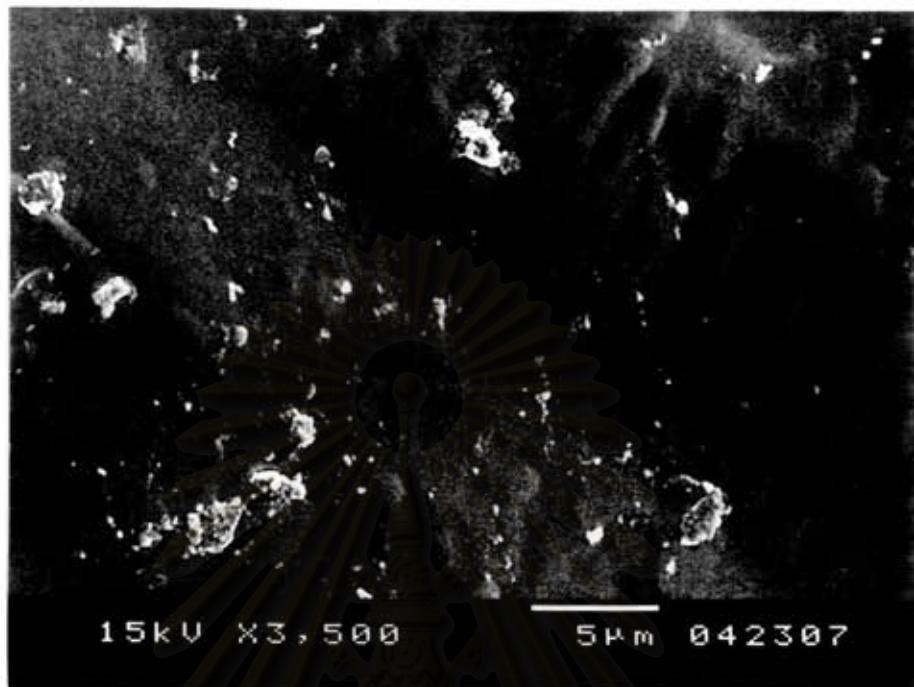


Figure A25 SEM micrograph of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 2 wt% of MEKP/Co.

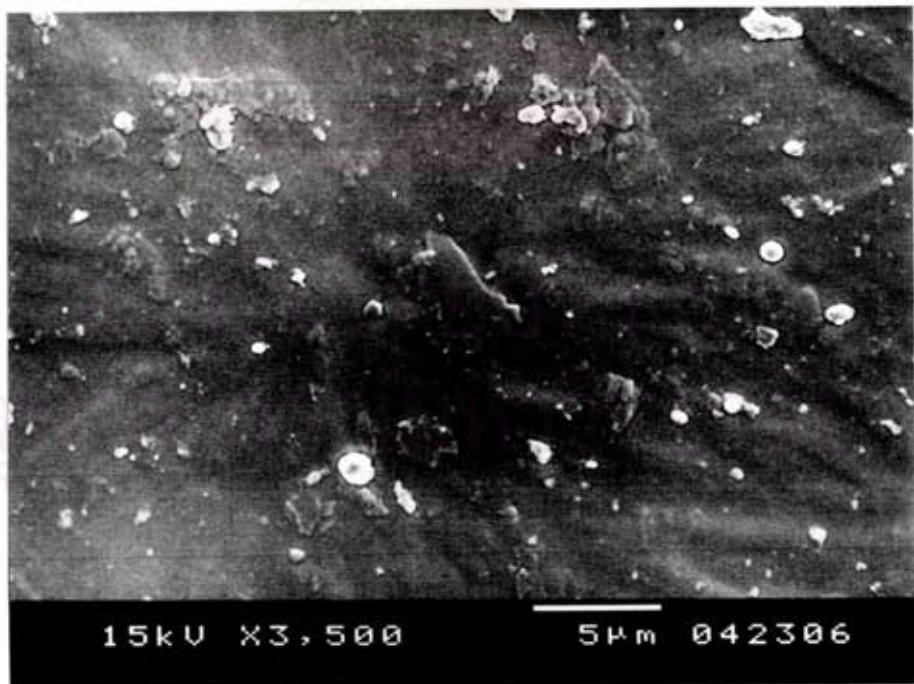


Figure A26 SEM micrograph of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 2 wt% of MEKP/Co.

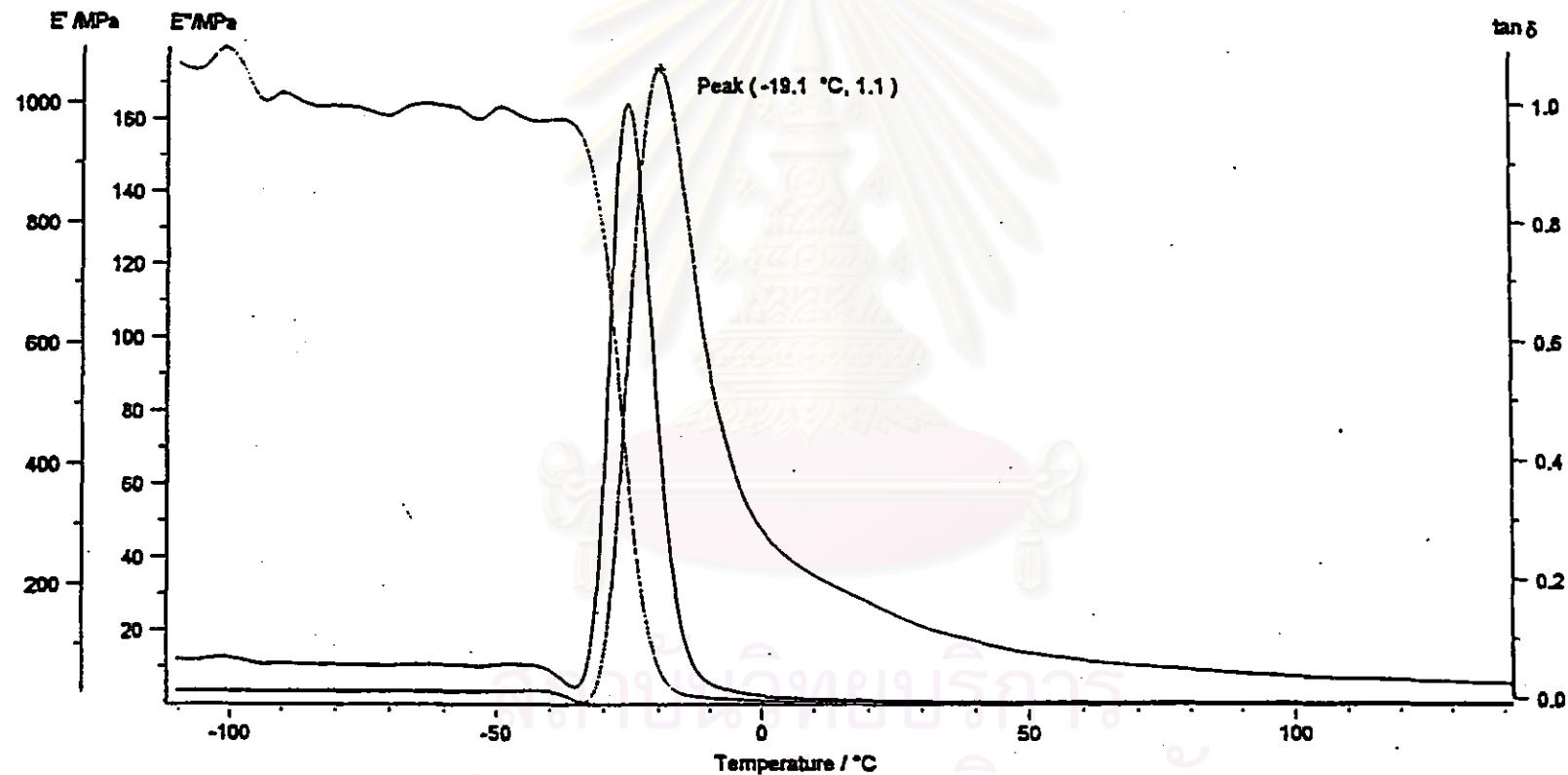


Figure A27 DMA thermogram of PU elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, and 1 wt% of MEKP/Co.

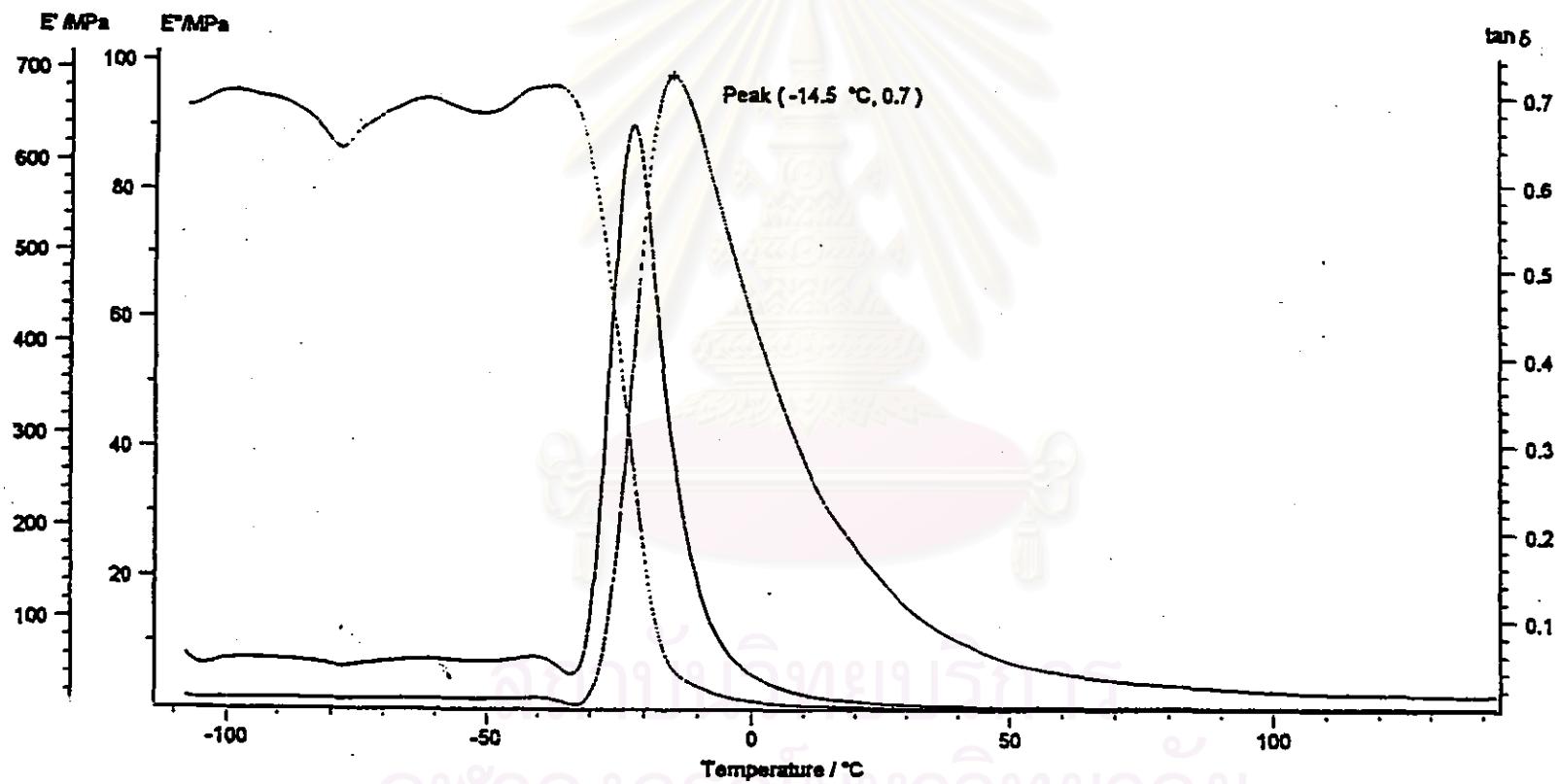


Figure A28 DMA thermogram of PU elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, and 1 wt% of MEKP/Co.

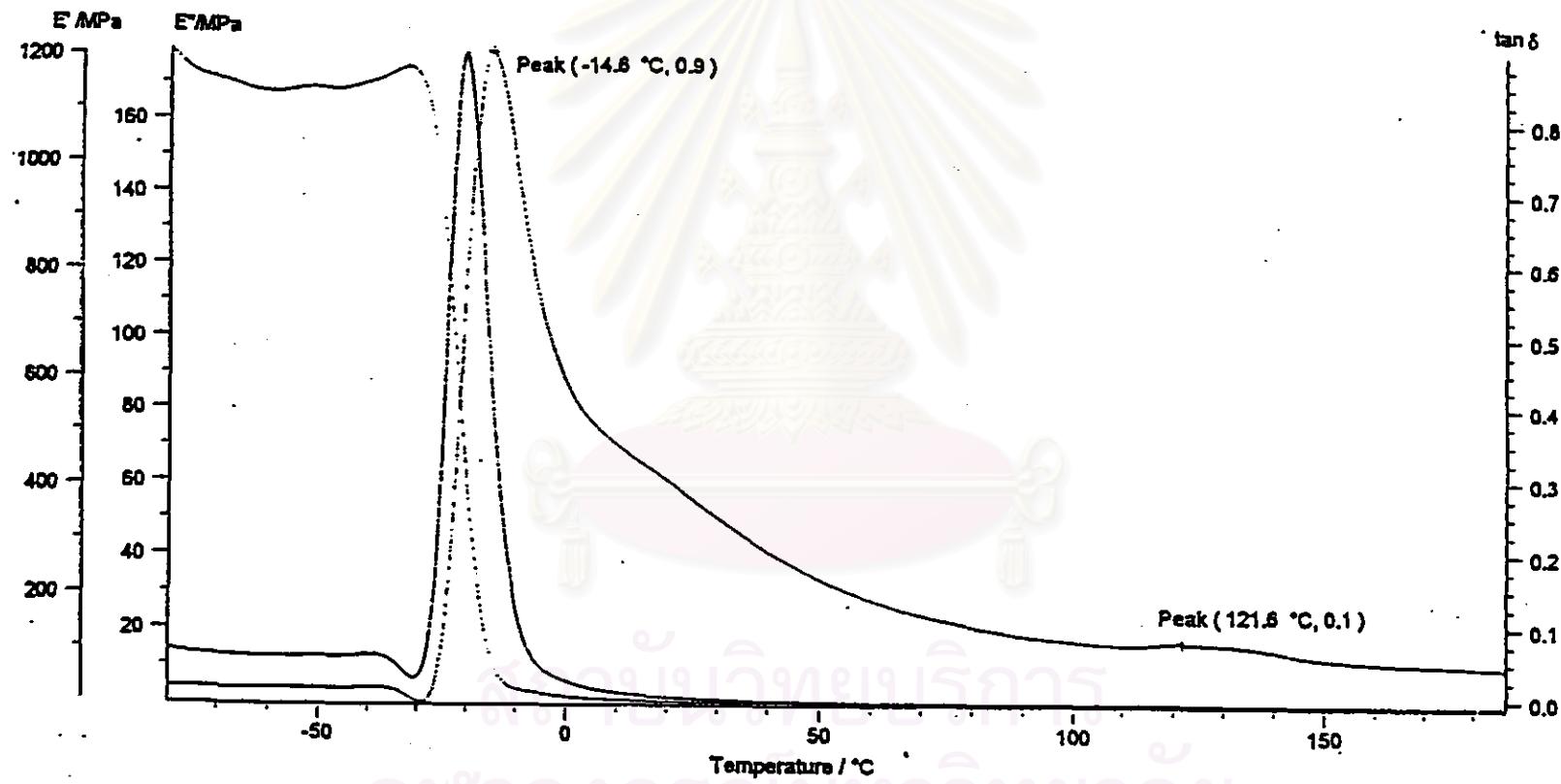


Figure A29 DMA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 1 wt% of MEKP/Co.

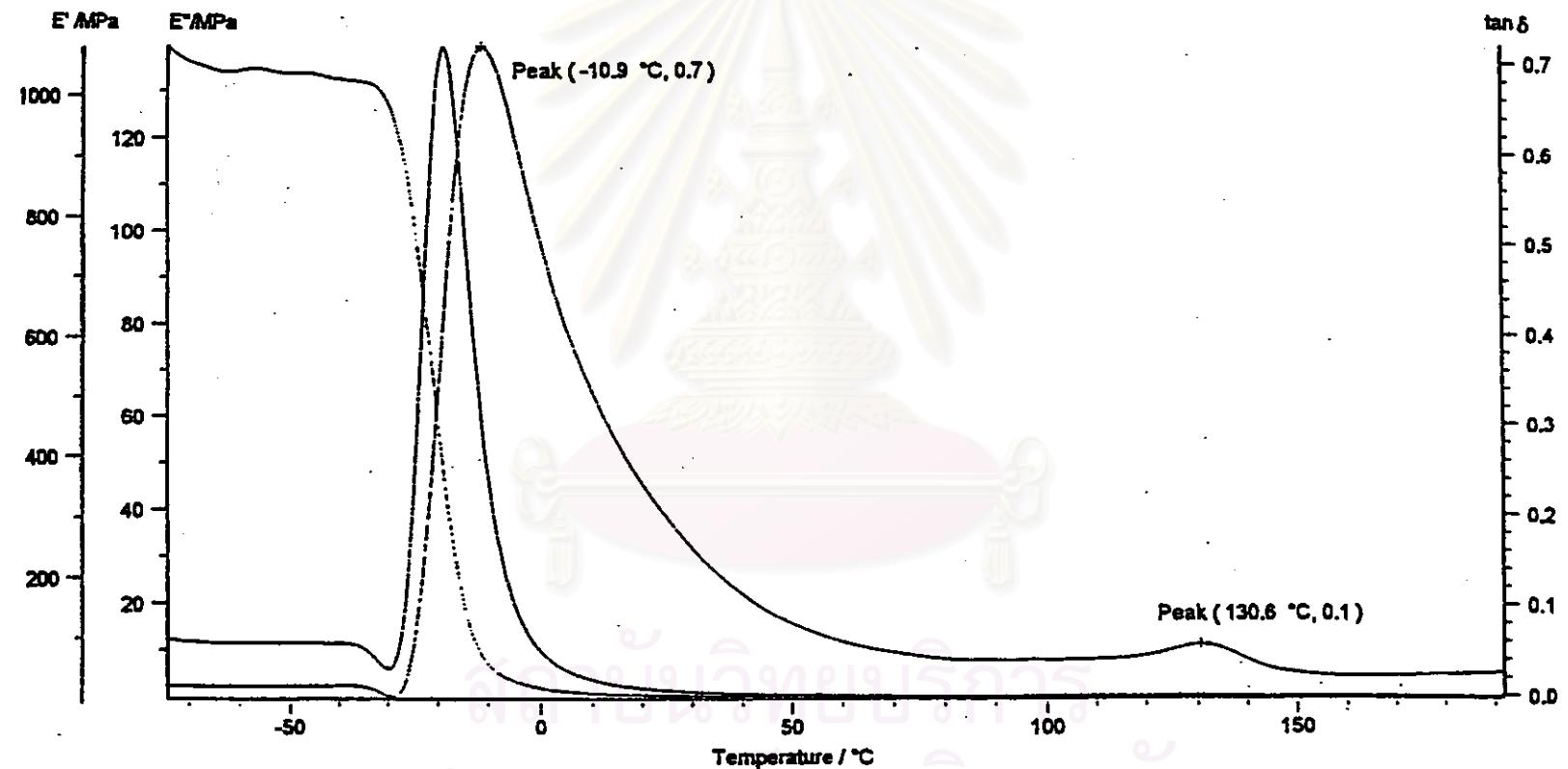


Figure A30 DMA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 1 wt% of MEKP/Co.

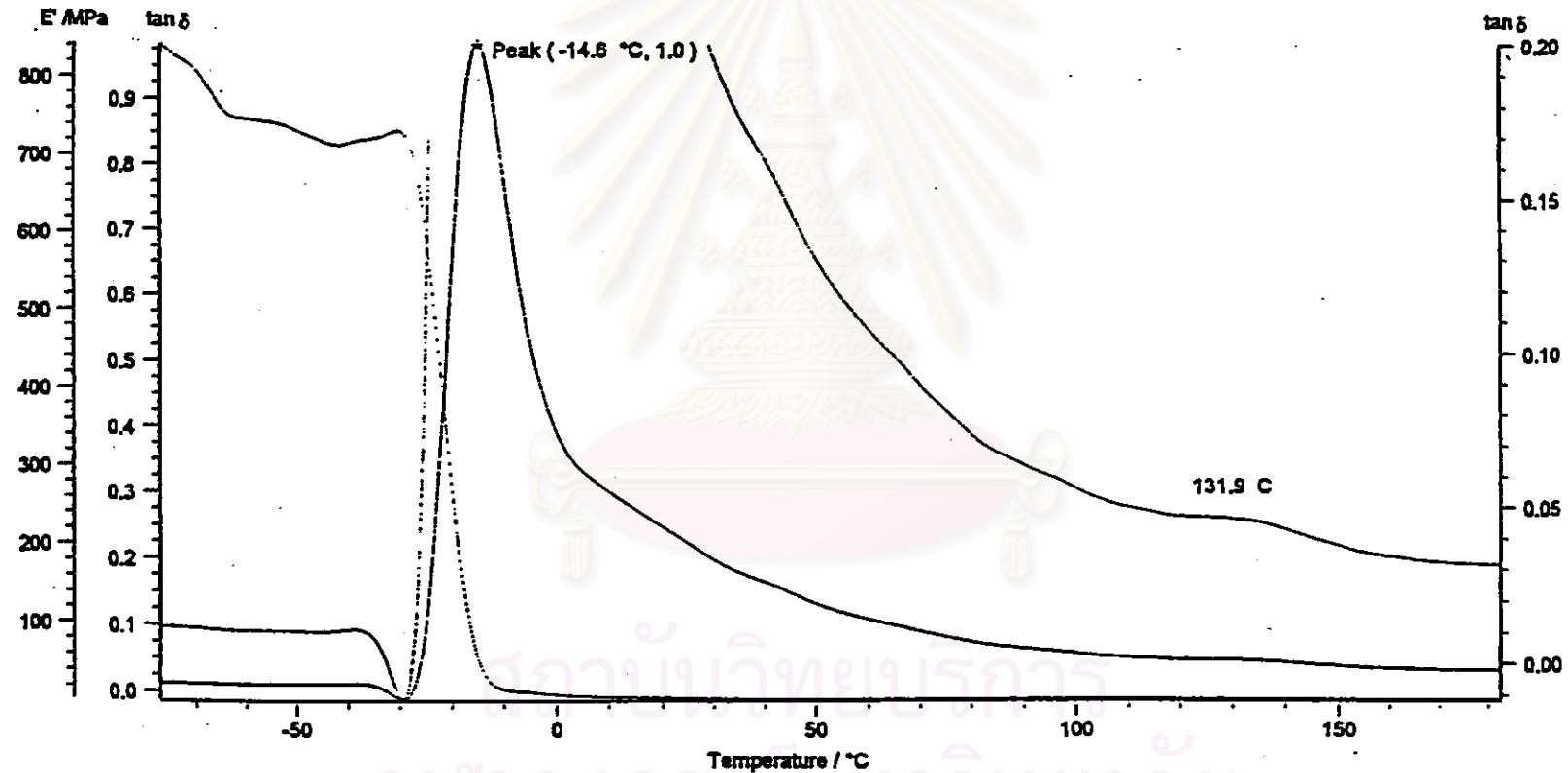


Figure A31 DMA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 2 wt% of MEKP/Co.

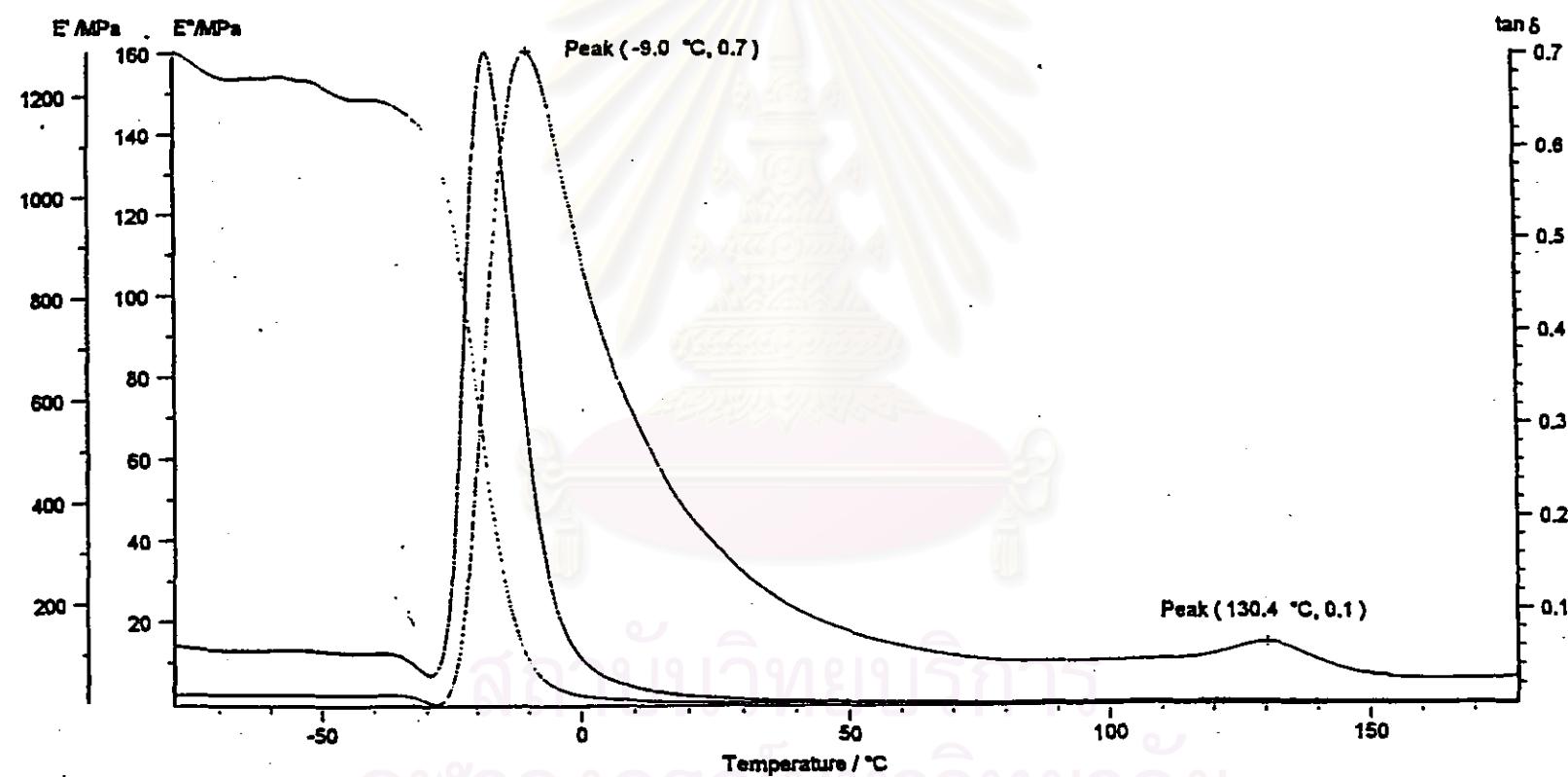


Figure A32 DMA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 2 wt% of MEKP/Co.

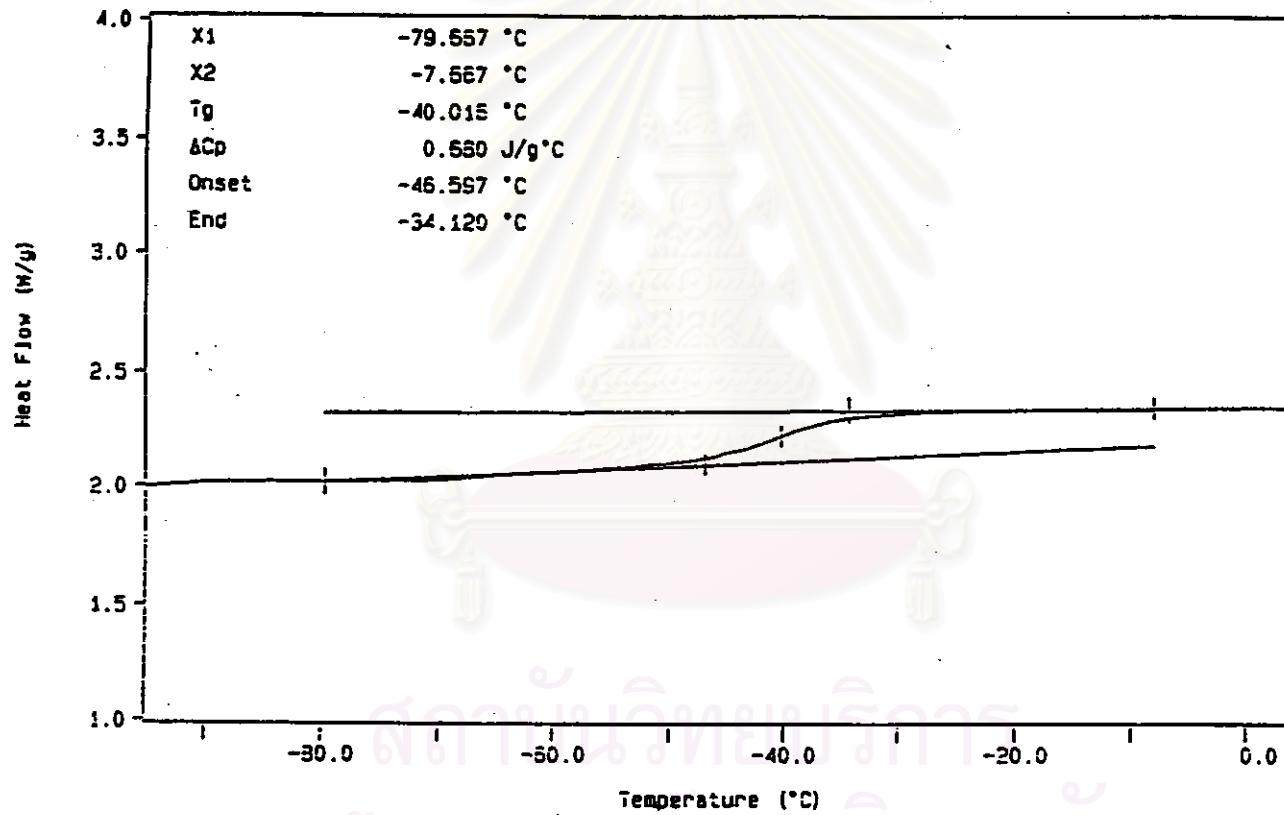


Figure A33 DSC thermogram of PU elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, and 1 wt% of MEKP/Co.

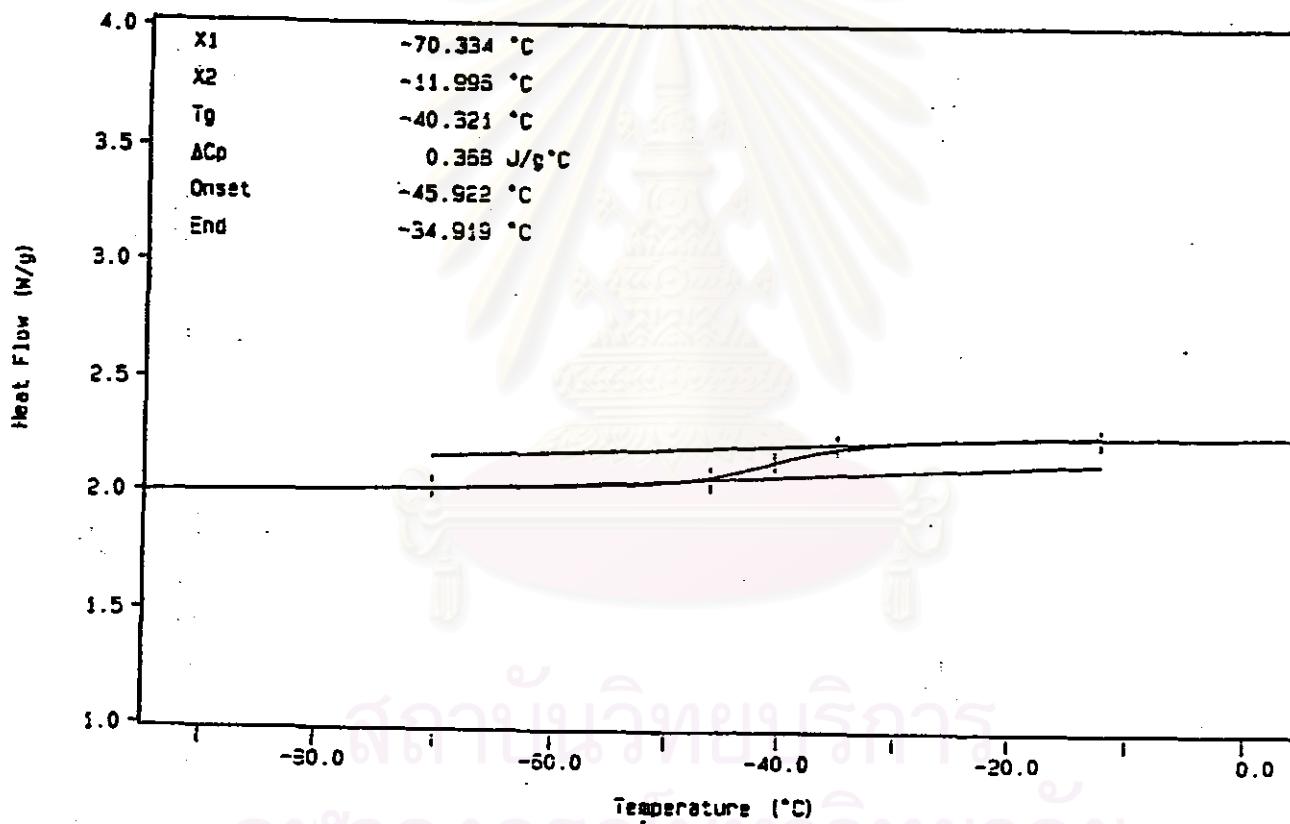


Figure A34 DSC thermogram of PU elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, and 1 wt% of MEKP/Co.

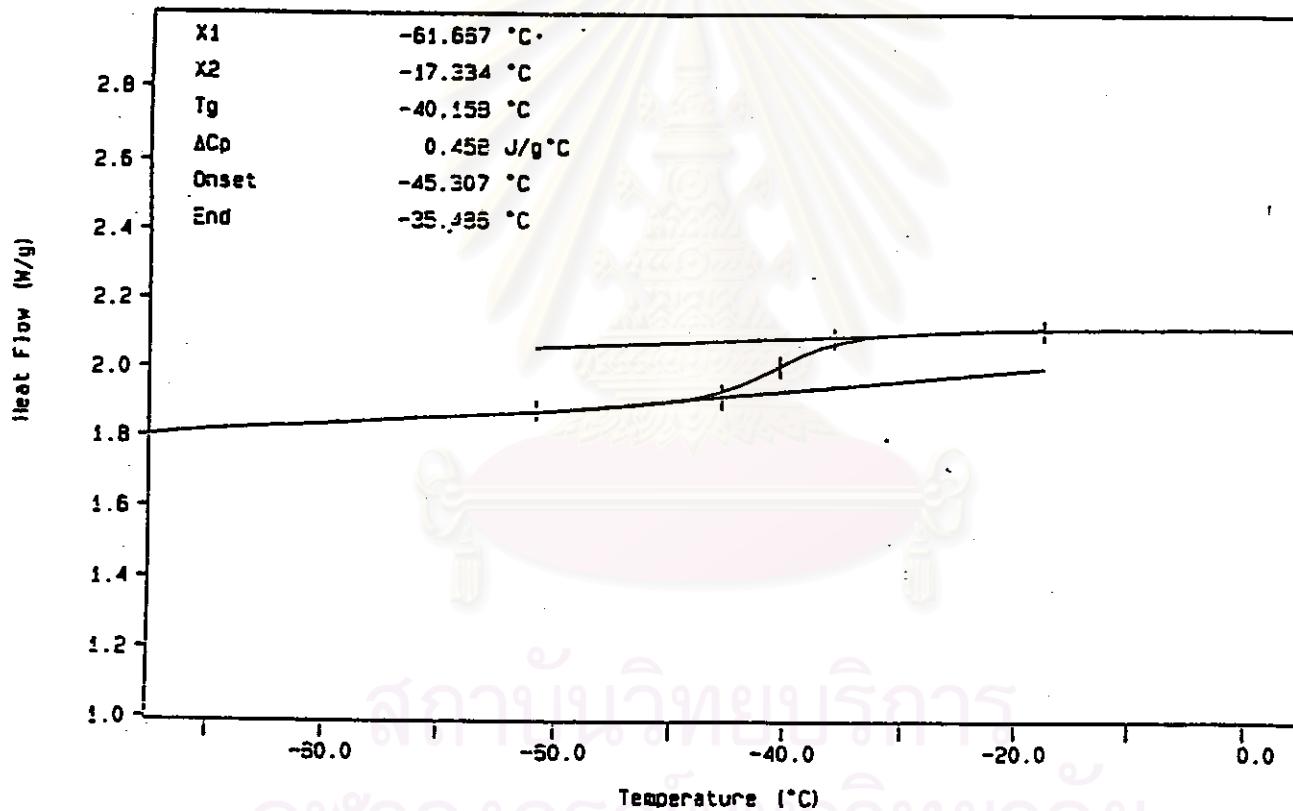


Figure A35 DSC thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 2 wt% of MEKP/Co.

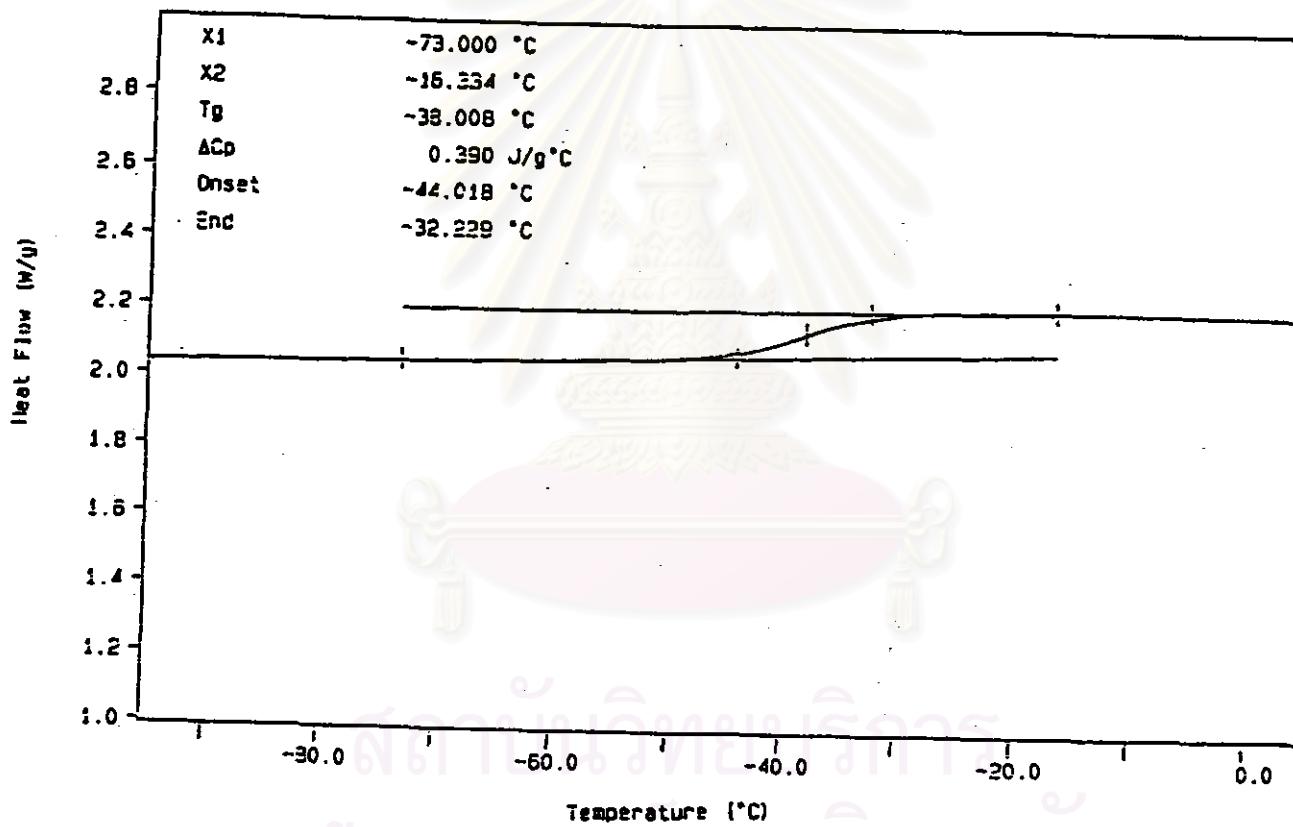


Figure A36 DSC thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 2 wt% of MEKP/Co.

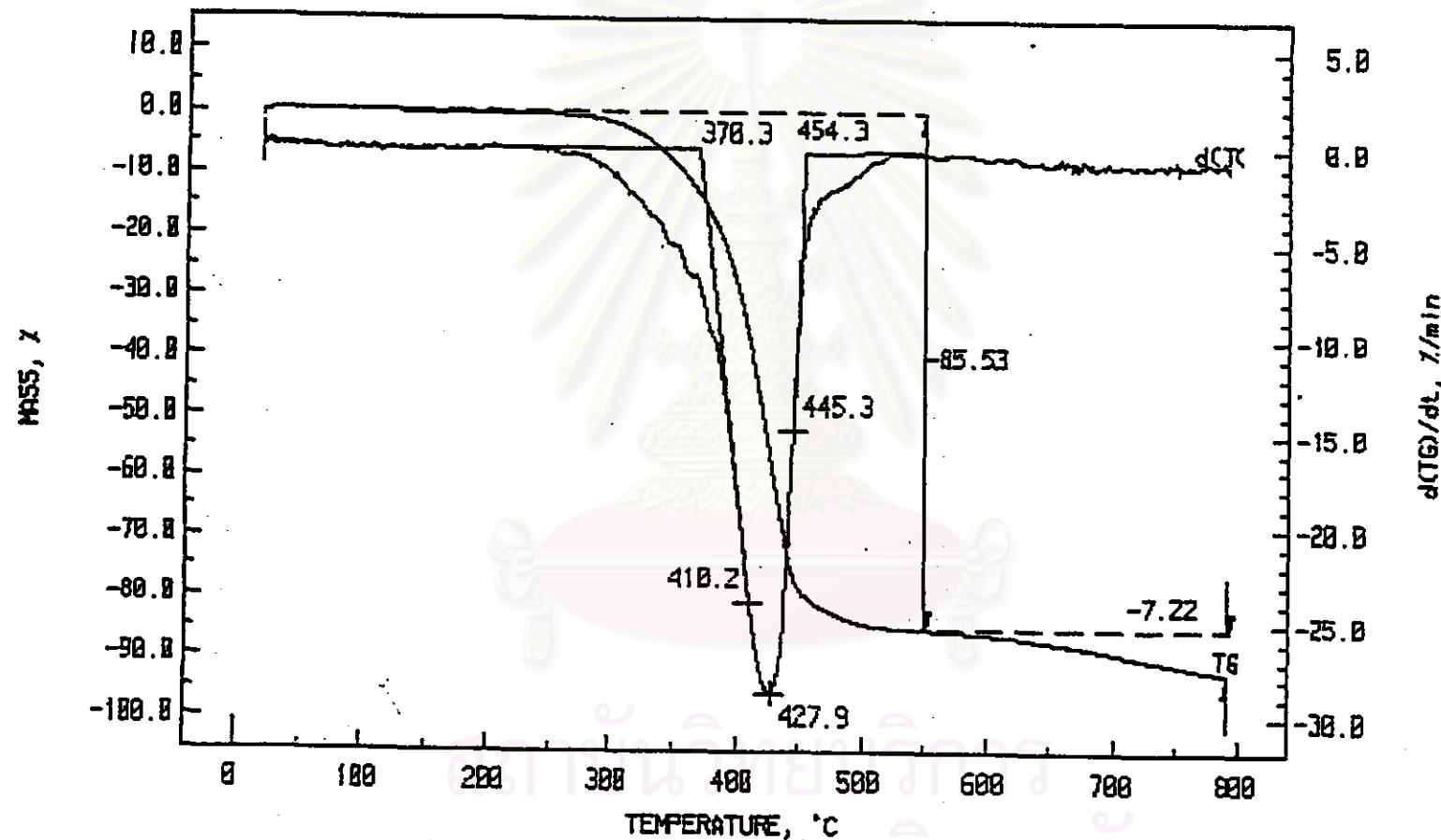


Figure A37 TGA thermogram of PU elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, and 1 wt% of MEKP/Co.

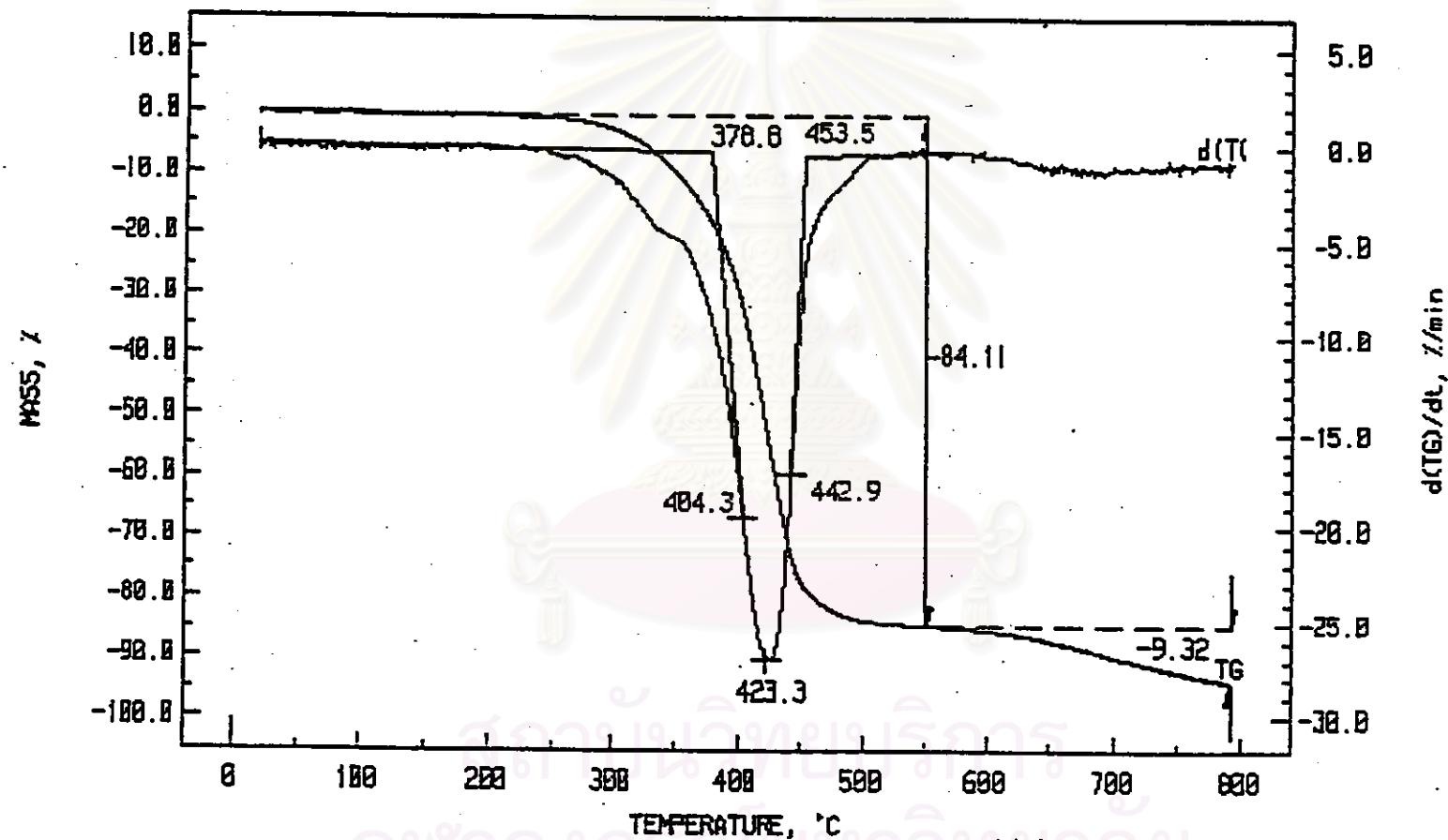


Figure A38 TGA thermogram of PU elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, and 1 wt% of MEKP/Co.

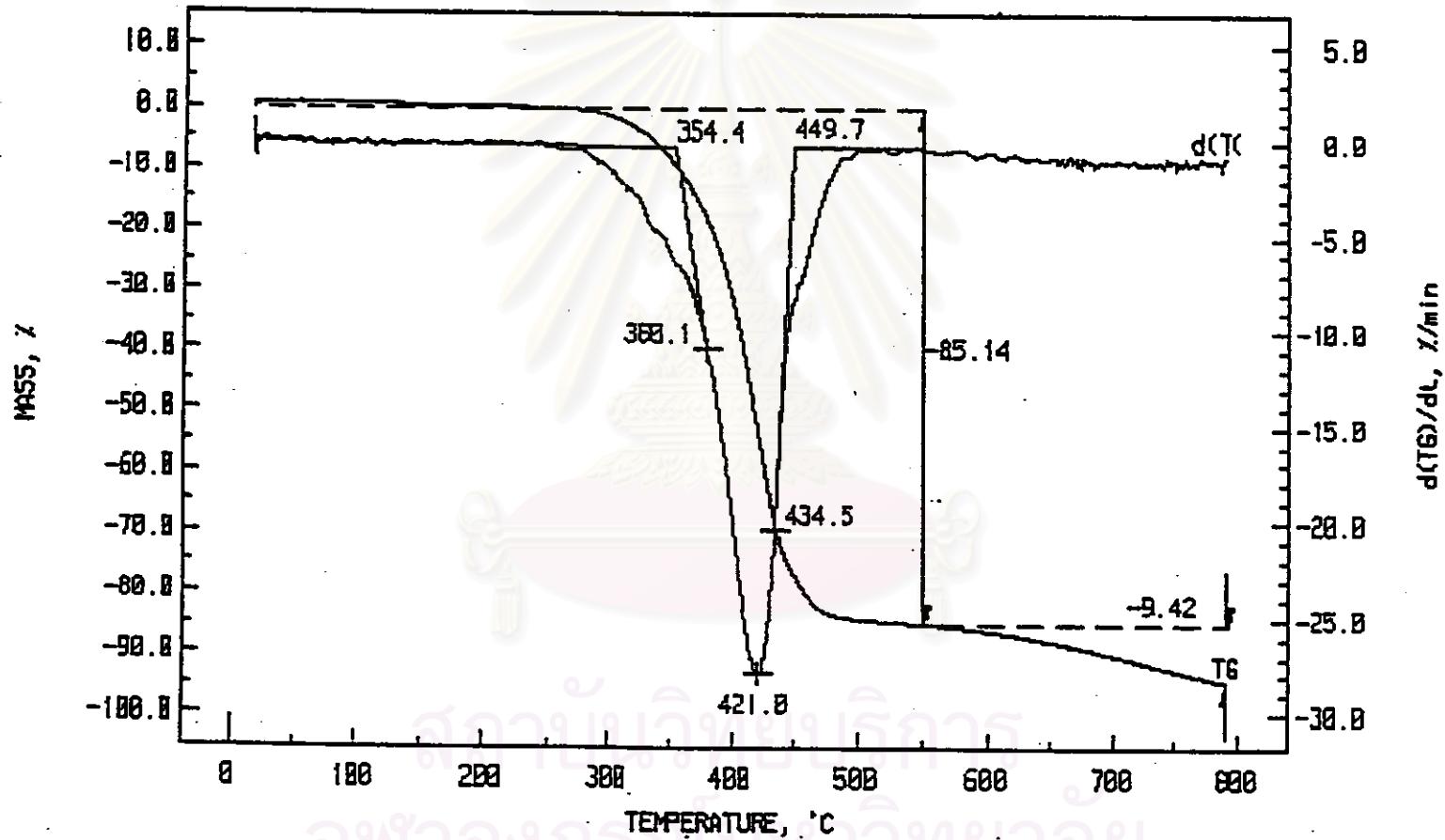


Figure A39 TGA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 1 wt% of MEKP/Co.

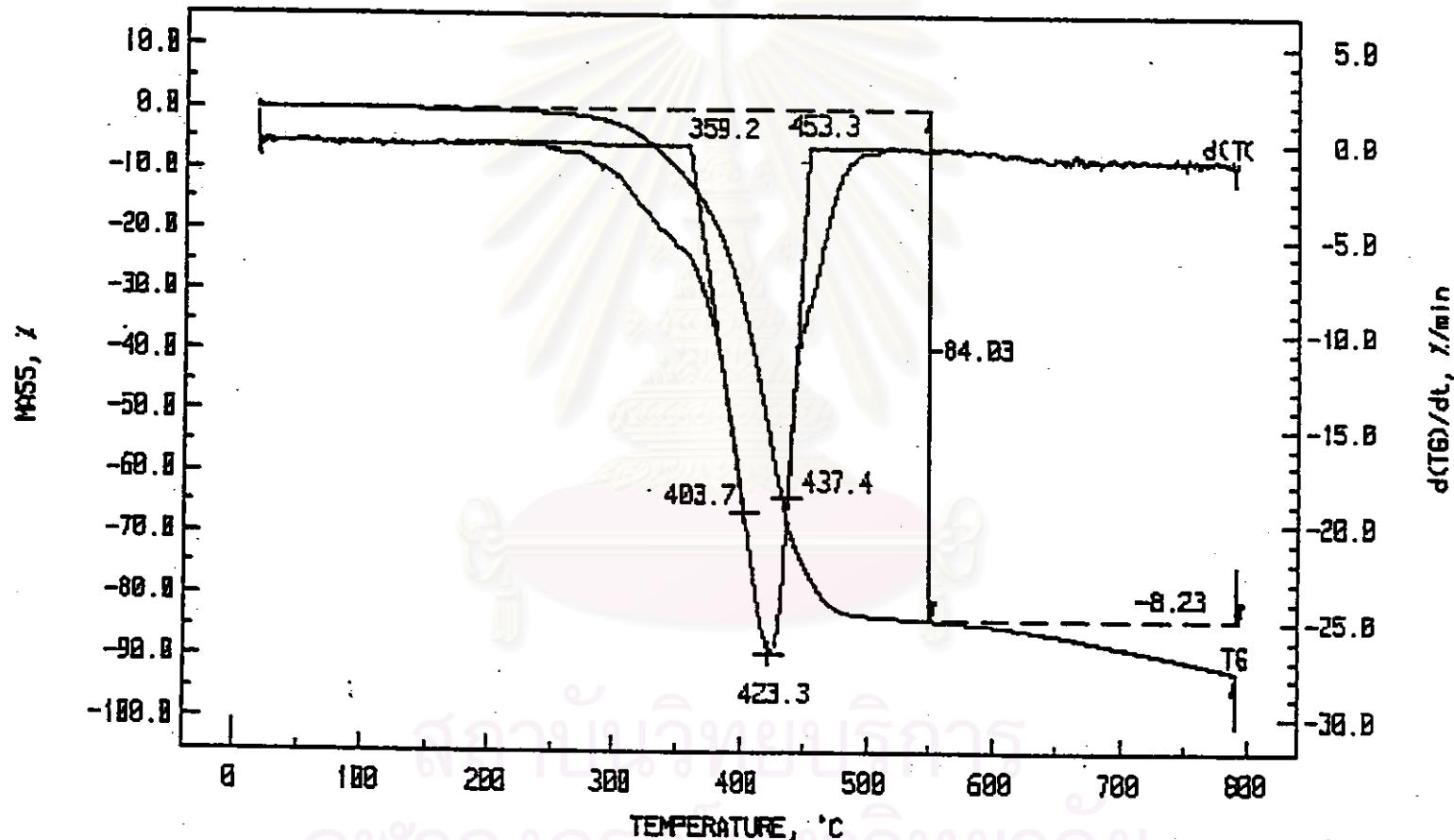


Figure A40 TGA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POL YOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 1 wt% of MEKP/Co.

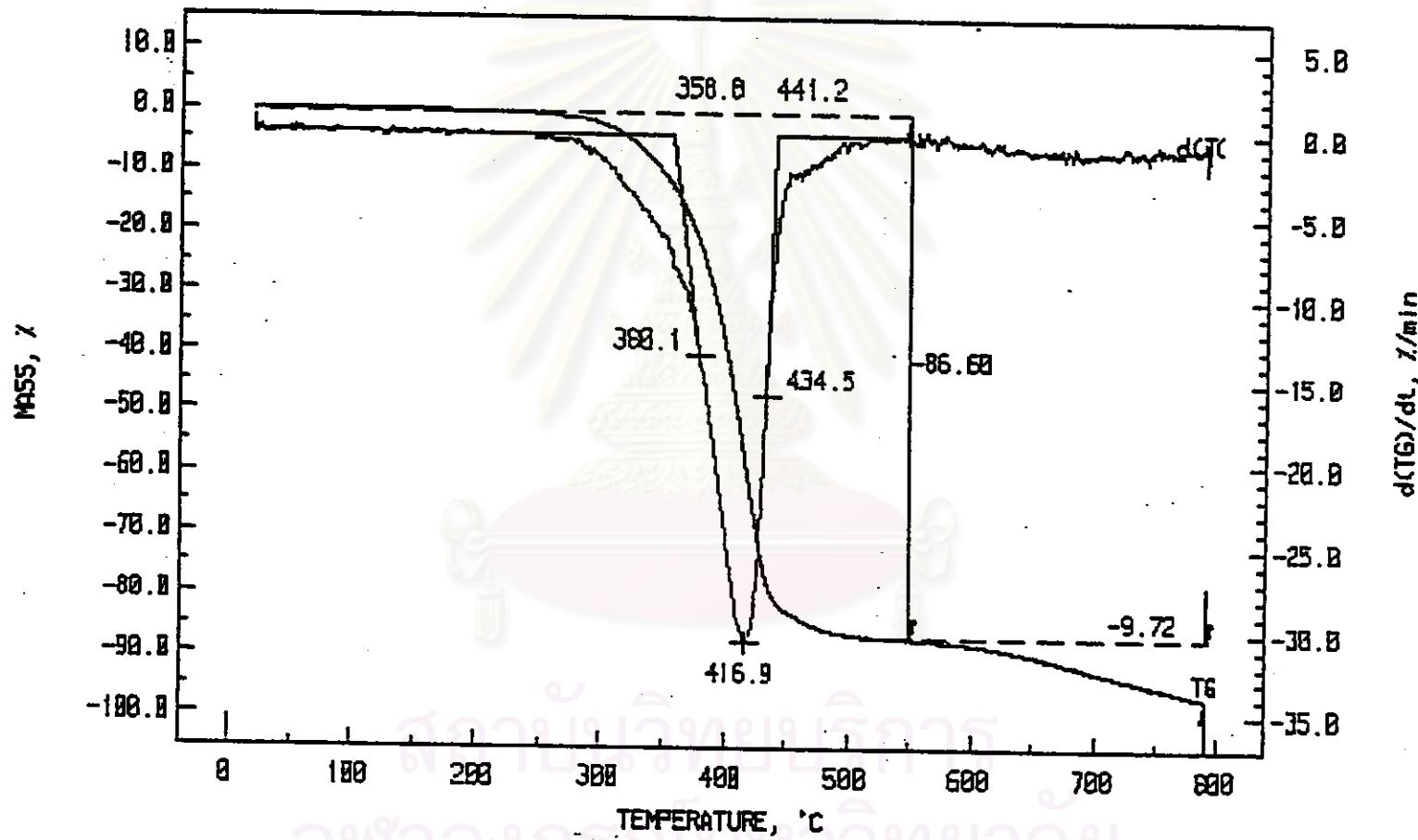


Figure A41 TGA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:BDPD = 2:1.8:0.2, 20 wt% of styrene, and 2 wt% of MEKP/Co.

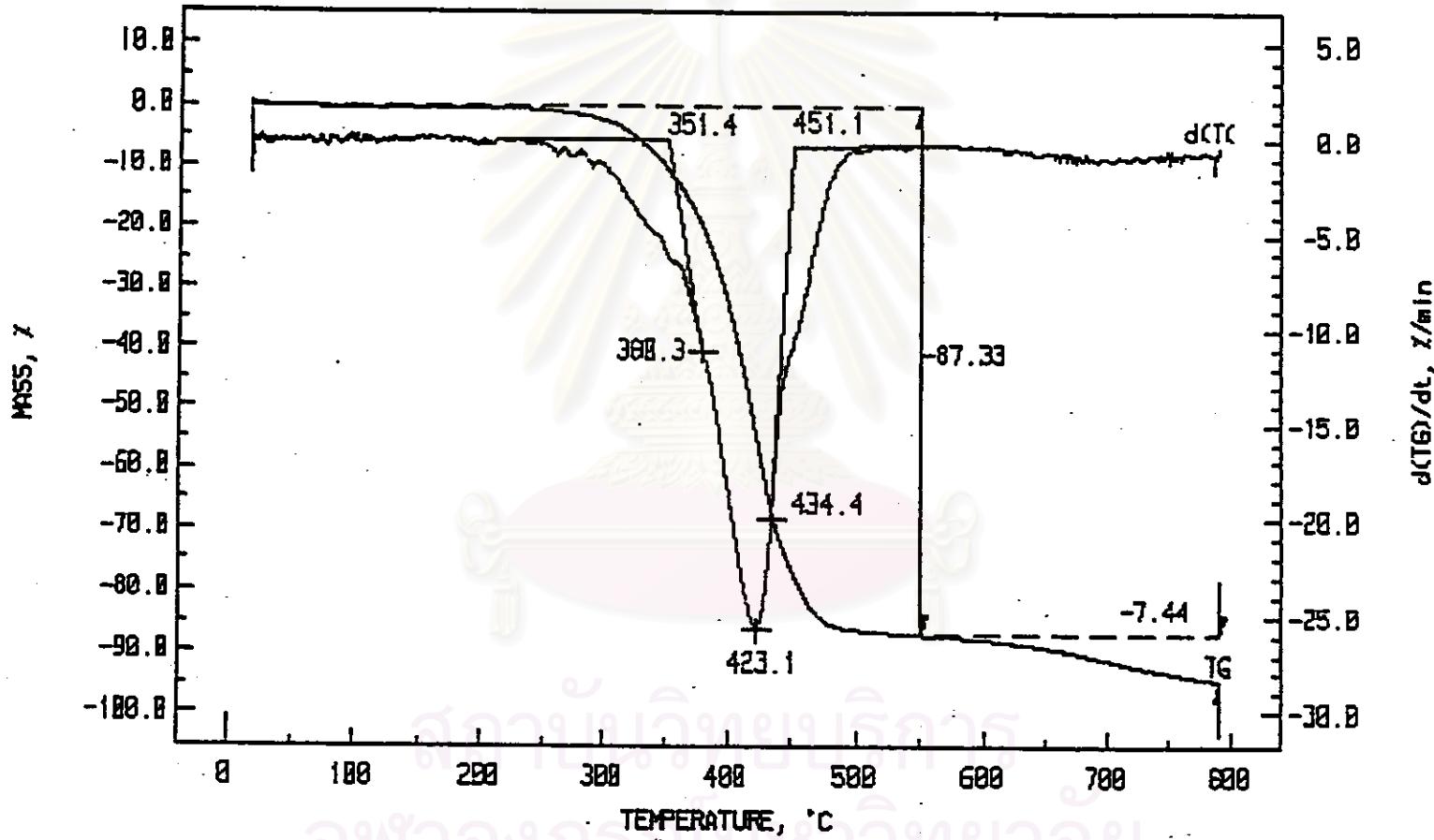


Figure A42 TGA thermogram of PU/PS elastomer at the equivalent weight ratio of MDI:POLYOL:TAPE = 2:1.4:0.6, 20 wt% of styrene, and 2 wt% of MEKP/Co.

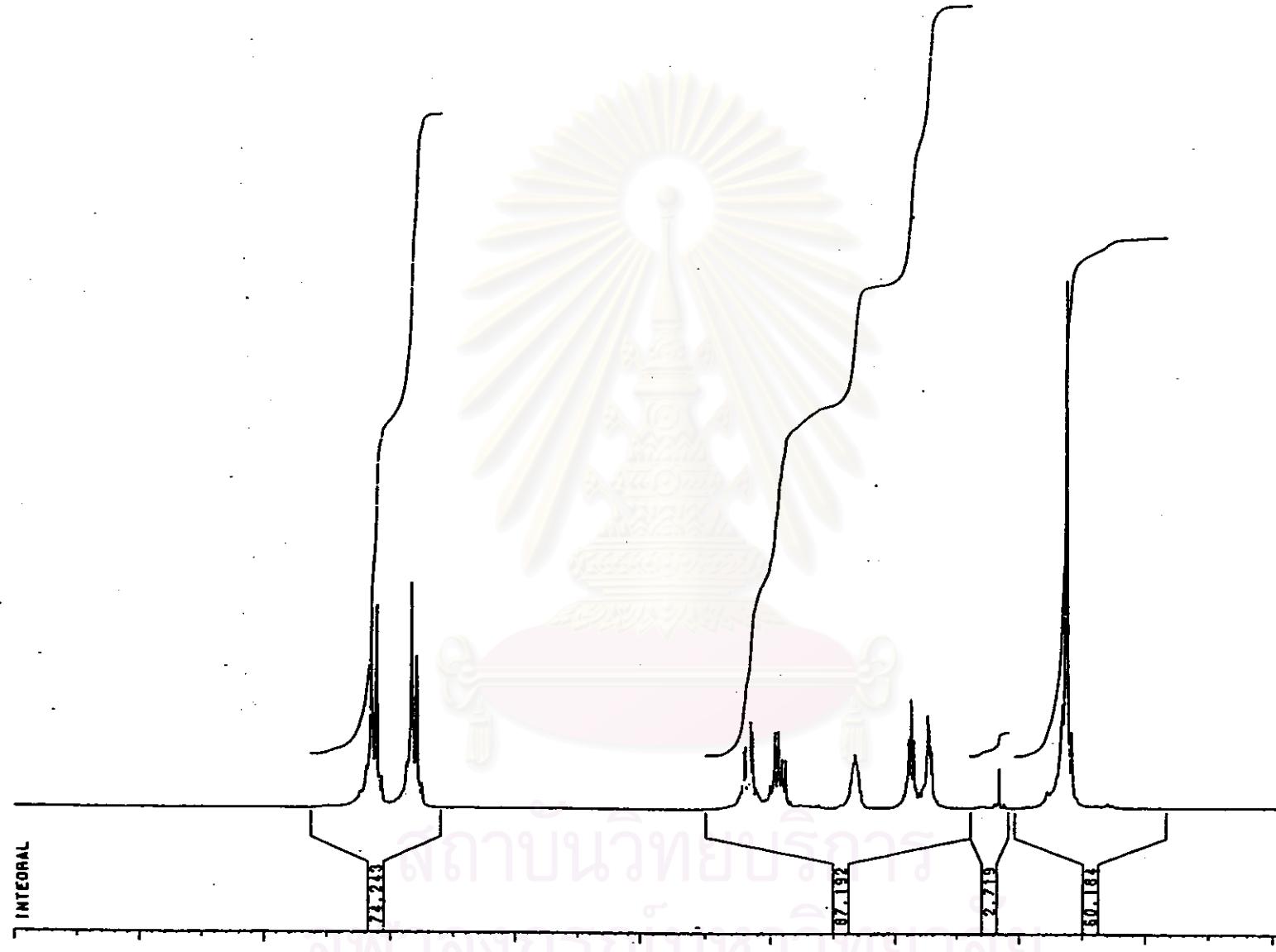


Figure A43 ^1H -NMR spectrum (CDCl_3) of Diglycidyl ether of bisphenol A (1)

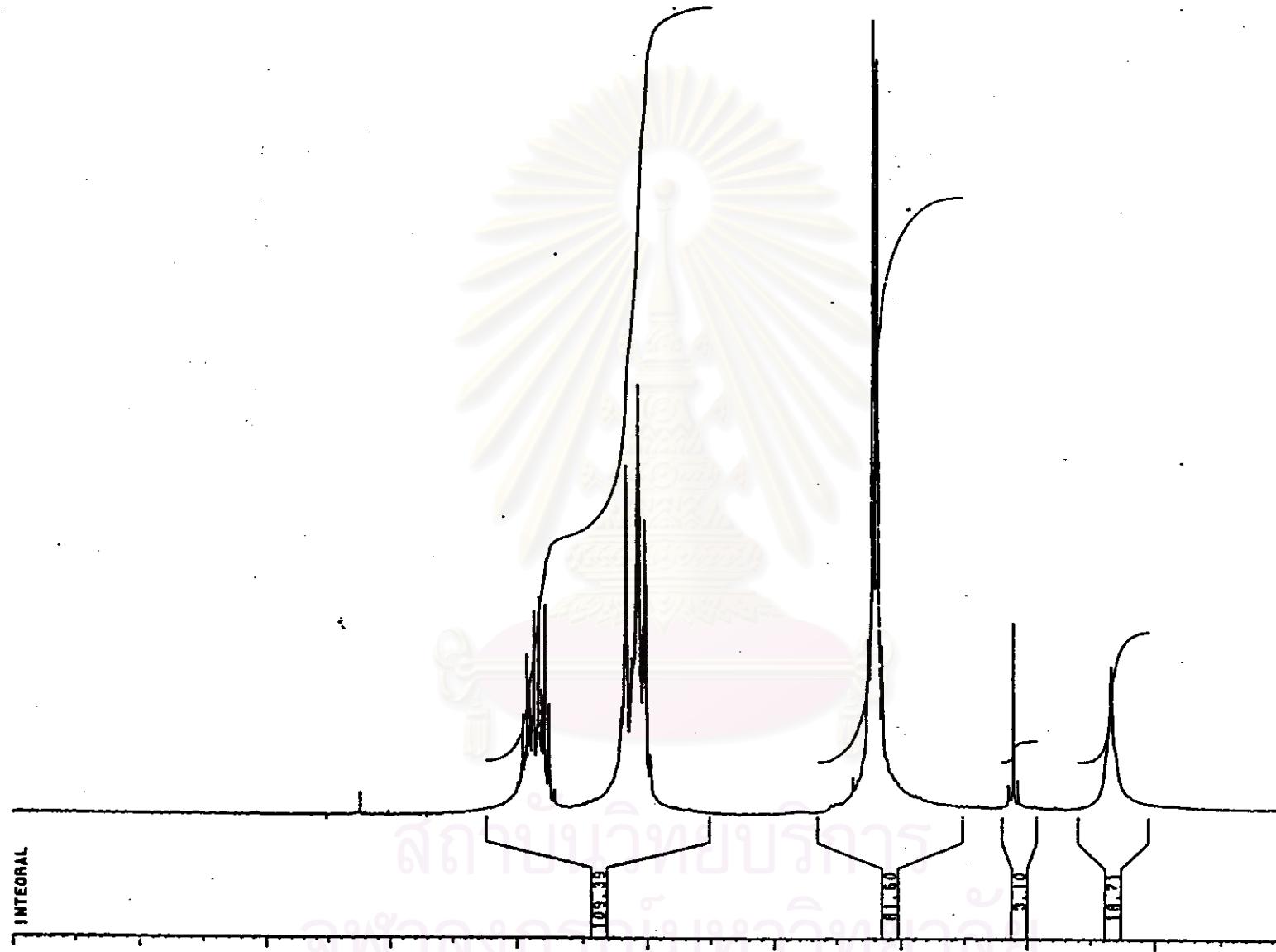


Figure A44 ^1H -NMR spectrum (CDCl_3) of Diallylamine (2)

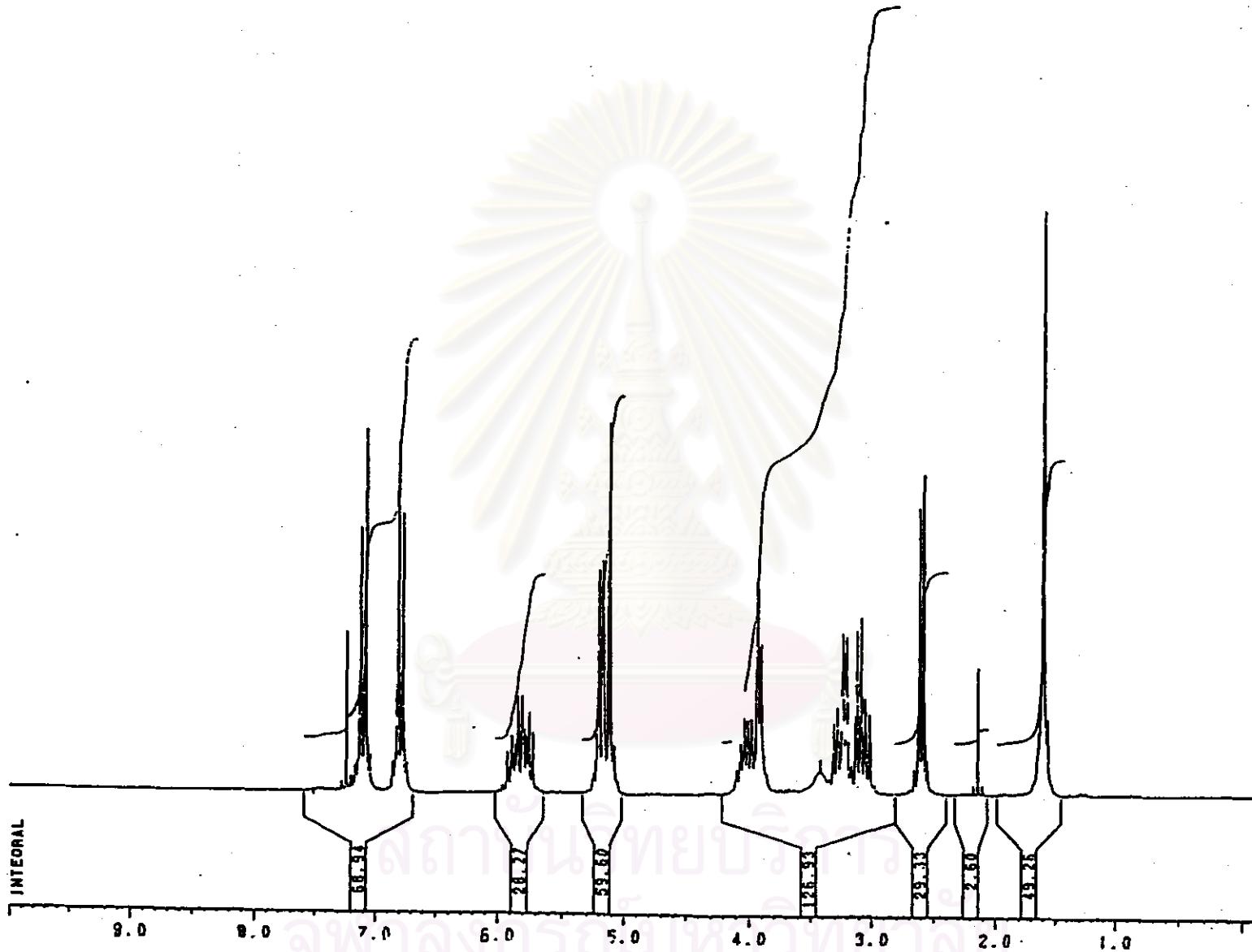


Figure A45 ^1H -NMR spectrum (CDCl_3) of Bis-(3-N,N-diallylamino-2-propanol)diphenylolpropane (3)

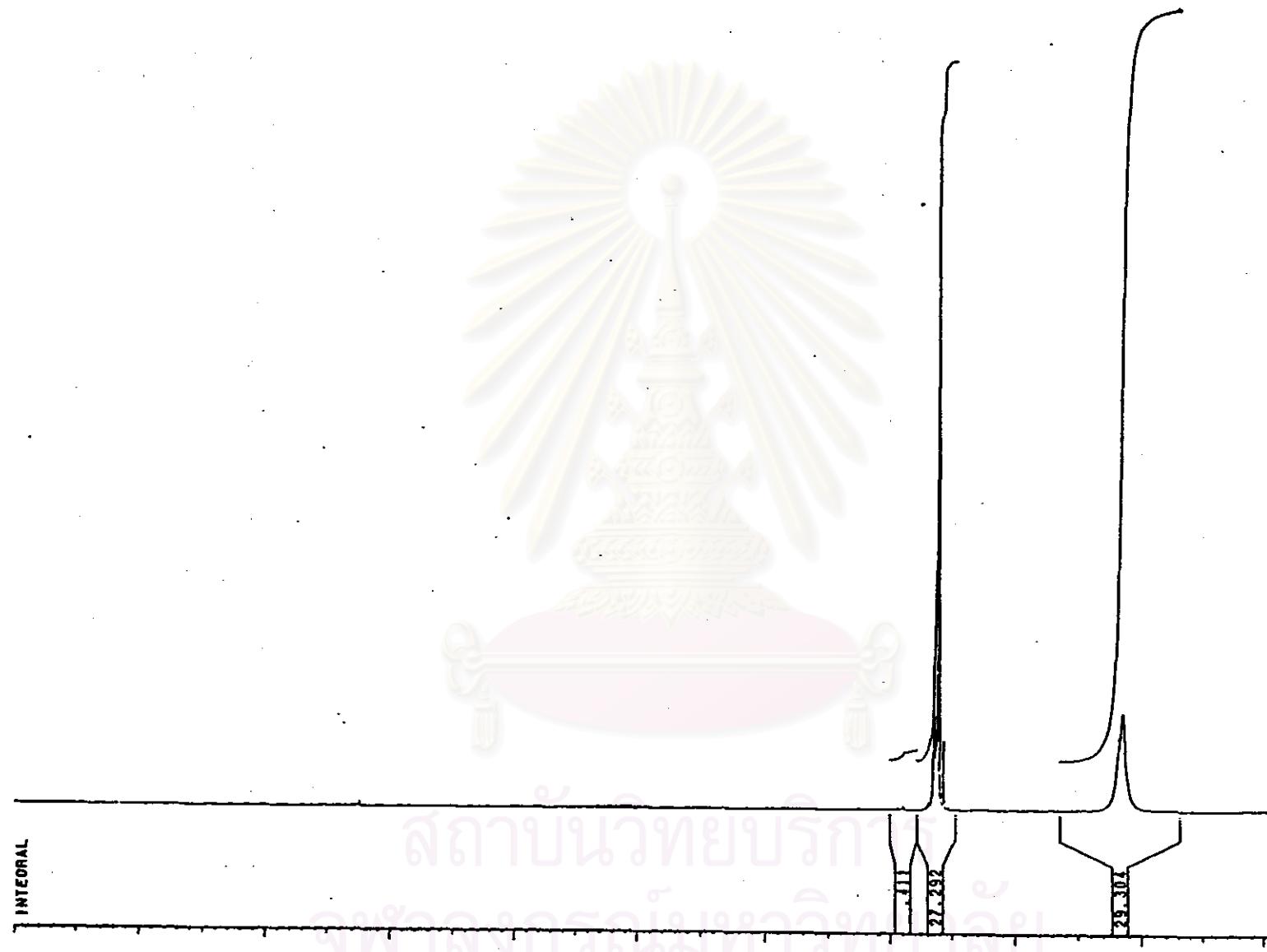


Figure A46 $^1\text{H-NMR}$ spectrum (CDCl_3) of Ethylene diamine (4)

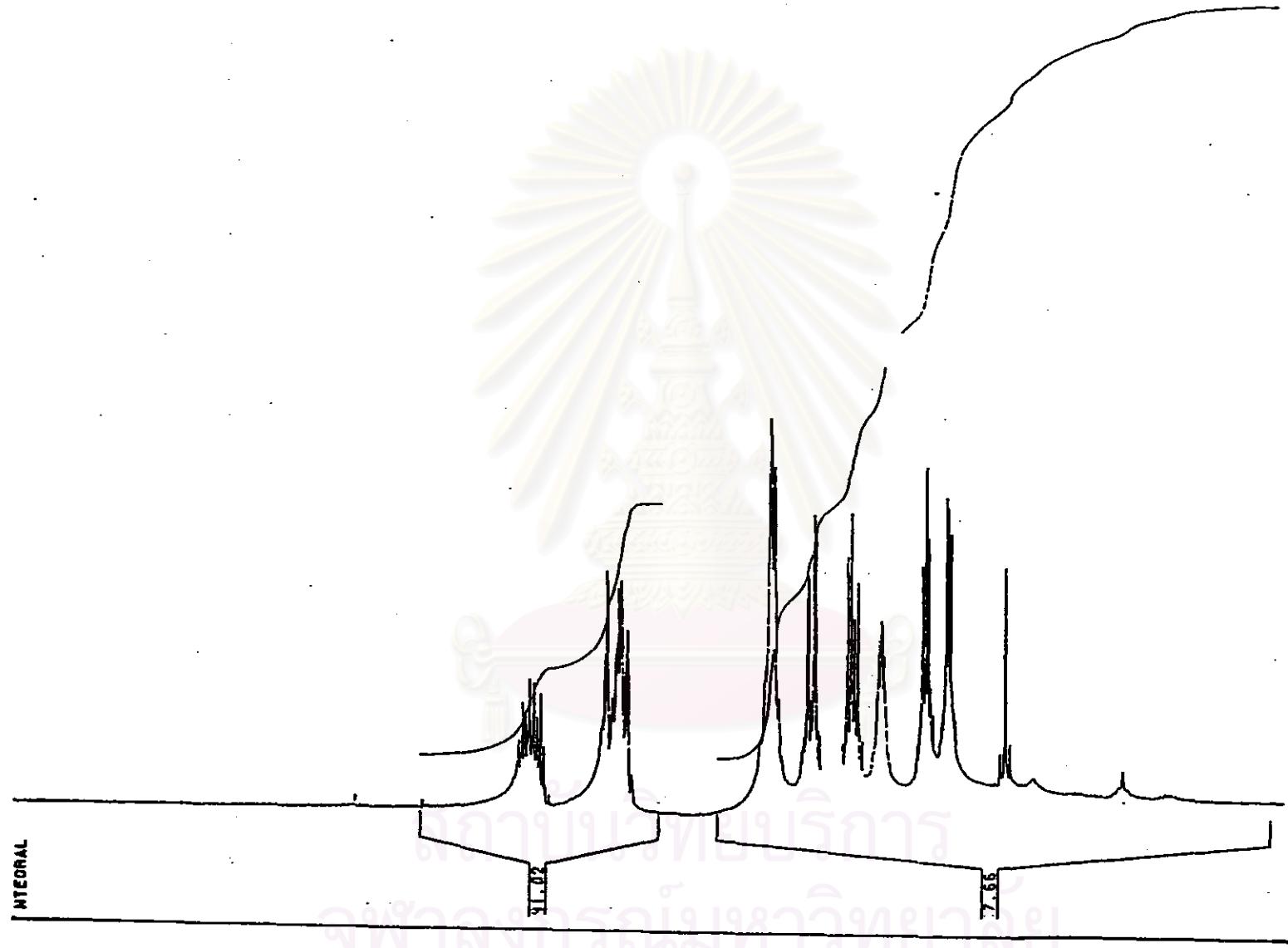


Figure A47 ^1H -NMR spectrum (CDCl_3) of Allylglycidyl ether (5)

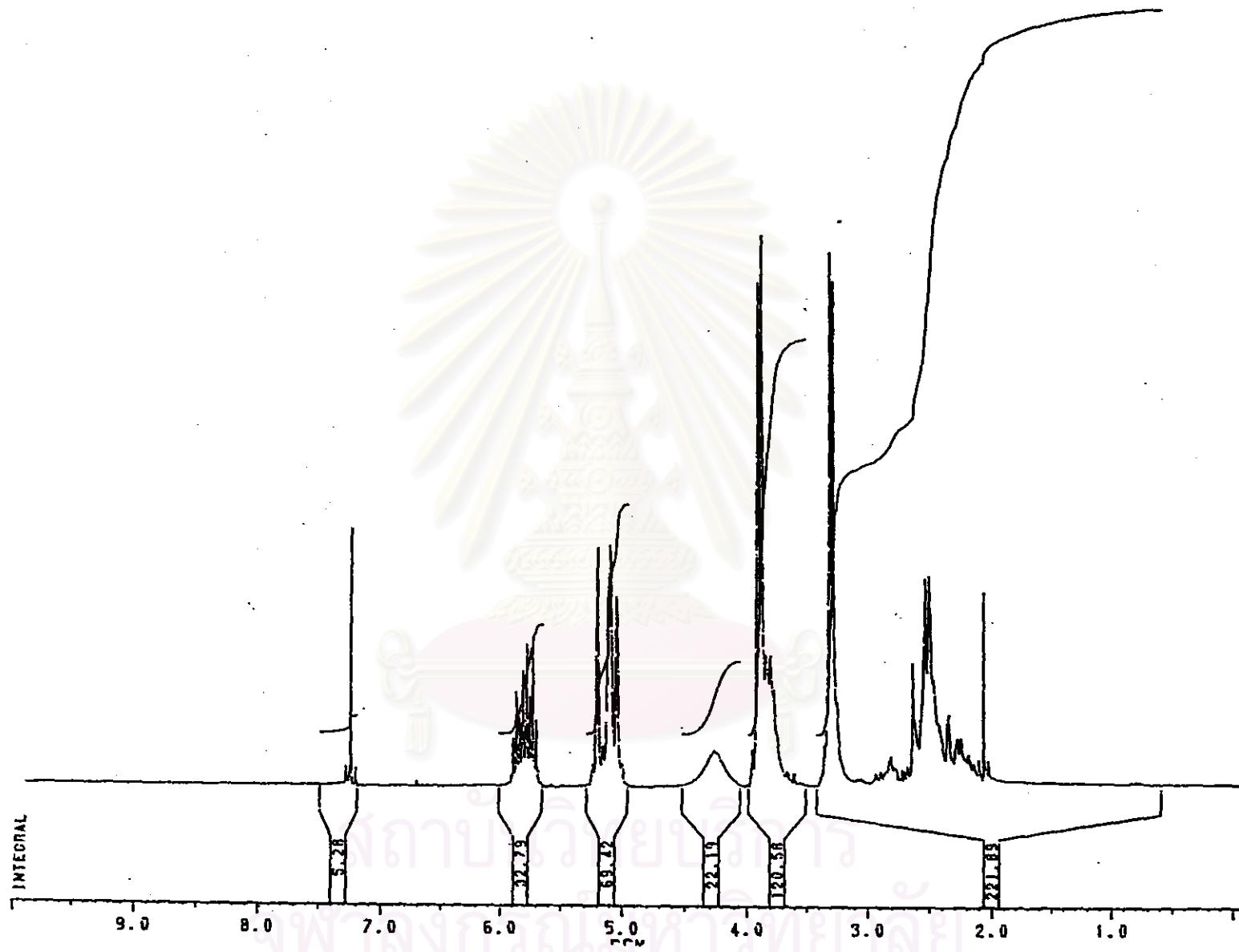


Figure A48 ^1H -NMR spectrum (CDCl_3) of $\text{N},\text{N},\text{N}',\text{N}'\text{-tetrakis-(3-allyloxy-2-propanol)ethylenediamine}$ (6)



VITA

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