

REFERENCES

- Adediji, A., Hudson, S.D., and Jamieson, A.M. Effect of exothermic interfacial mixing on interfacial activity of a block copolymer. Macromolecules 29 (January 1996) : 2449-2456.
- Adediji, A., Jamieson, A.M. and Hudson, S.D. Microstructures of emulsified polymer blends. Macromol. Chem. Phys 197 (1996) : 2521-2538.
- Akiyama, M., and Jamieson, A.M. Enthalpic interaction in block copolymer/homopolymer blends systems: morphological studies of solvent-cast films. Polymer 33 (1992) : 3582-3592.
- Allen, G., Bevington, J.C. Comprehensive Polymer Science. Vol. 2: Polymer properties. New York: Pergamon Press, 1989.
- Anastasiadis, S.H., Gancarz, I., and Koberstein, J.T. Compatibilizing effect of block copolymers added to the polymer/polymer interface. Macromolecules 22 (1989) : 1449-1453.
- Brandruys, J. and Immergul, E.H., eds. Polymer Hand Book. 2nd ed. New York: Wiley, 1975.
- Brostow, W., and Corneliussen, R.D. Failure of Plastics. New York: Carl Hanser, 1986.
- Cheremisinoff, N.P. Elastomer Technology Handbook. New York: CRC Press, Inc., 1993.
- Dadmun, M. Effect of copolymer architecture on the interfacial structure and miscibility of a ternary polymer blend containing a copolymer and two homopolymers. Macromolecules 29 (February 1996) : 3868-3874.

- Dai, C.-A., Jandt, K.D., Iyengar, D.R., Slack, N.L., Dai, K.H., Davidson, W.B., and Kramer, E.J. Strengthening polymer interfaces with triblock copolymers. Macromolecules 30 (1997) : 549-560.
- Fischer, M. Interface stabilization in polymer blends by means of block and graft copolymer. The Interfacial Interactions in Polymeric Composites (1993) : 415-416.
- Folkes, M.J., and Hope, P.S. Polymer Blends and Alloy. New York: Chapman & Hall, 1993.
- Grubb, D.T., and Sawyer, L.C. Polymer Microscopy. 2nd ed. London: Chapman & Hall, 1996.
- Han, C.D. Rheology in Polymer Processing. London: Academic Press, 1976.
- Hashimoto, T., Kimishima, K., and Hasegawa, H. Self-assembly and patterns in binary mixtures of SI block copolymer and PPO. Macromolecules 24 (May 1991) : 5704-5712.
- Hsieh, D.-T., and Peiffer, D.G. Miscibility and immiscibility in functionalized associating polymer systems: polystyrene-poly(phenylene oxide) blends. Polymer 33 (1992) : 1210-1217.
- Jo, W.H., Nam, K.H., and Cho, J.C. Effects of the molecular structure of styrene-isoprene block copolymers on the interfacial characteristics of polystyrene/polyisoprene blends. Journal of Polymer Science: Part B: Polymer Physics 34 (1996) : 2169-2175.
- Mark, H.F., Bikales, N.M., Overberger, C.G., and Menges, G. Encyclopedia of Polymer Science and Engineering. Vol. 12, 2nd ed. New York: John Wiley & Sons, 1988.
- Mark, H.F., Bikales, N.M., Overberger, C.G., and Menges, G. Encyclopedia of Polymer Science and Engineering. Vol. 9, 2nd ed. New York: John Wiley & Sons, 1987.

- Mark, H.F., Bikales, N.M., Overberger, C.G., and Menges, G. Encyclopedia of Polymer Science and Engineering. Vol. 3. 2nd ed. New York: John Wiley & Sons, 1985.
- Mark, J.E. Physical properties of Polymers. 2nd ed. Washington DC: American Chemical Society, 1993.
- Matsuoka, S. Relaxation Phenomena in Polymers. New York: Carl Hanser Verlag, 1992.
- Mccrum, N.G., Buckley, C.P., and Bucknall, C.B. Principles of Polymer Engineering. Great Britain: Oxford University Press, 1990.
- Miles, I.S., and Rostami, S. Multicomponent Polymer Systems. New York: John Wiley & Sons. 1992.
- Neilsen, L.E., and Landel, R.F. Mechanical Properties of Polymers and Composites. New York: Marcel Dekker, 1994.
- Noolandi, J., and Hong, K.M. Effect of block copolymers at demixed homopolymer interface. Macromolecules 17 (1984): 1531-1537.
- Noolandi, J., and Hong, K.M. Interfacial properties of immiscible homopolymer blends in the presence of block copolymers. Macromolecules 15 (1982): 482-492.
- Olabisi, O., Robeson, L.M., and Shaw, M.T. Polymer-Polymer miscibility. New York, 1979.
- Paul, D.R., and Newman, S., eds. Polymer Blends. Vol. 1 and 2. New York: Academic Press, 1975.
- Rabek, J.F. Experimental Methods in Polymer Chemistry: Physical Principles and Applications. New York : John Wiley & Son, 1980.
- Reichert, W.F., and Brown, H.R. Effect of a polystyrene-polyisoprene diblock layer on the adhesion between polystyrene and polyisoprene. Polymer 34 (1993): 2289-2296.

- Rosen, S.L. Fundamental Principles of Polymeric Materials. 2nd ed. New York: John Wiley & Sons, 1993.
- Sperling, L.H. Introduction to Physical Polymer Science. 2nd ed. Singapore: John Wiley & Sons, 1993.
- Strong, A.B. Plastics-Materials and Processing. New Jersey: Prentice-Hall, Inc., 1996.
- Sundaraaraj, U., and Macosko, C.W. Drop breakup and coalescence in polymer blends: The effects of concentration and compatibilization. Macromolecules 28 (1995) : 2647-2657.
- Tucker, P.S., and Paul, D.R. Simple model for enthalpic effects in homopolymer/block copolymer blends. Macromolecules 21 (March 1988) : 2801-2807.
- Tucker, P.S., Barlow, J.W., and Paul, D.R. Molecular weight effects on phase behavior of blends of poly(phenylene oxide) with styrenic triblock copolymers. Macromolecules 21 (March 1988) : 2794-2800.
- Tucker, P.S., Barlow, J.W., and Paul, D.R. Phase behavior for blends of styrene containing triblock copolymer with poly(2,6-dimethyl-1,4-phenylene oxide). Journal of Applied Polymer Science 34 (1987) : 1817-1833.
- Tucker, P.S., Barlow, J.W., and Paul, D.R. Thermal, mechanical, and morphological analyses of poly(2,6-dimethyl-1,4-phenylene oxide)/styrene-butadiene-styrene blends. Macromolecules 21 (1988) : 1678-1685.
- Utracki, L.A. Polymer Alloys and Blends. New York: Hanser, 1990.
- Vaidya, U.R., Bhattacharya, M., and Zhang, D. Effect of processing conditions on the dynamic mechanical properties of starch and anhydride functional polymer blends. Polymer 36 (November 1995) : 1179-1188.

Walker, B.M., and Rader, C.P. Handbook of Thermoplastic Elastomers. 2nd ed. Van Nostrand Reinhold, 1988.

Ziaee, S., and Paul, D.R. Polymer-polymer interactions via analog calorimetry: 1-blends of polystyrene with poly(2,6-dimethyl-1,4-phenylene oxide). Journal of Polymer Science: Part B: Polymer Physics 34 (1996) : 2641-2656.

APPENDICES
APPENDIX I
VISCOMETRIC DATA

Method for the experimental determination of viscosity

The viscosity of polymer solution is generally measured by capillary or rotational viscometers. For high accuracy determination of the viscosity of polymer solutions, a capillary type viscometer is frequently used.



Figure 1.1 Ubbelohde type.

Using a capillary viscometer like the one shown above, it is possible to measure the time for the fluid to fall from the upper mark at A to the lower one at B. The ratio of the viscosity of solution 1 (dilute polymer solution or η_1) to that of solution 2 (solvent or η_2) is expressed as (1).

$$\eta_1/\eta_2 = \rho_1 t_1/\rho_2 t_2 \quad (1)$$

The density (ρ) of solution 1 is assumed to be equal to that of solution 2. Then equation (1) has the simpler form of

$$\eta_1/\eta_2 = t_1/t_2 \quad (2)$$

η_1/η_2 gives relative viscosity η_r .

Analysis of viscosity data

Specific viscosity (η_{sp}) represents the increase of the viscosity due to presence of solute and is represented by a polynomial approximation in dilute solution as follows:

$$\eta_{sp}/C = [\eta] + k'[\eta]^2 C \quad (3)$$

where

- C = polymer concentration
- $[\eta]$ = intrinsic viscosity
- k' = Huggins constant

A plot of η_{sp}/C versus C is called a Huggins plot.

Another formula which represents the concentration dependence of viscosity was proposed by Kraemer (5) as follows:

$$(\ln \eta_r)/C = [\eta] + k''[\eta]^2 C \quad (4)$$

where k'' is independent of C and is related to the Huggins constant by

$$k'' = k' - \frac{1}{2} \quad (5)$$

The $[\eta]$ is obtained by extrapolation of either η_{sp}/C or $(\ln \eta_r/C)$ to zero concentration that is,

$$[\eta]_H = \lim (\eta_{sp}/C) \quad (6)$$

$$[\eta]_K = \lim (\ln \eta_r/C) \quad (7)$$

By definition, η_r is related to η_{sp}/C as

$$\eta_r = 1 + \eta_{sp} \quad (8)$$

At the limit of $c \rightarrow 0$, η_{sp} approaches zero, and

$$\lim (\ln \eta_r)/C = \lim (\eta_{sp}/C) \quad (9)$$

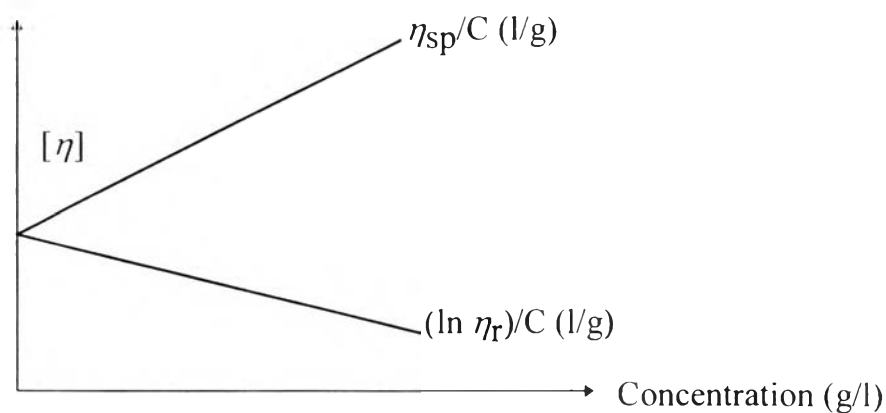


Figure I.2 Plot of η_{sp} or $\ln \eta_r$ versus concentration.

The molecular weight was determined by using Mark-Houwink equation:

$$[\eta] = K(M_v)^a \quad (11)$$

I.1 Data of viscosity average M_v of PS (Figure 2.1)

	No.	Solvent	$C_p=2.0040$ g/l	$C_p=4.0082$ g/l	$C_p=6.0122$ g/l	$C_p=8.0160$ g/l	$C_p=10.0200$ g/l
Time (second)	1	150.45	157.55	164.58	171.87	179.29	187.19
	2	150.77	157.31	164.56	171.73	179.90	187.37
	3	150.59	157.43	164.47	171.83	179.40	187.45
	4	150.44	157.45	164.50	171.93	179.31	187.97
	5	150.67	157.47	164.48	171.78	179.56	187.51
averages		150.584	157.442	164.518	171.828	179.492	187.498
$\eta_r = \text{time of solution} /$ time of solvent			1.0455	1.0925	1.1411	1.1920	1.2451
$\eta_{sp} = \eta_r - 1$			0.0455	0.0925	0.1411	0.1920	0.2451
polymer solution concentrations (C_p) (g/l)			2.0040	4.0082	6.0122	8.0160	10.0200
η_{sp} / C_p (l/g)			0.0227	0.0231	0.0235	0.0240	0.0245

I.2 Data of viscosity average M_v of PPO (Figure 2.2)

	No.	Solvent	$C_p=1.9983$ g/l	$C_p=3.9966$ g/l	$C_p=5.9950$ g/l	$C_p=7.9933$ g/l	$C_p=9.9916$ g/l
Time (second)	1	176.81	194.70	213.59	232.57	252.74	274.15
	2	176.65	194.80	213.07	232.21	252.91	274.18
	3	176.77	194.42	213.32	232.92	252.45	273.98
averages		176.743	194.640	213.326	232.566	252.603	274.035
$\eta_r = \text{time of solution} /$ time of solvent			1.1013	1.2070	1.3158	1.4292	1.5505
$\eta_{sp} = \eta_r - 1$			0.1013	0.2070	0.3158	0.4292	0.5505
polymer solution concentrations (C_p) (g/l)			1.9983	3.9966	5.9950	7.9933	9.9916
η_{sp} / C_p (l/g)			0.0507	0.0518	0.0527	0.0537	0.0550

I.3 Data of viscosity average M_v of PI-4 (Figure 2.3)

	No.	Solvent	$C_p=0.5130$ g/l	$C_p=1.0260$ g/l	$C_p=1.5390$ g/l	$C_p=2.0520$ g/l	$C_p=2.5650$ g/l
Time (second)	1	295.89	300.13	304.36	308.87	312.90	317.58
	2	295.96	300.24	304.63	308.89	313.15	317.14
	3	295.05	299.94	304.09	308.13	312.86	317.39
averages		295.967	300.10	304.36	308.63	312.97	317.37
$\eta_r = \text{time of solution} /$ time of solvent			1.0139	1.0284	1.0428	1.0575	1.0723
$\eta_{sp} = \eta_r - 1$			0.0139	0.0284	0.0428	0.0575	0.0723
polymer solution concentrations (C_p) (g/l)			0.5130	1.0260	1.5390	2.0520	2.5650
η_{sp} / C_p (l/g)			0.0273	0.0276	0.0278	0.0280	0.0282

APPENDIX II
GLASS TRANSITION TEMPERATURE

Glass transition temperatures (T_g) of several polymers (Ulrich, H.,1993)

Polymer	T_g (°C)
Polyethylene	-133
Natural rubber	-72
Polyisobutylene	-70
Polypropylene	5
Polyvinyl acetate	29
Nylon-6	60
Polyvinyl chloride	82
Polystyrene	100
Polymethyl methacrylate	105
Polycarbonate	150
Poly(2,6-dimethyl-1,4-phenylene oxide)	207
Polyvinylcarbazole	211

APPENDIX III

RHEOLOGICAL DATA

III.1 Data of Loss modulus of hard phase of PS/PI-100 (40/60) blends as a function of temperature and the triblock copolymer contents (Figure 3.1)

Instrument : Rheometer model RES

Mode : Dynamic Temperature Step Default Test

Samples film : PS/PI-100 (40/60) blends: 25 mm in diameter and 0.6-1.0 mm
in depth

Frequency : 1 rad/second

Strain : 0.1-5.0 %

Soak time : 180 second

Heating rate : 2-3 °C

Temperature scan : -80 °C to 150 °C

Temp (°C)	Loss modulus (G'') (dyn/cm ²)									
	C _{tb} = 0 wt %	C _{tb} = 1 wt %	C _{tb} = 3 wt %	C _{tb} = 5 wt %	C _{tb} = 7 wt %	C _{tb} = 9 wt %	C _{tb} = 11 wt %	C _{tb} = 13 wt %	C _{tb} = 15 wt %	C _{tb} = 20 wt %
50	144000	200000	410000	762550	625462	1386500	1682460	2021936	3670000	5169120
53	149000	211000	436000	765240	633961	1402500	1690000	2110850	3770000	5283828
56	157000	221000	458000	768000	646510	1432150	1750000	2194822	3840000	5352908
59	164000	231000	472000	781000	662401	1444569	1760000	2274370	3910000	5470432
62	170000	245000	483000	805000	676882	1509529	1820000	2341864	4000000	5571676
65	176000	264000	496000	825000	694336	1561665	1890000	2432892	4060000	5664208
68	181000	278000	509000	850000	713043	1607102	1940000	2520308	4170000	5782106
70	186000	294000	520000	877000	724689	1652252	2010000	2623516	4250000	5868214
72	196000	315000	541000	906000	750537	1705291	2120000	2721432	4370000	5957116
74	206000	336000	553000	929000	768798	1752212	2210000	2796696	4490000	6014272
76	212000	357000	566000	992000	784509	1813770	2280000	2858884	4530000	6039374
78	221000	377000	577000	1010000	798039	1849274	2330000	2888676	4530000	5952408
80	231000	394000	588000	1030000	806542	1859438	2340000	2857344	4480000	5726402
82	239000	409000	603000	1060000	817156.	1846593	2310000	2830926	4330000	5414684
84	247000	421000	614000	1080000	823668	1816451	2260000	2803920	4160000	5019124
86	254000	428000	624000	1090000	823092	1786743	2220000	2815666	3970000	4682942
88	253000	426000	623000	1120000	812623	1760703	2210000	2875810	3910000	4439182
90	246000	418000	611000	1140000	803493	1736567	2220000	2946720	3850000	4305268

Temp (°C)	Loss modulus (G'') (dyn/cm ²)									
	C _{tb} = 0 wt %	C _{tb} = 1 wt %	C _{tb} = 3 wt %	C _{tb} = 5 wt %	C _{tb} = 7 wt %	C _{tb} = 9 wt %	C _{tb} = 11 wt %	C _{tb} = 13 wt %	C _{tb} = 15 wt %	C _{tb} = 20 wt %
92	235000	402000	584000	1110000	768205	1708945	2190000	2812684	3800000	4091494
94	218000	381000	550000	1060000	723664	1652518	2120000	2626792	3580000	3918332
96	201000	367000	509000	995000	674082	1571941	2050000	2392446	3280000	3652132
98	184000	346000	468000	920000	628509	1476552	1930000	2217698	2970000	3369872
100	171000	321000	433000	855000	586684	1368822	1800000	2059932	2690000	3109876
102	159000	299000	399000	791000	553806	1263787	1680000	1919022	2450000	2876830
104	149000	278000	370000	734000	526984	1173144	1580000	1835106	2350000	2726130
106	140000	260000	348000	692000	502456	1097600	1480000	1709778	2270000	2632400
108	132000	246000	329000	653000	480253	1028132	1400000	1607788	2100000	2501230
110	127000	234000	313000	618000	460359	970158	1340000	1508528	1950000	2352340
113	118000	218000	289000	588000	421351	920304	1230000	1421448	1820000	2206540
116	112000	205000	273000	541000	396612	875455	1150000	1352909	1700000	2105240
119	106000	194000	261000	508000	372465	809662	1070000	1284369	1600000	2012340
122	101000	185000	248000	478000	351670	755531	1000000	1240880	1520000	1952136
125	96300	176000	238000	453000	331647	711669	952000	1205500	1480000	1902500
128	91900	168000	233000	434000	315358	671769	909000	1156000	1406500	1820130
131	87400	161000	228000	425148	304806	635840	888000	1102500	1300000	1720000

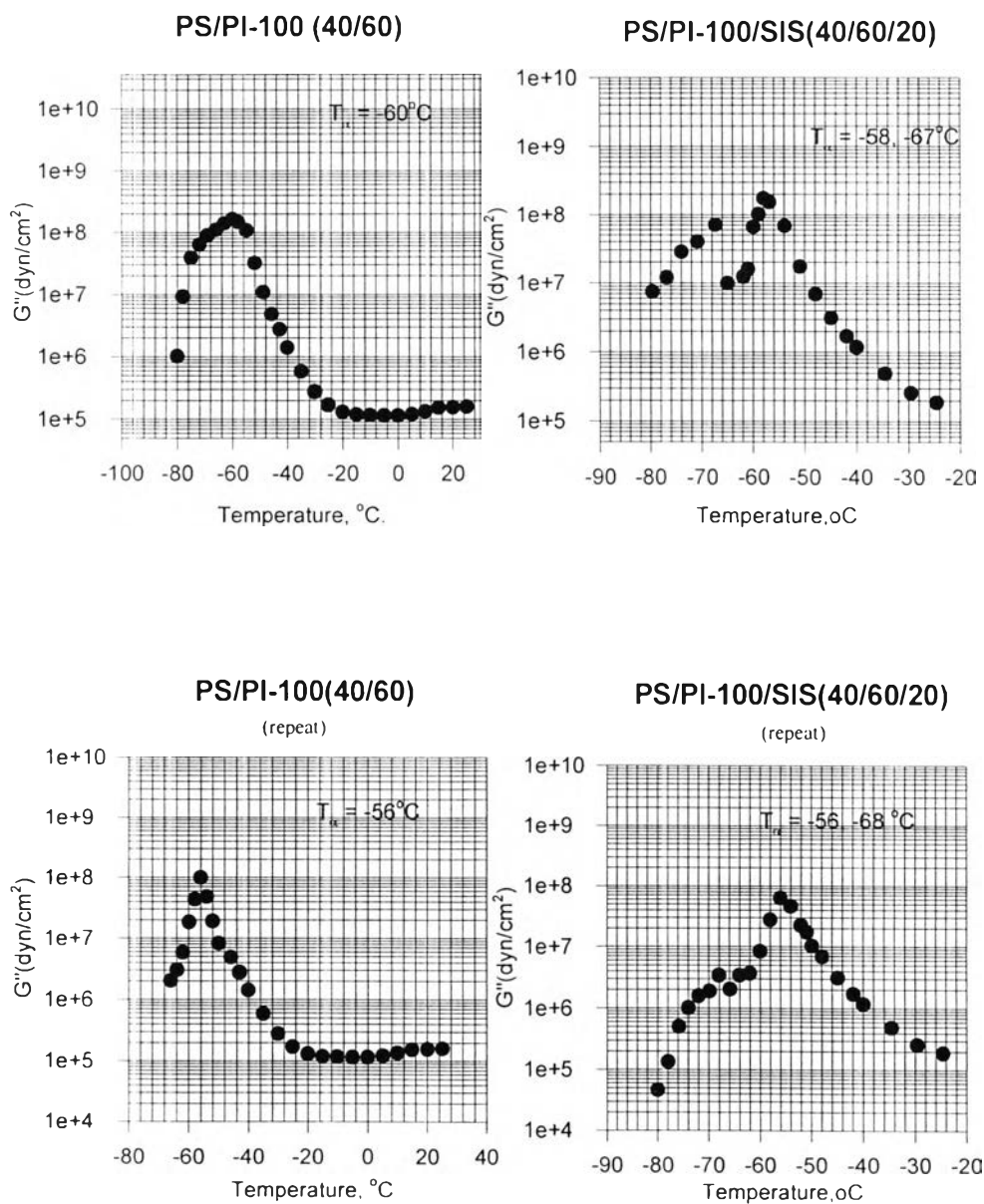
REPEAT

Temp (°C)	Loss modulus (G'') (dyn/cm ²)					
	C _{tb} =0 wt %	C _{tb} =3 wt %	C _{tb} =5 wt %	C _{tb} =9 wt %	C _{tb} =11 wt %	C _{tb} =13 wt %
50.0	1.44E+05	1.71E+05	6.72E+04	1.71E+05	1.96E+05	1.61E+05
53.0	1.49E+05	1.74E+05	7.54E+04	1.81E+05	2.06E+05	1.69E+05
56.0	1.57E+05	1.81E+05	7.88E+04	1.87E+05	2.16E+05	1.75E+05
59.0	1.64E+05	1.83E+05	8.41E+04	1.93E+05	2.23E+05	1.82E+05
62.0	1.70E+05	1.88E+05	8.80E+04	1.97E+05	2.30E+05	1.89E+05
65.0	1.76E+05	1.92E+05	9.15E+04	2.02E+05	2.36E+05	1.94E+05
68.0	1.81E+05	1.97E+05	9.54E+04	2.09E+05	2.44E+05	2.01E+05
70.0	1.86E+05	1.99E+05	9.78E+04	2.12E+05	2.50E+05	2.08E+05
72.0	2.01E+05	2.07E+05	1.04E+05	2.20E+05	2.59E+05	2.19E+05
74.0	2.06E+05	2.12E+05	1.09E+05	2.26E+05	2.64E+05	2.29E+05
76.0	2.12E+05	2.18E+05	1.14E+05	2.31E+05	2.66E+05	2.35E+05
78.0	2.21E+05	2.25E+05	1.18E+05	2.34E+05	2.64E+05	2.37E+05
80.0	2.31E+05	2.32E+05	1.24E+05	2.33E+05	2.59E+05	2.37E+05
82.0	2.39E+05	2.39E+05	1.30E+05	2.29E+05	2.55E+05	2.33E+05
84.0	2.47E+05	2.46E+05	1.37E+05	2.23E+05	2.52E+05	2.29E+05
86.0	2.54E+05	2.50E+05	1.45E+05	2.19E+05	2.48E+05	2.29E+05
88.0	2.53E+05	2.50E+05	1.52E+05	2.18E+05	2.44E+05	2.30E+05
90.0	2.46E+05	2.44E+05	1.57E+05	2.17E+05	2.36E+05	2.31E+05
92.0	2.35E+05	2.30E+05	1.59E+05	2.15E+05	2.25E+05	2.30E+05
94.0	2.18E+05	2.15E+05	1.56E+05	2.09E+05	2.11E+05	2.25E+05
96.0	2.01E+05	1.98E+05	1.51E+05	1.99E+05	1.96E+05	2.14E+05
98.0	1.84E+05	1.81E+05	1.44E+05	1.88E+05	1.81E+05	2.02E+05
100.0	1.71E+05	1.68E+05	1.36E+05	1.76E+05	1.68E+05	1.89E+05
102.0	1.59E+05	1.56E+05	1.29E+05	1.66E+05	1.57E+05	1.78E+05
104.0	1.49E+05	1.47E+05	1.23E+05	1.56E+05	1.47E+05	1.67E+05
106.0	1.40E+05	1.39E+05	1.18E+05	1.48E+05	1.39E+05	1.57E+05
108.0	1.32E+05	1.32E+05	1.14E+05	1.40E+05	1.31E+05	1.49E+05
110.1	1.27E+05	1.27E+05	1.12E+05	1.34E+05	1.25E+05	1.41E+05
113.0	1.18E+05	1.19E+05	1.04E+05	1.22E+05	1.16E+05	1.27E+05
115.9	1.12E+05	1.12E+05	9.92E+04	1.15E+05	1.08E+05	1.18E+05
119.0	1.06E+05	1.06E+05	9.47E+04	1.08E+05	1.02E+05	1.11E+05
121.9	1.01E+05		9.06E+04	1.06E+05	9.60E+04	1.09E+05
125.0	9.63E+04		8.81E+04		9.08E+04	
128.0	9.19E+04		8.47E+04		8.67E+04	
131.0	8.74E+04		8.25E+04		8.43E+04	
134.0	8.29E+04		7.97E+04			
137.0	7.86E+04		7.69E+04			
140.0	7.49E+04		7.44E+04			

III.2 Data of triblock copolymer content on the alpha transition temperature of PS/PI-100 (40/60) blends (Figure 3.2)

Triblock copolymer (wt %)	T_{α} of hard phase							
	Peak 1				Peak 2			
	1st	2nd	Mean	S.D.	1st	2nd	Mean	S.D.
0	86	88	87	1.414	-	-	-	-
1	86	-	-	-	-	-	-	-
3	86	86	86	0.000	-	-	-	-
5	86	85	85.5	0.707	-	-	-	-
7	80	-			88	-	-	-
9	80	78	79	1.414	90	90	90	0.000
11	78	76	77	1.414	90	92	91	1.414
13	78	78	78	0.000	90	92	91	1.414
15	76	-	-	-	90	-	-	-
20	76	-	-	-	90	-	-	-

III.3 Data of Loss modulus of rubber phase of PS/PI-100 (40/60) blends as a function of temperature and the triblock copolymer content



$C_{tb} = 0 \text{ wt } \%$				$C_{tb} = 20 \text{ wt } \%$			
Temp(°C)	G''	repeat		Temp(°C)	G''	repeat	
		Temp(°C)	G''			Temp(°C)	G''
25.00	159000	-66.00	2030000	-79.70	7470000	-80.00	46100
20.00	156000	-63.90	3030000	-76.90	12000000	-78.00	134000
14.80	153000	-62.00	5820000	-74.00	28200000	-75.90	501000
9.86	135000	-59.90	18500000	-70.90	40300000	-74.00	1010000
4.99	121000	-58.00	43700000	-67.40	70600000	-72.00	1570000
-0.04	115000	-56.00	99000000	-65.00	9930000	-69.90	1880000
-5.06	116000	-54.00	47900000	-61.90	12400000	-68.00	3410000
-10.20	117000	-52.00	19000000	-61.00	15900000	-65.90	2020000
-15.10	119000	-50.00	8260000	-60.00	66000000	-64.00	3390000
-20.00	131000	-46.00	4830000	-59.00	102000000	-62.00	3640000
-25.20	170000	-43.00	2760000	-58.00	174000000	-60.00	8390000
-30.10	279000	-40.20	1410000	-56.90	153000000	-58.00	27700000
-35.10	587000	-35.10	587000	-53.90	68500000	-56.00	63200000
-40.20	1410000	-30.10	279000	-50.90	17300000	-54.00	46400000
-43.00	2760000	-25.20	170000	-47.90	6890000	-52.00	22300000
-46.00	4830000	-20.00	131000	-44.90	3110000	-49.90	10300000
-49.00	11000000	-15.10	119000	-41.90	1700000	-50.90	17300000
-52.00	31800000	-10.20	117000	-40.00	1180000	-47.90	6890000
-55.00	108000000	-5.06	116000	-34.60	489000	-44.90	3110000
-58.00	147000000	-0.04	115000	-29.60	257000	-41.90	1700000
-60.00	167000000	4.99	121000	-24.60	189000	-40.00	1180000
-63.00	140000000	9.86	135000	-	-	-34.60	489000
-66.00	110000000	14.80	153000	-	-	-29.60	257000
-69.00	90546000	20.00	156000	-	-	-24.60	189000
-72.00	63500000	25.00	159000	-	-	-	-
-75.00	38700000	-	-	-	-	-	-
-78.00	9380000	-	-	-	-	-	-
-80.00	1020000	-	-	-	-	-	-

III.4 Data of Loss modulus of hard phase of PPO/PI-100 (40/60) blends as a function of temperature and the triblock copolymer contents (Figure 3.3)

Instrument : Rheometer model RES

Mode : Dynamic Temperature Step Default Test

Samples film : PPO/PI-100 (40/60) blends: 25 mm in diameter and 0.6-1.0 mm in depth

Frequency : 1 rad/second

Strain : 0.1-5.0 %

Soak time : 180 second

Heating rate : 2-3°C

Temperature scan : -80°C to 250°C

Temp (°C)	Loss modulus (G'') (dyn/cm ²)									
	C _{tb} = 0 wt %	C _{tb} = 1 wt %	C _{tb} = 3 wt %	C _{tb} = 5 wt %	C _{tb} = 7 wt %	C _{tb} = 9 wt %	C _{tb} = 11 wt %	C _{tb} = 13 wt %	C _{tb} = 15 wt %	C _{tb} = 20 wt %
45	830000	1503720	2690000	8880000	27150000	55600000	157800000	408800000	2120000000	4580000000
50	812300	1537020	2632500	8800000	27800000	56300000	156000000	418600000	2200000000	4568000000
55	757000	1503720	2488500	8800000	27900000	57500000	153600000	407400000	1912000000	4365000000
59	743000	1486800	2371500	8800000	27450000	58200000	145100000	375900000	1920000000	4258000000
65	711000	1489620	2394000	8720000	27050000	59600000	121800000	359800000	1896000000	4062000000
69	674000	1456860	2349000	8240000	27600000	58500000	135400000	344400000	1776000000	4528000000
74	660000	1455642	2250000	9200000	25500000	59600000	146500000	350700000	1568000000	4960000000
80	632140	1426872	2245500	9760000	28950000	62600000	154800000	334600000	1368000000	5320000000
84	598000	1435560	2250000	10342857	31950000	65520000	153600000	271600000	1656000000	5648000000
89	570000	1456863	2290500	11680000	32700000	67500000	155100000	361900000	1880000000	6104000000
93	552710	1455100	2224500	11880000	35250000	69800000	161800000	385400000	1936000000	6232000000
96	523000	1440000	2178000	12080000	36000000	69300000	165400000	411600000	2024000000	5928000000
99	507000	1380000	2169000	12240000	37650000	72800000	171700000	438900000	1920000000	5864000000
102	454000	1356200	2210400	12640000	39150000	73900000	173500000	475480000	1904000000	5592000000
105	410000	1320000	2205400	12800000	41850000	79600000	175900000	529900000	1920000000	5248000000

Temp (°C)	Loss modulus (G'') (dyn/cm ²)									
	C _{tb} = 0 wt %	C _{tb} = 1 wt %	C _{tb} = 3 wt %	C _{tb} = 5 wt %	C _{tb} = 7 wt %	C _{tb} = 9 wt %	C _{tb} = 11 wt %	C _{tb} = 13 wt %	C _{tb} = 15 wt %	C _{tb} = 20 wt %
108	374000	1302500	2199800	13200000	43500000	80500000	176200000	534500000	1816000000	4824000000
111	360000	1260000	2193750	13040000	43800000	75800000	169900000	550200000	1728000000	4448000000
114	352960	1177500	2083500	12960000	42654000	73500000	157200000	496300000	1784000000	4192000000
117	330000	1142300	1968700	13280000	41250000	70700000	154500000	456870000	1672000000	4208000000
120	339000	1110000	1894500	13760000	40874000	65900000	148800000	434000000	1648000000	4136000000
123	336000	1101000	1802400	13760000	38400000	60800000	145500000	420150000	1440000000	3704000000
126	364000	1059000	1782000	14000000	35100000	55900000	138900000	400400000	1344000000	3672000000
129	422000	1104000	1620000	12720000	33364000	50600000	125700000	327600000	1112000000	3540000000
132	451000	1165300	1896500	11280000	30150000	48580000	120300000	305470000	1160000000	3204000000
135	463000	1221000	2124000	10800000	28350000	45100000	113700000	275800000	904000000	3088000000
138	513000	1256400	2254600	9840000	26548000	43700000	105000000	255400000	856470000	2936000000
140	536000	1311000	2412000	9600000	25350000	43100000	102600000	249200000	816000000	2756000000
143	561000	1335600	2501400	8160000	21750000	40100000	98400000	225400000	752000000	2608000000
146	586540	1356000	2781000	8000000	19350000	39300000	98700000	214200000	676800000	2568000000
149	619000	1458000	2812500	6792000	14220000	38100000	93600000	198800000	502800000	2312000000

Temp (°C)	Loss modulus (G'') (dyn/cm ²)									
	C _{tb} = 0 wt %	C _{tb} = 1 wt %	C _{tb} = 3 wt %	C _{tb} = 5 wt %	C _{tb} = 7 wt %	C _{tb} = 9 wt %	C _{tb} = 11 wt %	C _{tb} = 13 wt %	C _{tb} = 15 wt %	C _{tb} = 20 wt %
152	663000	1502800	2839500	6256000	12735000	38800000	91500000	200450000	471200000	2056000000
155	679000	1566000	2709000	5952000	12135000	36700000	87900000	209300000	427200000	2128000000
158	700000	1590000	2538000	5480000	11910000	35600000	88200000	215340000	382400000	2092000000
161	737000	1593000	2421000	5320000	10080000	32300000	88500000	218400000	340800000	1946400000
164	783000	1587000	2255400	4820320	10095000	31100000	82200000	238000000	355200000	2036000000
167	801000	1500000	2120400	4328000	9835000	30900000	80100000	240570000	338400000	1996000000
170	832000	1491000	2005200	4096000	9595000	26500000	81600000	246400000	390400000	2668000000
175	776000	1296300	2167200	3352000	9570000	36200000	91800000	238000000	429120000	2836000000
180	669000	1239000	2389500	3620000	12360000	48600000	94800000	236600000	500480000	3296000000
185	602000	1176000	2210400	3936000	15300000	48900000	93900000	227500000	504123200	3168000000
190	504000	1123560	1970100	3532000	16350000	42600000	88500000	211400000	460800000	2464000000
195	402000	1039560	1714500	3016000	14895000	36500000	84900000	175700000	356400000	2050000000
200	298000	963120	1486575	2508000	12015000	34500000	58833846	139300000	298000000	1862000000

REPEAT

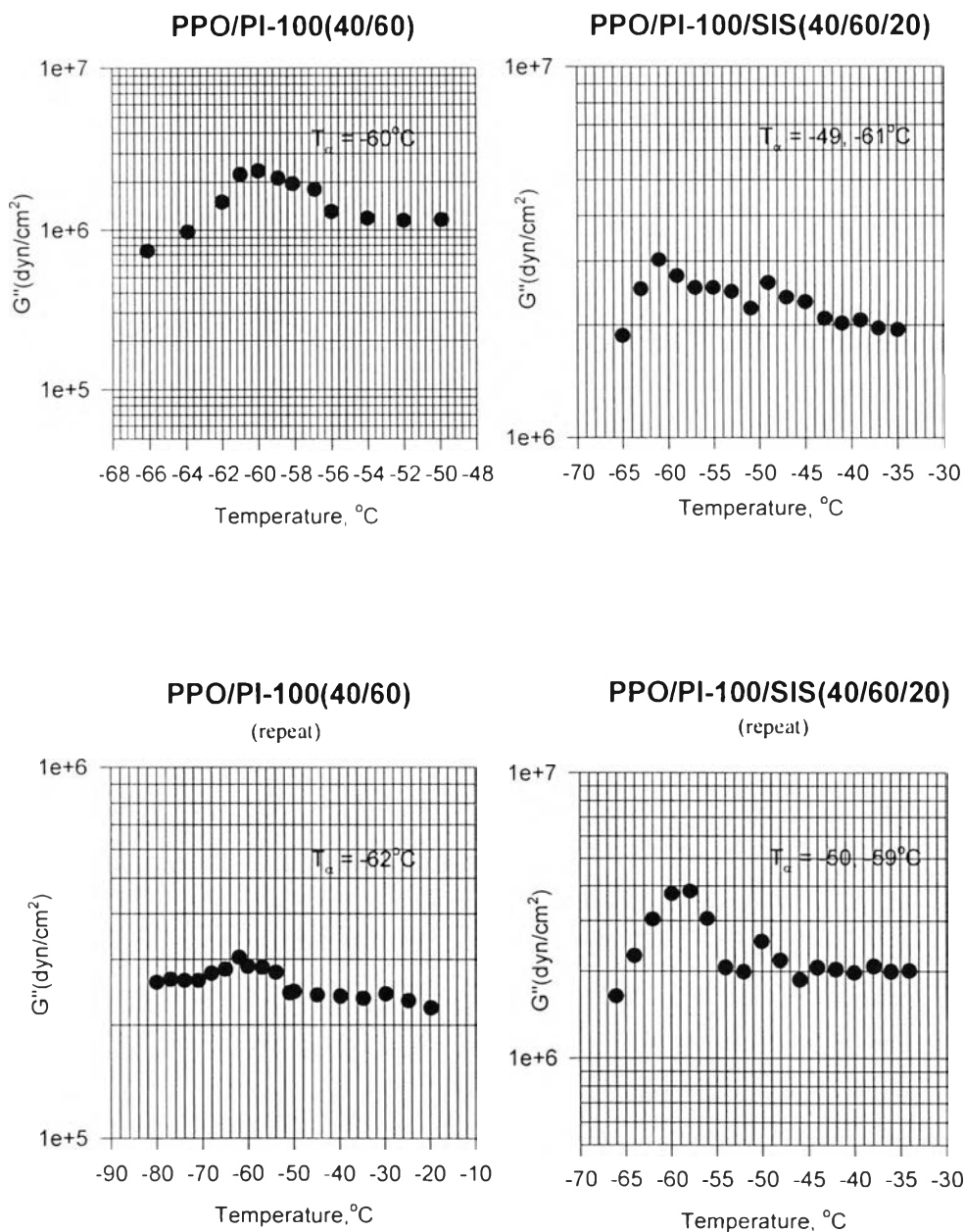
Temp (°C)	G" C _{tb} =0 wt%	Temp (°C)	G" C _{tb} =1 wt%	Temp (°C)	G" C _{tb} =3 wt%	Temp (°C)	G" C _{tb} =5 wt%	Temp (°C)	G" C _{tb} =7 wt%	Temp (°C)	G" C _{tb} =11 wt%	Temp (°C)	G" C _{tb} =13wt%	Temp (°C)	G" C _{tb} =15 wt%
40	8.53E+05	40	4.85E+05	40	3.73E+06	40	1.27E+06	40	5.07E+06	40	4.07E+06	40	6.59E+05	40	2.85E+06
45	8.30E+05	45	5.00E+05	45	3.40E+06	45	1.21E+06	45	5.02E+06	45	4.03E+06	45.1	5.84E+05	45	2.65E+06
50	8.12E+05	50	5.01E+05	50	3.50E+06	50	1.22E+06	50	4.30E+06	50	4.06E+06	50	5.98E+05	50	2.75E+06
55	7.57E+05	55	5.12E+05	55	3.15E+06	55	1.01E+06	55	4.60E+06	53	4.04E+06	55	5.82E+05	55	2.39E+06
59.9	7.43E+05	60	5.01E+05	60	2.99E+06	59.9	1.09E+06	60	4.01E+06	56	4.02E+06	59.9	5.37E+05	60	2.40E+06
65	7.11E+05	65	4.96E+05	65	2.77E+06	65	9.98E+05	64.9	3.86E+06	59	4.09E+06	64.9	5.14E+05	65	2.37E+06
69.9	6.74E+05	70	4.97E+05	70	2.55E+06	70	1.13E+06	69.9	3.91E+06	62	3.97E+06	69.9	4.92E+05	70	2.22E+06
74.9	6.60E+05	75	4.86E+05	75	2.47E+06	75	1.13E+06	75	3.55E+06	65	4.14E+06	74.9	5.01E+05	73	2.10E+06
80	6.32E+05	79.9	4.85E+05	79.9	2.46E+06	80	1.25E+06	79.9	3.25E+06	68	4.10E+06	79.9	4.78E+05	76	1.96E+06
84.9	5.98E+05	84.9	4.76E+05	85	2.33E+06	84.9	1.37E+06	84.9	3.28E+06	71	4.17E+06	85	3.88E+05	79	1.71E+06
89.9	5.70E+05	89.9	4.79E+05	89.9	2.24E+06	89.9	1.53E+06	89.9	3.23E+06	74	4.18E+06	90	5.17E+05	82	1.93E+06
93	5.53E+05	94.9	4.86E+05	93	2.15E+06	95	1.85E+06	92.9	2.78E+06	77	4.18E+06	95	5.88E+05	85	2.07E+06
96	5.23E+05	99.9	4.80E+05	96	2.01E+06	99.9	2.22E+06	96	2.86E+06	80	4.19E+06	100	6.27E+05	88	2.24E+06
99	5.07E+05	105	4.60E+05	99	1.96E+06	105	2.74E+06	99	3.50E+06	83	4.27E+06	105	7.57E+05	91	2.35E+06
102	4.54E+05	110	4.40E+05	102	1.85E+06	110	3.09E+06	102	4.03E+06	86	4.07E+06	110	7.86E+05	94	2.42E+06
105	4.10E+05	115	4.20E+05	105	1.75E+06	115	3.55E+06	105	4.13E+06	89	3.94E+06	115	7.09E+05	97	2.53E+06
108	3.74E+05	120	3.93E+05	108	1.74E+06	120	4.41E+06	108	4.16E+06	92	4.06E+06	120	6.20E+05	100	2.40E+06
111	3.60E+05	125	3.70E+05	111	1.69E+06	125	4.58E+06	111	4.13E+06	95	3.82E+06	125	5.72E+05	103	2.38E+06
114	3.45E+05	130	3.53E+05	114	1.65E+06	130	4.68E+06	114	4.06E+06	98	3.80E+06	130	4.68E+05	106	2.40E+06
117	3.30E+05	135	3.68E+05	117	1.60E+06	135	4.33E+06	117	3.82E+06	101	3.77E+06	135	3.94E+05	109	2.27E+06
120	3.39E+05	140	4.07E+05	120	1.60E+06	140	3.53E+06	120	3.75E+06	104	4.08E+06	140	3.56E+05	112	2.16E+06
123	3.36E+05	145	4.37E+05	123	1.59E+06	145	2.85E+06	123	3.73E+06	107	4.43E+06	145	3.06E+05	115	2.23E+06
126	3.64E+05	150	4.52E+05	126	1.35E+06	150	2.29E+06	126	3.61E+06	110	4.55E+06	150	2.84E+05	118	2.09E+06
129	4.22E+05	155	4.86E+05	129	1.38E+06	153	2.31E+06	129	3.35E+06	113	4.67E+06	155	2.99E+05	121	2.06E+06

Temp (°C)	G" C _{th} =0 wt%	Temp (°C)	G" C _{th} =1 wt%	Temp (°C)	G" C _{th} =3 wt%	Temp (°C)	G" C _{th} =5 wt%	Temp (°C)	G" C _{th} =7 wt%	Temp (°C)	G" C _{th} =11 wt%	Temp (°C)	G" C _{th} =13 wt%	Temp (°C)	G" C _{th} =15 wt%
132	4.51E+05	158	5.22E+05	132	1.16E+06	156	2.21E+06	132	3.14E+06	116	4.51E+06	160	3.12E+05	124	1.80E+06
135	4.63E+05	161	5.30E+05	135	1.09E+06	159	2.17E+06	135	2.62E+06	119	4.32E+06	165	3.40E+05	127	1.68E+06
138	5.13E+05	164	5.31E+05	138	1.03E+06	162	2.12E+06	138	2.36E+06	122	4.10E+06	170	3.52E+05	130	1.39E+06
140	5.36E+05	167	5.29E+05	141	1.20E+06	165	2.26E+06	141	2.05E+06	125	4.02E+06	175	3.40E+05	133	1.45E+06
143	5.61E+05	170	5.00E+05	144	1.27E+06	168	2.48E+06	144	1.47E+06	128	3.85E+06	180	3.38E+05	136	1.13E+06
146	5.82E+05	173	4.97E+05	147	1.41E+06	171	2.60E+06	147	1.33E+06	131	3.70E+06	185	3.25E+05	139	1.02E+06
149	6.19E+05	176	4.62E+05	150	1.48E+06	174	2.51E+06	150	1.11E+06	134	3.62E+06	190	3.02E+05	142	9.40E+05
152	6.63E+05	179	4.32E+05	153	1.53E+06	177	2.67E+06	155	8.50E+05	137	3.51E+06	195	2.51E+05	145	8.46E+05
155	6.79E+05	180	4.13E+05	156	1.65E+06	180	2.63E+06	160	1.04E+06	140	3.12E+06	200	1.99E+05	148	7.12E+05
158	7.00E+05	185	3.92E+05	159	1.68E+06	185	2.72E+06	165	1.17E+06	143	2.86E+06	205	1.37E+05	150	5.66E+05
161	7.37E+05	190	3.75E+05	162	1.66E+06	190	2.46E+06	170	1.24E+06	146	2.70E+06	210	7.80E+04	155	5.89E+05
164	7.83E+05	195	3.47E+05	165	1.48E+06	195	2.13E+06	175	1.50E+06	149	2.63E+06	215	2.80E+04	160	5.34E+05
167	8.01E+05	200	3.21E+05	168	1.35E+06	200	1.59E+06	180	1.59E+06	150	2.69E+06			165	4.78E+05
170	8.32E+05	205	3.01E+05	171	1.15E+06			185	1.66E+06	155	2.33E+06			170	4.26E+05
175	7.76E+05	210	2.85E+05	174	1.12E+06			190	1.66E+06	160	2.10E+06			175	4.44E+05
180	6.69E+05	215	2.65E+05	177	1.05E+06			195	1.50E+06	165	1.75E+06			180	4.23E+05
185	6.02E+05	220	2.41E+05	180	8.25E+05			200	1.17E+06	170	1.61E+06			185	4.88E+05
190	5.04E+05			185	7.52E+05			205	9.80E+05	175	1.40E+06			190	5.36E+05
195	4.02E+05			190	9.25E+05			210	7.01E+05	180	1.30E+06			195	6.26E+05
200	2.98E+05			195	1.02E+06			215	4.06E+05	185	1.33E+06			200	6.30E+05
				200	1.00E+06			220	1.84E+05	190	1.31E+06			205	5.76E+05
				205	9.54E+05			225	6.09E+04	195	1.21E+06			210	3.83E+05
				210	8.98E+05			235		200	1.06E+06			215	1.16E+05
				215	6.83E+05					205	8.87E+05			220	4.85E+04
				220	3.39E+05					210	6.41E+05				

III.5 Data of triblock copolymer content on the alpha transition temperature of PPO/PI-100 (40/60) blends (Figure 3.4)

Triblock copolymer (wt %)	T_{α} of hard phase									
	Peak 1					Peak 2				
	1 st	2 nd	3 rd	Mean	S.D.	1 st	2 nd	3 rd	Mean	S.D.
0	172	173	170	171.66	1.53	-	-	-	-	-
1	165	164	-	164.50	0.71	-	-	-	-	-
3	156	160	-	158	2.83	190	192	-	191	1.41
5	132	136	134	134	2.00	200	196	196	197.33	2.31
7	105	110	-	107.50	3.54	190	188	-	189	1.41
9	109	-	-	-	-	186	-	-	-	-
11	112	115	-	113.50	2.12	185	186	-	185.50	0.71
13	115	112	-	113.50	2.12	175	180	-	177.5	3.54
15	100	95	-	97.5	3.54	185	190	-	187.5	3.54
20	94	-	-	-	-	170	-	-	-	-

III.6 Data of Loss modulus of rubber phase of PPO/PI-100 (40/60) blends as a function of temperature and the triblock copolymer content



$C_{ib} = 0 \text{ wt } \%$				$C_{ib} = 20 \text{ wt } \%$			
Temp (°C)	G''	repeat		Temp (°C)	G''	repeat	
		Temp (°C)	G''			Temp (°C)	G''
-66.10	736000	-80.00	260000	-65.00	1870000	-66.00	1630000
-63.90	970000	-77.00	265000	-63.00	2510000	-64.00	2250000
-62.00	1500000	-73.90	263000	-61.00	3020000	-62.00	3030000
-61.00	2220000	-70.90	263000	-59.00	2730000	-59.90	3740000
-60.00	2340000	-68.00	275000	-57.00	2530000	-57.90	3820000
-58.90	2110000	-64.90	282000	-55.00	2530000	-56.00	3050000
-58.10	1950000	-61.90	304000	-53.00	2470000	-54.00	2050000
-56.90	1800000	-60.00	287000	-50.90	2220000	-52.00	1980000
-56.00	1310000	-56.80	285000	-49.00	2610000	-50.00	2530000
-54.00	1190000	-53.80	276000	-47.00	2380000	-48.00	2170000
-52.00	1150000	-50.80	243000	-45.00	2310000	-45.90	1860000
-49.90	1160000	-49.90	245000	-42.90	2080000	-44.00	2050000
-	-	-44.80	240000	-41.00	2020000	-42.00	2020000
-	-	-39.70	239000	-39.00	2060000	-40.00	1970000
-	-	-34.70	235000	-37.00	1960000	-37.90	2070000
-	-	-29.70	242000	-34.90	1940000	-36.00	1990000
-	-	-24.70	232000	-	-	-34.00	2000000
-	-	-19.70	222000	-	-	-	-

III.7 Data of the mechanical properties of PS/PI-100 (40/60) blends (Figure 3.5). Shear rate = 0.05 s⁻¹,

Temperature = 25°C, Time = 0-10 second.

Triblock copolymer (wt %)	Shear modulus ($G \times 10^4$) (dyn/cm ²)				Shear yield stress ($\tau_y \times 10^4$) (dyn/cm ²)				Shear yield strain (γ_y) (dyn/cm ²)			
	1st	2nd	Mean	S.D.	1st	2nd	Mean	S.D.	1st	2nd	Mean	S.D.
0	0.82	0.78	0.80	0.028	3.02	2.80	2.91	0.156	0.035	0.036	0.0355	7.1×10^{-4}
1	0.79	0.83	0.81	0.028	2.92	3.00	2.96	0.057	0.035	0.036	0.0355	7.1×10^{-4}
3	0.81	0.87	0.84	0.042	3.00	3.20	3.10	0.141	0.036	0.035	0.0355	7.1×10^{-4}
5	0.88	-	-	-	3.20	-	-	-	0.036	-	-	-
7	0.95	1.00	0.975	0.035	3.35	3.70	3.523	0.247	0.038	0.038	0.038	0.000
9	0.86	0.85	0.855	0.007	3.17	3.20	3.185	0.021	0.037	0.038	0.0375	7.1×10^{-4}
11	0.79	0.87	0.83	0.057	2.57	2.65	2.61	0.057	0.036	0.035	0.0355	7.1×10^{-4}
13	0.85	0.83	0.84	0.014	2.87	2.60	2.735	0.191	0.035	0.036	0.0355	7.1×10^{-4}
15	1.00	1.02	1.01	0.014	3.50	3.46	3.48	0.028	0.034	0.036	0.0350	1.4×10^{-3}
20	1.00	1.10	1.05	0.071	3.81	3.70	3.755	0.078	0.035	0.034	0.0345	1.4×10^{-3}
25	0.70	0.81	0.755	0.078	2.28	2.35	2.315	0.050	0.034	0.034	0.034	0.000
35	0.55	0.57	0.56	0.014	2.18	2.12	2.12	0.043	0.038	0.037	0.0375	7.1×10^{-4}
45	0.53	0.50	0.515	0.021	2.02	2.15	2.15	0.092	0.036	0.035	0.0355	7.1×10^{-4}
55	0.51	0.55	0.53	0.028	1.48	1.55	1.55	0.050	0.036	0.037	0.0365	7.1×10^{-4}

**III.8 Data of the mechanical properties of PPO/PI-100 (40/60) blends (Figure 3.6). Shear rate = 1.0 s⁻¹,
Temperature = 25°C, Time = 0-10 second.**

Triblock copolymer (wt %)	Shear modulus ($G \times 10^5$) (dyn/cm ²)				Shear yield stress ($\tau_y \times 10^5$) (dyn/cm ²)				Shear yield strain (γ_y) (dyn/cm ²)			
	1st	2nd	Mean	S.D.	1st	2nd	Mean	S.D.	1st	2nd	Mean	S.D.
0	0.94	0.86	0.90	0.056	0.49	0.51	0.50	0.014	0.0509	0.0520	0.05145	5.5×10^{-4}
1	1.04	-	-	-	0.57	-	-	-	0.0530	-	-	-
3	1.09	0.98	1.035	0.078	0.58	0.56	0.057	0.014	0.0532	0.0544	0.0538	8.5×10^{-4}
5	1.15	1.17	1.16	0.014	0.62	0.58	0.60	0.028	0.0536	0.0537	0.05365	7.0×10^{-5}
7	1.02	1.19	1.105	0.12	0.52	0.56	0.54	0.028	0.0530	0.0500	0.0515	2.1×10^{-3}
9	1.15	-	-	-	0.57	-	-	-	0.0530	-	-	-
11	1.24	-	-	-	0.57	-	-	-	0.0495	-	-	-
13	1.39	1.32	1.355	0.049	0.61	0.60	0.605	0.007	0.0470	0.0430	0.0450	2.8×10^{-3}
15	1.45	1.53	1.49	0.056	0.82	0.80	0.81	0.014	0.0420	0.0450	0.0435	2.1×10^{-3}
20	1.76	-	-	-	0.83	-	-	-	0.0440	-	-	-
25	1.20	1.31	1.255	0.078	0.46	0.50	0.48	0.028	0.0363	0.0380	0.0372	1.2×10^{-3}
35	0.91	1.02	0.965	0.078	0.30	0.41	0.355	0.078	0.0311	0.0328	0.0320	1.2×10^{-3}
45	0.41	0.55	0.48	0.099	0.11	0.15	0.13	0.028	0.0260	0.0250	0.0255	7.1×10^{-4}
55	0.41	0.48	0.445	0.046	0.10	0.14	0.12	0.028	0.0252	0.0255	0.0254	2.0×10^{-4}

III.9 Data of the stress relaxation ($G(t)$) of PS/PI-100 (40/60) blends (Figure 3.8). % Strain = 0.4, Temperature = 50°C, Time = 0-1000 s.

$C_{ib} = 0 \text{ wt\%}$				time (second)	$G(t)$, dyn/cm ²			
time (second)	$G(t)$ dyn/cm ²	time (second) (repeat)	$G(t)$ dyn/cm ² (repeat)		$C_{ib}=1$ wt%	$C_{ib}=9$ wt%	$C_{ib}=20$ wt%	$C_{ib}=20$ wt% (repeat)
1.00E-02	7.71E+05	1.00E-02	1.62E+06	1.00E-02	2.32E+06	2.43E+06	3.31E+06	3.11E+06
2.00E-02	9.53E+05	2.00E-02	1.78E+06	2.00E-02	2.61E+06	3.10E+06	3.85E+06	3.81E+06
3.00E-02	9.85E+05	3.00E-02	1.83E+06	3.00E-02	2.67E+06	3.15E+06	3.91E+06	3.97E+06
4.00E-02	9.87E+05	4.00E-02	1.84E+06	4.00E-02	2.67E+06	3.13E+06	3.87E+06	4.02E+06
5.00E-02	9.88E+05	5.00E-02	1.83E+06	5.00E-02	2.65E+06	2.79E+06	3.79E+06	4.03E+06
6.00E-02	9.79E+05	6.00E-02	1.81E+06	6.00E-02	2.62E+06	3.01E+06	3.72E+06	4.00E+06
7.00E-02	9.67E+05	7.00E-02	1.79E+06	7.00E-02	2.58E+06	2.95E+06	3.65E+06	3.97E+06
8.00E-02	9.54E+05	8.00E-02	1.76E+06	8.00E-02	2.55E+06	2.90E+06	3.58E+06	3.92E+06
9.00E-02	9.39E+05	9.00E-02	1.73E+06	9.00E-02	2.51E+06	2.86E+06	3.51E+06	3.86E+06
1.00E-01	9.26E+05	1.00E-01	1.71E+06	1.00E-01	2.47E+06	2.81E+06	3.45E+06	3.81E+06
1.10E-01	9.12E+05	1.10E-01	1.68E+06	1.10E-01	2.43E+06	2.77E+06	3.40E+06	3.76E+06
1.20E-01	9.01E+05	1.20E-01	1.65E+06	1.20E-01	2.40E+06	2.74E+06	3.35E+06	3.70E+06
1.30E-01	8.89E+05	1.30E-01	1.62E+06	1.30E-01	2.37E+06	2.71E+06	3.30E+06	3.64E+06
1.40E-01	8.77E+05	1.40E-01	1.60E+06	1.40E-01	2.34E+06	2.68E+06	3.26E+06	3.58E+06
1.50E-01	8.66E+05	1.50E-01	1.58E+06	1.50E-01	2.32E+06	2.66E+06	3.22E+06	3.52E+06
1.60E-01	8.55E+05	1.60E-01	1.55E+06	1.60E-01	2.29E+06	2.63E+06	3.17E+06	3.48E+06
1.70E-01	8.47E+05	1.70E-01	1.54E+06	1.70E-01	2.27E+06	2.60E+06	3.14E+06	3.43E+06
1.80E-01	8.39E+05	1.80E-01	1.52E+06	1.80E-01	2.24E+06	2.58E+06	3.11E+06	3.39E+06
1.90E-01	8.30E+05	1.90E-01	1.50E+06	1.90E-01	2.22E+06	2.56E+06	3.08E+06	3.36E+06
2.00E-01	8.22E+05	2.00E-01	1.48E+06	2.00E-01	2.20E+06	2.54E+06	3.06E+06	3.33E+06
2.10E-01	8.15E+05	2.10E-01	1.47E+06	2.10E-01	2.19E+06	2.52E+06	3.03E+06	3.29E+06
2.20E-01	8.08E+05	2.20E-01	1.45E+06	2.20E-01	2.17E+06	2.50E+06	3.01E+06	3.27E+06
2.30E-01	8.02E+05	2.30E-01	1.44E+06	2.30E-01	2.16E+06	2.48E+06	2.98E+06	3.24E+06
2.40E-01	7.99E+05	2.40E-01	1.43E+06	2.40E-01	2.14E+06	2.47E+06	2.96E+06	3.20E+06
2.50E-01	7.95E+05	2.50E-01	1.42E+06	2.50E-01	2.12E+06	2.45E+06	2.94E+06	3.18E+06
2.60E-01	7.91E+05	2.60E-01	1.41E+06	2.60E-01	2.11E+06	2.44E+06	2.93E+06	3.15E+06
2.70E-01	7.85E+05	2.70E-01	1.39E+06	2.70E-01	2.09E+06	2.43E+06	2.91E+06	3.13E+06
2.80E-01	7.78E+05	2.80E-01	1.38E+06	2.80E-01	2.08E+06	2.41E+06	2.89E+06	3.11E+06
2.90E-01	7.72E+05	2.90E-01	1.37E+06	2.90E-01	2.07E+06	2.40E+06	2.87E+06	3.09E+06
3.00E-01	7.68E+05	3.00E-01	1.36E+06	3.00E-01	2.06E+06	2.39E+06	2.85E+06	3.06E+06
3.10E-01	7.62E+05	3.10E-01	1.36E+06	3.10E-01	2.04E+06	2.38E+06	2.83E+06	3.05E+06
3.20E-01	7.55E+05	3.20E-01	1.35E+06	3.20E-01	2.03E+06	2.37E+06	2.82E+06	3.03E+06
3.30E-01	7.51E+05	3.30E-01	1.34E+06	3.30E-01	2.02E+06	2.36E+06	2.81E+06	3.01E+06
3.40E-01	7.47E+05	3.40E-01	1.33E+06	3.40E-01	2.01E+06	2.35E+06	2.79E+06	3.00E+06
3.50E-01	7.43E+05	3.50E-01	1.32E+06	3.50E-01	2.00E+06	2.34E+06	2.77E+06	2.99E+06
3.60E-01	7.41E+05	3.60E-01	1.31E+06	3.60E-01	1.99E+06	2.33E+06	2.75E+06	2.97E+06
3.70E-01	7.39E+05	3.70E-01	1.30E+06	3.70E-01	1.98E+06	2.33E+06	2.73E+06	2.95E+06

3.80E-01	7.36E+05	3.80E-01	1.29E+06	3.80E-01	1.97E+06	2.32E+06	2.72E+06	2.94E+06
3.90E-01	7.30E+05	3.90E-01	1.28E+06	3.90E-01	1.96E+06	2.31E+06	2.71E+06	2.91E+06
4.00E-01	7.26E+05	4.00E-01	1.27E+06	4.00E-01	1.95E+06	2.29E+06	2.70E+06	2.90E+06
4.10E-01	7.22E+05	4.10E-01	1.27E+06	4.10E-01	1.94E+06	2.29E+06	2.69E+06	2.89E+06
4.20E-01	7.18E+05	4.20E-01	1.26E+06	4.20E-01	1.93E+06	2.28E+06	2.68E+06	2.87E+06
4.30E-01	7.15E+05	4.30E-01	1.25E+06	4.30E-01	1.92E+06	2.26E+06	2.67E+06	2.85E+06
4.40E-01	7.12E+05	4.40E-01	1.25E+06	4.40E-01	1.92E+06	2.26E+06	2.65E+06	2.83E+06
4.50E-01	7.08E+05	4.50E-01	1.24E+06	4.50E-01	1.91E+06	2.25E+06	2.64E+06	2.81E+06
4.60E-01	7.05E+05	4.60E-01	1.24E+06	4.60E-01	1.90E+06	2.24E+06	2.63E+06	2.79E+06
4.70E-01	7.02E+05	4.70E-01	1.24E+06	4.70E-01	1.89E+06	2.23E+06	2.63E+06	2.78E+06
4.80E-01	6.98E+05	4.80E-01	1.24E+06	4.80E-01	1.88E+06	2.22E+06	2.62E+06	2.77E+06
4.90E-01	6.96E+05	4.90E-01	1.22E+06	4.90E-01	1.88E+06	2.21E+06	2.61E+06	2.77E+06
5.00E-01	6.94E+05	5.00E-01	1.22E+06	5.00E-01	1.87E+06	2.21E+06	2.60E+06	2.76E+06
5.10E-01	6.92E+05	5.10E-01	1.22E+06	5.10E-01	1.86E+06	2.20E+06	2.60E+06	2.75E+06
5.20E-01	6.89E+05	5.20E-01	1.21E+06	5.20E-01	1.85E+06	2.20E+06	2.59E+06	2.73E+06
5.30E-01	6.86E+05	5.30E-01	1.20E+06	5.30E-01	1.84E+06	2.19E+06	2.58E+06	2.72E+06
5.40E-01	6.83E+05	5.40E-01	1.20E+06	5.40E-01	1.84E+06	2.18E+06	2.57E+06	2.71E+06
5.50E-01	6.79E+05	5.50E-01	1.19E+06	5.50E-01	1.83E+06	2.18E+06	2.55E+06	2.68E+06
5.60E-01	6.77E+05	5.60E-01	1.19E+06	5.60E-01	1.83E+06	2.17E+06	2.54E+06	2.67E+06
5.70E-01	6.76E+05	5.70E-01	1.18E+06	5.70E-01	1.82E+06	2.16E+06	2.54E+06	2.66E+06
5.80E-01	6.73E+05	5.80E-01	1.17E+06	5.80E-01	1.81E+06	2.15E+06	2.53E+06	2.65E+06
5.90E-01	6.71E+05	5.90E-01	1.17E+06	5.90E-01	1.81E+06	2.15E+06	2.52E+06	2.65E+06
6.00E-01	6.69E+05	6.00E-01	1.16E+06	6.00E-01	1.81E+06	2.14E+06	2.51E+06	2.64E+06
6.10E-01	6.67E+05	6.10E-01	1.16E+06	6.10E-01	1.80E+06	2.13E+06	2.50E+06	2.62E+06
6.20E-01	6.65E+05	6.20E-01	1.16E+06	6.20E-01	1.79E+06	2.13E+06	2.49E+06	2.62E+06
6.30E-01	6.62E+05	6.30E-01	1.15E+06	6.30E-01	1.78E+06	2.11E+06	2.48E+06	2.61E+06
6.40E-01	6.60E+05	6.40E-01	1.15E+06	6.40E-01	1.77E+06	2.11E+06	2.47E+06	2.59E+06
6.50E-01	6.60E+05	6.50E-01	1.14E+06	6.50E-01	1.77E+06	2.10E+06	2.47E+06	2.59E+06
6.60E-01	6.58E+05	6.60E-01	1.14E+06	6.60E-01	1.77E+06	2.10E+06	2.46E+06	2.58E+06
6.70E-01	6.55E+05	6.70E-01	1.13E+06	6.70E-01	1.76E+06	2.09E+06	2.46E+06	2.57E+06
6.80E-01	6.54E+05	6.80E-01	1.13E+06	6.80E-01	1.75E+06	2.09E+06	2.45E+06	2.57E+06
6.90E-01	6.53E+05	6.90E-01	1.12E+06	6.90E-01	1.74E+06	2.08E+06	2.44E+06	2.56E+06
7.00E-01	6.54E+05	7.00E-01	1.12E+06	7.00E-01	1.74E+06	2.07E+06	2.43E+06	2.54E+06
7.10E-01	6.54E+05	7.10E-01	1.12E+06	7.10E-01	1.74E+06	2.07E+06	2.43E+06	2.54E+06
7.20E-01	6.50E+05	7.20E-01	1.12E+06	7.20E-01	1.73E+06	2.06E+06	2.42E+06	2.53E+06
7.30E-01	6.48E+05	7.30E-01	1.11E+06	7.30E-01	1.72E+06	2.06E+06	2.41E+06	2.52E+06
7.40E-01	6.46E+05	7.40E-01	1.11E+06	7.40E-01	1.72E+06	2.06E+06	2.40E+06	2.51E+06
7.50E-01	6.44E+05	7.50E-01	1.11E+06	7.50E-01	1.72E+06	2.06E+06	2.39E+06	2.51E+06
7.60E-01	6.42E+05	7.60E-01	1.10E+06	7.60E-01	1.72E+06	2.05E+06	2.38E+06	2.50E+06
7.70E-01	6.39E+05	7.70E-01	1.10E+06	7.70E-01	1.71E+06	2.05E+06	2.39E+06	2.49E+06
7.80E-01	6.36E+05	7.80E-01	1.09E+06	7.80E-01	1.71E+06	2.04E+06	2.39E+06	2.48E+06
7.90E-01	6.35E+05	7.90E-01	1.09E+06	7.90E-01	1.70E+06	2.04E+06	2.38E+06	2.48E+06
8.00E-01	6.35E+05	8.00E-01	1.09E+06	8.00E-01	1.69E+06	2.04E+06	2.37E+06	2.48E+06
8.10E-01	6.34E+05	8.10E-01	1.08E+06	8.10E-01	1.68E+06	2.04E+06	2.36E+06	2.48E+06

8.20E-01	6.34E+05	8.20E-01	1.08E+06	8.20E-01	1.69E+06	2.03E+06	2.35E+06	2.47E+06
8.30E-01	6.32E+05	8.30E-01	1.08E+06	8.30E-01	1.69E+06	2.03E+06	2.35E+06	2.47E+06
8.40E-01	6.30E+05	8.40E-01	1.07E+06	8.40E-01	1.68E+06	2.02E+06	2.34E+06	2.46E+06
8.50E-01	6.26E+05	8.50E-01	1.07E+06	8.50E-01	1.68E+06	2.02E+06	2.33E+06	2.45E+06
8.60E-01	6.25E+05	8.60E-01	1.07E+06	8.60E-01	1.69E+06	2.01E+06	2.33E+06	2.44E+06
8.70E-01	6.23E+05	8.70E-01	1.06E+06	8.70E-01	1.68E+06	2.01E+06	2.32E+06	2.43E+06
8.80E-01	6.21E+05	8.80E-01	1.06E+06	8.80E-01	1.68E+06	2.00E+06	2.31E+06	2.42E+06
8.90E-01	6.20E+05	8.90E-01	1.06E+06	8.90E-01	1.67E+06	2.00E+06	2.31E+06	2.42E+06
9.00E-01	6.19E+05	9.00E-01	1.06E+06	9.00E-01	1.67E+06	1.99E+06	2.31E+06	2.41E+06
9.10E-01	6.17E+05	9.10E-01	1.05E+06	9.10E-01	1.66E+06	1.99E+06	2.30E+06	2.40E+06
9.20E-01	6.14E+05	9.20E-01	1.05E+06	9.20E-01	1.66E+06	1.98E+06	2.30E+06	2.39E+06
9.30E-01	6.14E+05	9.30E-01	1.05E+06	9.30E-01	1.65E+06	1.98E+06	2.30E+06	2.39E+06
9.40E-01	6.14E+05	9.40E-01	1.04E+06	9.40E-01	1.64E+06	1.97E+06	2.29E+06	2.38E+06
9.50E-01	6.12E+05	9.50E-01	1.05E+06	9.50E-01	1.64E+06	1.96E+06	2.29E+06	2.37E+06
9.60E-01	6.10E+05	9.60E-01	1.04E+06	9.60E-01	1.63E+06	1.96E+06	2.29E+06	2.37E+06
9.70E-01	6.08E+05	9.70E-01	1.04E+06	9.70E-01	1.63E+06	1.96E+06	2.28E+06	2.36E+06
9.80E-01	6.08E+05	9.80E-01	1.03E+06	9.80E-01	1.63E+06	1.95E+06	2.27E+06	2.36E+06
9.90E-01	6.08E+05	9.90E-01	1.03E+06	9.90E-01	1.62E+06	1.95E+06	2.27E+06	2.36E+06
1.00E+00	6.06E+05	1.00E+00	1.02E+06	1.00E+00	1.62E+06	1.95E+06	2.26E+06	2.36E+06
1.01E+00	6.05E+05	1.01E+00	1.02E+06	1.01E+00	1.62E+06	1.95E+06	2.26E+06	2.35E+06
1.02E+00	6.03E+05	1.02E+00	1.02E+06	1.02E+00	1.62E+06	1.94E+06	2.25E+06	2.34E+06
1.03E+00	6.02E+05	1.03E+00	1.02E+06	1.03E+00	1.61E+06	1.94E+06	2.24E+06	2.33E+06
1.04E+00	5.99E+05	1.04E+00	1.02E+06	1.04E+00	1.61E+06	1.93E+06	2.24E+06	2.31E+06
1.05E+00	5.98E+05	1.05E+00	1.02E+06	1.05E+00	1.60E+06	1.93E+06	2.23E+06	2.31E+06
1.06E+00	5.99E+05	1.06E+00	1.02E+06	1.06E+00	1.60E+06	1.92E+06	2.23E+06	2.31E+06
1.07E+00	5.98E+05	1.07E+00	1.02E+06	1.07E+00	1.60E+06	1.93E+06	2.23E+06	2.31E+06
1.08E+00	5.97E+05	1.08E+00	1.02E+06	1.08E+00	1.60E+06	1.93E+06	2.22E+06	2.31E+06
1.09E+00	5.95E+05	1.09E+00	1.01E+06	1.09E+00	1.59E+06	1.93E+06	2.22E+06	2.31E+06
1.10E+00	5.93E+05	1.10E+00	1.01E+06	1.10E+00	1.59E+06	1.92E+06	2.22E+06	2.30E+06
1.11E+00	5.91E+05	1.11E+00	1.01E+06	1.11E+00	1.59E+06	1.92E+06	2.21E+06	2.29E+06
1.12E+00	5.89E+05	1.12E+00	1.01E+06	1.12E+00	1.59E+06	1.92E+06	2.21E+06	2.28E+06
1.13E+00	5.86E+05	1.13E+00	1.00E+06	1.13E+00	1.58E+06	1.92E+06	2.21E+06	2.27E+06
1.14E+00	5.86E+05	1.14E+00	9.99E+05	1.14E+00	1.58E+06	1.91E+06	2.20E+06	2.27E+06
1.15E+00	5.84E+05	1.15E+00	9.96E+05	1.15E+00	1.58E+06	1.91E+06	2.20E+06	2.26E+06
1.16E+00	5.83E+05	1.16E+00	9.94E+05	1.16E+00	1.57E+06	1.90E+06	2.19E+06	2.25E+06
1.17E+00	5.83E+05	1.17E+00	9.89E+05	1.17E+00	1.57E+06	1.90E+06	2.18E+06	2.24E+06
1.18E+00	5.84E+05	1.18E+00	9.86E+05	1.18E+00	1.57E+06	1.89E+06	2.19E+06	2.24E+06
1.19E+00	5.85E+05	1.19E+00	9.81E+05	1.19E+00	1.57E+06	1.89E+06	2.19E+06	2.23E+06
1.20E+00	5.83E+05	1.20E+00	9.79E+05	1.20E+00	1.57E+06	1.89E+06	2.18E+06	2.22E+06
1.21E+00	5.81E+05	1.21E+00	9.74E+05	1.21E+00	1.56E+06	1.89E+06	2.18E+06	2.22E+06
1.22E+00	5.79E+05	1.22E+00	9.72E+05	1.22E+00	1.56E+06	1.88E+06	2.17E+06	2.21E+06
1.23E+00	5.77E+05	1.23E+00	9.65E+05	1.23E+00	1.55E+06	1.88E+06	2.17E+06	2.20E+06
1.24E+00	5.77E+05	1.24E+00	9.63E+05	1.24E+00	1.55E+06	1.88E+06	2.16E+06	2.20E+06
1.25E+00	5.74E+05	1.25E+00	9.63E+05	1.25E+00	1.55E+06	1.87E+06	2.16E+06	2.19E+06

1.26E+00	5.71E+05	1.26E+00	9.63E+05	1.26E+00	1.55E+06	1.87E+06	2.16E+06	2.19E+06
1.27E+00	5.71E+05	1.27E+00	9.62E+05	1.27E+00	1.55E+06	1.86E+06	2.16E+06	2.19E+06
1.28E+00	5.70E+05	1.28E+00	9.61E+05	1.28E+00	1.54E+06	1.86E+06	2.15E+06	2.18E+06
1.29E+00	5.68E+05	1.29E+00	9.60E+05	1.29E+00	1.54E+06	1.86E+06	2.15E+06	2.18E+06
1.30E+00	5.67E+05	1.30E+00	9.56E+05	1.30E+00	1.54E+06	1.86E+06	2.14E+06	2.18E+06
1.31E+00	5.68E+05	1.31E+00	9.51E+05	1.31E+00	1.53E+06	1.86E+06	2.13E+06	2.17E+06
1.32E+00	5.67E+05	1.32E+00	9.50E+05	1.32E+00	1.53E+06	1.85E+06	2.13E+06	2.17E+06
1.33E+00	5.67E+05	1.33E+00	9.46E+05	1.33E+00	1.53E+06	1.85E+06	2.13E+06	2.16E+06
1.34E+00	5.66E+05	1.34E+00	9.45E+05	1.34E+00	1.52E+06	1.85E+06	2.12E+06	2.16E+06
1.35E+00	5.64E+05	1.35E+00	9.42E+05	1.35E+00	1.52E+06	1.85E+06	2.12E+06	2.16E+06
1.36E+00	5.62E+05	1.36E+00	9.37E+05	1.36E+00	1.51E+06	1.85E+06	2.13E+06	2.16E+06
1.37E+00	5.61E+05	1.37E+00	9.33E+05	1.37E+00	1.51E+06	1.85E+06	2.12E+06	2.15E+06
1.38E+00	5.58E+05	1.38E+00	9.40E+05	1.38E+00	1.51E+06	1.84E+06	2.12E+06	2.15E+06
1.39E+00	5.56E+05	1.39E+00	9.45E+05	1.39E+00	1.51E+06	1.84E+06	2.11E+06	2.15E+06
1.40E+00	5.56E+05	1.40E+00	9.44E+05	1.40E+00	1.50E+06	1.84E+06	2.11E+06	2.14E+06
1.41E+00	5.54E+05	1.41E+00	9.40E+05	1.41E+00	1.51E+06	1.83E+06	2.11E+06	2.14E+06
1.42E+00	5.53E+05	1.42E+00	9.41E+05	1.42E+00	1.51E+06	1.83E+06	2.10E+06	2.13E+06
1.43E+00	5.53E+05	1.43E+00	9.37E+05	1.43E+00	1.50E+06	1.82E+06	2.10E+06	2.12E+06
1.44E+00	5.52E+05	1.44E+00	9.36E+05	1.44E+00	1.50E+06	1.82E+06	2.09E+06	2.12E+06
1.46E+00	5.50E+05	1.45E+00	9.34E+05	1.45E+00	1.50E+06	1.82E+06	2.09E+06	2.12E+06
1.51E+00	5.47E+05	1.46E+00	9.30E+05	1.46E+00	1.49E+06	1.82E+06	2.08E+06	2.12E+06
1.57E+00	5.42E+05	1.47E+00	9.29E+05	1.47E+00	1.48E+06	1.82E+06	2.07E+06	2.12E+06
1.62E+00	5.37E+05	1.48E+00	9.23E+05	1.48E+00	1.48E+06	1.82E+06	2.07E+06	2.11E+06
1.68E+00	5.32E+05	1.49E+00	9.16E+05	1.49E+00	1.48E+06	1.82E+06	2.07E+06	2.11E+06
1.74E+00	5.25E+05	1.50E+00	9.13E+05	1.50E+00	1.48E+06	1.82E+06	2.07E+06	2.10E+06
1.81E+00	5.22E+05	1.51E+00	9.14E+05	1.51E+00	1.48E+06	1.82E+06	2.07E+06	2.10E+06
1.87E+00	5.18E+05	1.52E+00	9.16E+05	1.52E+00	1.47E+06	1.82E+06	2.07E+06	2.10E+06
1.94E+00	5.13E+05	1.53E+00	9.22E+05	1.53E+00	1.47E+06	1.81E+06	2.07E+06	2.10E+06
2.01E+00	5.06E+05	1.54E+00	9.21E+05	1.54E+00	1.48E+06	1.80E+06	2.06E+06	2.09E+06
2.08E+00	5.02E+05	1.55E+00	9.15E+05	1.55E+00	1.47E+06	1.80E+06	2.06E+06	2.09E+06
2.15E+00	4.97E+05	1.56E+00	9.11E+05	1.56E+00	1.47E+06	1.80E+06	2.06E+06	2.08E+06
2.21E+00	4.91E+05	1.57E+00	9.08E+05	1.57E+00	1.46E+06	1.80E+06	2.06E+06	2.08E+06
2.29E+00	4.86E+05	1.58E+00	8.99E+05	1.58E+00	1.46E+06	1.80E+06	2.06E+06	2.07E+06
2.37E+00	4.82E+05	1.59E+00	8.98E+05	1.59E+00	1.46E+06	1.79E+06	2.06E+06	2.05E+06
2.45E+00	4.79E+05	1.61E+00	8.99E+05	1.61E+00	1.46E+06	1.78E+06	2.05E+06	2.06E+06
2.54E+00	4.75E+05	1.64E+00	8.88E+05	1.64E+00	1.45E+06	1.78E+06	2.03E+06	2.06E+06
2.63E+00	4.70E+05	1.69E+00	8.84E+05	1.69E+00	1.44E+06	1.77E+06	2.01E+06	2.03E+06
2.73E+00	4.63E+05	1.74E+00	8.73E+05	1.74E+00	1.42E+06	1.75E+06	1.99E+06	2.01E+06
2.83E+00	4.59E+05	1.79E+00	8.66E+05	1.79E+00	1.41E+06	1.74E+06	1.97E+06	2.01E+06
2.93E+00	4.56E+05	1.85E+00	8.63E+05	1.85E+00	1.40E+06	1.73E+06	1.95E+06	1.99E+06
3.03E+00	4.52E+05	1.91E+00	8.58E+05	1.91E+00	1.39E+06	1.73E+06	1.94E+06	1.96E+06
3.14E+00	4.46E+05	1.98E+00	8.44E+05	1.98E+00	1.39E+06	1.71E+06	1.92E+06	1.93E+06
3.25E+00	4.42E+05	2.05E+00	8.32E+05	2.05E+00	1.37E+06	1.69E+06	1.91E+06	1.92E+06
3.35E+00	4.38E+05	2.11E+00	8.28E+05	2.11E+00	1.37E+06	1.68E+06	1.89E+06	1.91E+06

3.47E+00	4.32E+05	2.19E+00	8.16E+05	2.19E+00	1.35E+06	1.67E+06	1.87E+06	1.88E+06
3.59E+00	4.27E+05	2.28E+00	8.08E+05	2.28E+00	1.33E+06	1.66E+06	1.86E+06	1.87E+06
3.72E+00	4.23E+05	2.38E+00	7.97E+05	2.38E+00	1.32E+06	1.64E+06	1.84E+06	1.85E+06
3.86E+00	4.18E+05	2.48E+00	7.91E+05	2.48E+00	1.31E+06	1.62E+06	1.82E+06	1.83E+06
4.00E+00	4.12E+05	2.59E+00	7.81E+05	2.59E+00	1.30E+06	1.61E+06	1.79E+06	1.81E+06
4.14E+00	4.07E+05	2.69E+00	7.63E+05	2.69E+00	1.29E+06	1.60E+06	1.77E+06	1.79E+06
4.29E+00	4.02E+05	2.81E+00	7.56E+05	2.81E+00	1.27E+06	1.57E+06	1.75E+06	1.75E+06
4.44E+00	3.99E+05	2.95E+00	7.46E+05	2.95E+00	1.25E+06	1.55E+06	1.72E+06	1.74E+06
4.58E+00	3.92E+05	3.09E+00	7.36E+05	3.09E+00	1.24E+06	1.54E+06	1.71E+06	1.72E+06
4.74E+00	3.87E+05	3.23E+00	7.23E+05	3.23E+00	1.22E+06	1.53E+06	1.69E+06	1.69E+06
4.91E+00	3.84E+05	3.40E+00	7.16E+05	3.40E+00	1.21E+06	1.51E+06	1.68E+06	1.66E+06
5.09E+00	3.81E+05	3.58E+00	7.03E+05	3.58E+00	1.20E+06	1.49E+06	1.65E+06	1.65E+06
5.27E+00	3.74E+05	3.77E+00	6.91E+05	3.77E+00	1.18E+06	1.47E+06	1.63E+06	1.62E+06
5.46E+00	3.67E+05	3.95E+00	6.80E+05	3.95E+00	1.16E+06	1.45E+06	1.61E+06	1.60E+06
5.64E+00	3.66E+05	4.17E+00	6.65E+05	4.17E+00	1.14E+06	1.44E+06	1.57E+06	1.56E+06
5.84E+00	3.62E+05	4.39E+00	6.52E+05	4.39E+00	1.12E+06	1.41E+06	1.55E+06	1.54E+06
6.05E+00	3.54E+05	4.64E+00	6.44E+05	4.64E+00	1.10E+06	1.40E+06	1.52E+06	1.51E+06
6.27E+00	3.53E+05	4.90E+00	6.27E+05	4.90E+00	1.08E+06	1.37E+06	1.49E+06	1.49E+06
6.49E+00	3.51E+05	5.19E+00	6.16E+05	5.19E+00	1.06E+06	1.34E+06	1.48E+06	1.46E+06
6.71E+00	3.47E+05	5.50E+00	6.08E+05	5.50E+00	1.05E+06	1.34E+06	1.45E+06	1.43E+06
6.95E+00	3.42E+05	5.84E+00	5.89E+05	5.84E+00	1.03E+06	1.32E+06	1.42E+06	1.39E+06
7.20E+00	3.36E+05	6.20E+00	5.78E+05	6.20E+00	1.01E+06	1.29E+06	1.39E+06	1.35E+06
7.46E+00	3.29E+05	6.58E+00	5.66E+05	6.58E+00	9.89E+05	1.27E+06	1.36E+06	1.32E+06
7.72E+00	3.28E+05	7.00E+00	5.56E+05	7.00E+00	9.72E+05	1.24E+06	1.33E+06	1.29E+06
7.98E+00	3.23E+05	7.44E+00	5.42E+05	7.44E+00	9.52E+05	1.22E+06	1.31E+06	1.26E+06
8.27E+00	3.16E+05	7.91E+00	5.29E+05	7.91E+00	9.34E+05	1.21E+06	1.29E+06	1.23E+06
8.56E+00	3.12E+05	8.42E+00	5.15E+05	8.42E+00	9.00E+05	1.17E+06	1.26E+06	1.21E+06
8.87E+00	3.08E+05	8.97E+00	5.08E+05	8.97E+00	8.86E+05	1.15E+06	1.23E+06	1.18E+06
9.19E+00	3.05E+05	9.56E+00	4.97E+05	9.56E+00	8.67E+05	1.13E+06	1.20E+06	1.16E+06
9.52E+00	3.02E+05	1.02E+01	4.79E+05	1.02E+01	8.47E+05	1.12E+06	1.18E+06	1.11E+06
9.86E+00	2.95E+05	1.09E+01	4.74E+05	1.09E+01	8.32E+05	1.10E+06	1.15E+06	1.08E+06
1.00E+01	2.93E+05	1.10E+01	4.67E+05	1.10E+01	8.29E+05	1.11E+06	1.15E+06	1.07E+06
1.00E+01	2.95E+05	1.10E+01	4.70E+05	1.10E+01	8.30E+05	1.11E+06	1.15E+06	1.08E+06
1.00E+01	2.94E+05	1.10E+01	4.71E+05	1.10E+01	8.30E+05	1.10E+06	1.15E+06	1.08E+06
1.00E+01	2.94E+05	1.10E+01	4.71E+05	1.10E+01	8.29E+05	1.10E+06	1.15E+06	1.08E+06
1.01E+01	2.94E+05	1.11E+01	4.74E+05	1.11E+01	8.25E+05	1.10E+06	1.15E+06	1.07E+06
1.02E+01	2.91E+05	1.11E+01	4.79E+05	1.11E+01	8.23E+05	1.11E+06	1.15E+06	1.07E+06
1.03E+01	2.92E+05	1.11E+01	4.80E+05	1.11E+01	8.23E+05	1.10E+06	1.15E+06	1.07E+06
1.04E+01	2.88E+05	1.11E+01	4.75E+05	1.11E+01	8.22E+05	1.10E+06	1.15E+06	1.08E+06
1.05E+01	2.82E+05	1.11E+01	4.74E+05	1.11E+01	8.24E+05	1.10E+06	1.15E+06	1.08E+06
1.06E+01	2.86E+05	1.11E+01	4.74E+05	1.11E+01	8.27E+05	1.10E+06	1.15E+06	1.08E+06
1.07E+01	2.85E+05	1.11E+01	4.72E+05	1.11E+01	8.25E+05	1.10E+06	1.15E+06	1.08E+06
1.08E+01	2.83E+05	1.11E+01	4.72E+05	1.11E+01	8.25E+05	1.10E+06	1.14E+06	1.08E+06
1.09E+01	2.87E+05	1.11E+01	4.68E+05	1.11E+01	8.28E+05	1.10E+06	1.14E+06	1.08E+06

1.10E+01	2.87E+05	1.11E+01	4.68E+05	1.11E+01	8.31E+05	1.10E+06	1.14E+06	1.08E+06
1.11E+01	2.87E+05	1.12E+01	4.65E+05	1.12E+01	8.35E+05	1.10E+06	1.14E+06	1.08E+06
1.12E+01	2.82E+05	1.12E+01	4.65E+05	1.12E+01	8.35E+05	1.10E+06	1.13E+06	1.08E+06
1.13E+01	2.80E+05	1.12E+01	4.66E+05	1.12E+01	8.35E+05	1.10E+06	1.13E+06	1.06E+06
1.14E+01	2.78E+05	1.12E+01	4.72E+05	1.12E+01	8.35E+05	1.09E+06	1.13E+06	1.05E+06
1.15E+01	2.78E+05	1.12E+01	4.69E+05	1.12E+01	8.30E+05	1.09E+06	1.13E+06	1.05E+06
1.16E+01	2.78E+05	1.12E+01	4.68E+05	1.12E+01	8.24E+05	1.09E+06	1.14E+06	1.05E+06
1.17E+01	2.75E+05	1.12E+01	4.73E+05	1.12E+01	8.23E+05	1.09E+06	1.14E+06	1.05E+06
1.18E+01	2.69E+05	1.12E+01	4.76E+05	1.12E+01	8.20E+05	1.09E+06	1.14E+06	1.05E+06
1.19E+01	2.72E+05	1.12E+01	4.78E+05	1.12E+01	8.18E+05	1.09E+06	1.15E+06	1.05E+06
1.20E+01	2.70E+05	1.12E+01	4.75E+05	1.12E+01	8.22E+05	1.09E+06	1.15E+06	1.06E+06
1.21E+01	2.72E+05	1.13E+01	4.73E+05	1.13E+01	8.26E+05	1.09E+06	1.15E+06	1.06E+06
1.22E+01	2.71E+05	1.13E+01	4.73E+05	1.13E+01	8.27E+05	1.09E+06	1.15E+06	1.06E+06
1.23E+01	2.66E+05	1.13E+01	4.73E+05	1.13E+01	8.24E+05	1.09E+06	1.15E+06	1.06E+06
1.24E+01	2.65E+05	1.13E+01	4.72E+05	1.13E+01	8.23E+05	1.09E+06	1.14E+06	1.06E+06
1.25E+01	2.66E+05	1.13E+01	4.71E+05	1.13E+01	8.24E+05	1.10E+06	1.15E+06	1.06E+06
1.26E+01	2.65E+05	1.13E+01	4.73E+05	1.13E+01	8.25E+05	1.09E+06	1.15E+06	1.06E+06
1.28E+01	2.62E+05	1.13E+01	4.72E+05	1.13E+01	8.25E+05	1.09E+06	1.14E+06	1.07E+06
1.29E+01	2.63E+05	1.13E+01	4.68E+05	1.13E+01	8.24E+05	1.10E+06	1.14E+06	1.07E+06
1.31E+01	2.62E+05	1.13E+01	4.66E+05	1.13E+01	8.24E+05	1.10E+06	1.14E+06	1.06E+06
1.32E+01	2.59E+05	1.13E+01	4.64E+05	1.13E+01	8.22E+05	1.10E+06	1.14E+06	1.06E+06
1.34E+01	2.59E+05	1.14E+01	4.63E+05	1.14E+01	8.19E+05	1.10E+06	1.14E+06	1.06E+06
1.35E+01	2.56E+05	1.14E+01	4.64E+05	1.14E+01	8.19E+05	1.09E+06	1.13E+06	1.05E+06
1.37E+01	2.55E+05	1.14E+01	4.69E+05	1.14E+01	8.18E+05	1.09E+06	1.13E+06	1.06E+06
1.38E+01	2.52E+05	1.14E+01	4.72E+05	1.14E+01	8.18E+05	1.09E+06	1.13E+06	1.06E+06
1.40E+01	2.51E+05	1.14E+01	4.72E+05	1.14E+01	8.20E+05	1.09E+06	1.13E+06	1.05E+06
1.42E+01	2.51E+05	1.14E+01	4.72E+05	1.14E+01	8.16E+05	1.09E+06	1.13E+06	1.05E+06
1.44E+01	2.48E+05	1.14E+01	4.69E+05	1.14E+01	8.14E+05	1.08E+06	1.13E+06	1.05E+06
1.46E+01	2.46E+05	1.14E+01	4.70E+05	1.14E+01	8.10E+05	1.08E+06	1.13E+06	1.04E+06
1.48E+01	2.47E+05	1.15E+01	4.66E+05	1.15E+01	8.08E+05	1.08E+06	1.14E+06	1.05E+06
1.51E+01	2.47E+05	1.15E+01	4.63E+05	1.15E+01	8.00E+05	1.08E+06	1.13E+06	1.04E+06
1.53E+01	2.42E+05	1.16E+01	4.59E+05	1.16E+01	8.01E+05	1.08E+06	1.12E+06	1.04E+06
1.56E+01	2.42E+05	1.16E+01	4.60E+05	1.16E+01	8.16E+05	1.07E+06	1.12E+06	1.04E+06
1.58E+01	2.37E+05	1.17E+01	4.61E+05	1.17E+01	8.11E+05	1.09E+06	1.13E+06	1.05E+06
1.61E+01	2.36E+05	1.18E+01	4.65E+05	1.18E+01	8.08E+05	1.08E+06	1.12E+06	1.02E+06
1.64E+01	2.36E+05	1.18E+01	4.57E+05	1.18E+01	8.05E+05	1.07E+06	1.13E+06	1.03E+06
1.67E+01	2.34E+05	1.19E+01	4.53E+05	1.19E+01	8.06E+05	1.06E+06	1.13E+06	1.03E+06
1.70E+01	2.31E+05	1.20E+01	4.53E+05	1.20E+01	7.93E+05	1.06E+06	1.12E+06	1.02E+06
1.74E+01	2.30E+05	1.21E+01	4.51E+05	1.21E+01	7.92E+05	1.07E+06	1.12E+06	1.02E+06
1.77E+01	2.26E+05	1.22E+01	4.54E+05	1.22E+01	7.94E+05	1.07E+06	1.11E+06	1.02E+06
1.81E+01	2.25E+05	1.23E+01	4.53E+05	1.23E+01	7.93E+05	1.06E+06	1.11E+06	1.01E+06
1.85E+01	2.20E+05	1.25E+01	4.51E+05	1.25E+01	7.86E+05	1.05E+06	1.11E+06	9.98E+05
1.89E+01	2.22E+05	1.26E+01	4.47E+05	1.26E+01	7.84E+05	1.05E+06	1.10E+06	1.01E+06
1.93E+01	2.17E+05	1.28E+01	4.40E+05	1.28E+01	7.83E+05	1.04E+06	1.11E+06	1.01E+06

1.97E+01	2.15E+05	1.29E+01	4.43E+05	1.29E+01	7.71E+05	1.04E+06	1.10E+06	1.01E+06
2.02E+01	2.12E+05	1.31E+01	4.40E+05	1.31E+01	7.79E+05	1.03E+06	1.10E+06	1.00E+06
2.07E+01	2.10E+05	1.33E+01	4.35E+05	1.33E+01	7.65E+05	1.02E+06	1.09E+06	9.92E+05
2.12E+01	2.07E+05	1.35E+01	4.31E+05	1.35E+01	7.59E+05	1.02E+06	1.09E+06	9.90E+05
2.18E+01	2.05E+05	1.38E+01	4.23E+05	1.38E+01	7.51E+05	1.01E+06	1.06E+06	9.94E+05
2.23E+01	2.03E+05	1.41E+01	4.20E+05	1.41E+01	7.46E+05	1.01E+06	1.05E+06	9.84E+05
2.29E+01	1.99E+05	1.44E+01	4.15E+05	1.44E+01	7.39E+05	9.99E+05	1.05E+06	9.76E+05
2.35E+01	1.95E+05	1.47E+01	4.09E+05	1.47E+01	7.47E+05	9.89E+05	1.04E+06	9.61E+05
2.42E+01	1.93E+05	1.51E+01	4.09E+05	1.51E+01	7.46E+05	9.79E+05	1.03E+06	9.54E+05
2.49E+01	1.92E+05	1.55E+01	4.10E+05	1.55E+01	7.46E+05	9.68E+05	1.02E+06	9.47E+05
2.56E+01	1.90E+05	1.60E+01	4.06E+05	1.60E+01	7.34E+05	9.71E+05	1.01E+06	9.33E+05
2.63E+01	1.84E+05	1.65E+01	3.96E+05	1.65E+01	7.17E+05	9.53E+05	9.93E+05	9.24E+05
2.71E+01	1.92E+05	1.70E+01	3.93E+05	1.70E+01	7.02E+05	9.47E+05	9.77E+05	8.97E+05
2.79E+01	1.91E+05	1.76E+01	3.85E+05	1.76E+01	6.93E+05	9.33E+05	9.78E+05	8.90E+05
2.88E+01	1.91E+05	1.83E+01	3.83E+05	1.83E+01	6.78E+05	9.27E+05	9.52E+05	8.74E+05
2.97E+01	1.89E+05	1.90E+01	3.74E+05	1.90E+01	6.62E+05	9.17E+05	9.34E+05	8.84E+05
3.06E+01	1.87E+05	1.98E+01	3.74E+05	1.98E+01	6.68E+05	9.01E+05	9.30E+05	8.63E+05
3.16E+01	1.84E+05	2.06E+01	3.59E+05	2.06E+01	6.63E+05	8.86E+05	9.14E+05	8.31E+05
3.26E+01	1.81E+05	2.16E+01	3.50E+05	2.16E+01	6.53E+05	8.62E+05	8.93E+05	8.38E+05
3.37E+01	1.82E+05	2.26E+01	3.44E+05	2.26E+01	6.32E+05	8.64E+05	8.78E+05	8.10E+05
3.48E+01	1.76E+05	2.38E+01	3.32E+05	2.38E+01	6.24E+05	8.37E+05	8.63E+05	7.98E+05
3.60E+01	1.76E+05	2.50E+01	3.24E+05	2.50E+01	6.11E+05	8.21E+05	8.39E+05	7.66E+05
3.72E+01	1.71E+05	2.64E+01	3.16E+05	2.64E+01	5.95E+05	8.14E+05	8.17E+05	7.54E+05
3.85E+01	1.69E+05	2.79E+01	3.09E+05	2.79E+01	5.84E+05	7.92E+05	8.02E+05	7.34E+05
3.99E+01	1.67E+05	2.96E+01	3.08E+05	2.96E+01	5.72E+05	7.79E+05	7.78E+05	7.08E+05
4.13E+01	1.65E+05	3.14E+01	3.00E+05	3.14E+01	5.64E+05	7.64E+05	7.54E+05	6.91E+05
4.28E+01	1.63E+05	3.34E+01	2.93E+05	3.34E+01	5.41E+05	7.42E+05	7.34E+05	6.50E+05
4.44E+01	1.58E+05	3.56E+01	2.89E+05	3.56E+01	5.18E+05	7.24E+05	7.27E+05	6.40E+05
4.60E+01	1.54E+05	3.81E+01	2.74E+05	3.81E+01	5.19E+05	6.96E+05	6.89E+05	6.04E+05
4.77E+01	1.52E+05	4.07E+01	2.65E+05	4.07E+01	4.98E+05	6.85E+05	6.81E+05	6.23E+05
4.95E+01	1.51E+05	4.36E+01	2.61E+05	4.36E+01	4.78E+05	6.68E+05	6.55E+05	6.01E+05
5.14E+01	1.43E+05	4.68E+01	2.51E+05	4.68E+01	4.76E+05	6.40E+05	6.46E+05	5.80E+05
5.33E+01	1.40E+05	5.03E+01	2.57E+05	5.03E+01	4.57E+05	6.26E+05	6.22E+05	5.55E+05
5.54E+01	1.37E+05	5.42E+01	2.51E+05	5.42E+01	4.34E+05	6.06E+05	5.95E+05	5.32E+05
5.76E+01	1.32E+05	5.84E+01	2.32E+05	5.84E+01	4.24E+05	5.82E+05	5.72E+05	4.91E+05
5.98E+01	1.34E+05	6.30E+01	2.37E+05	6.30E+01	4.12E+05	5.65E+05	5.66E+05	4.83E+05
6.22E+01	1.31E+05	6.81E+01	2.32E+05	6.81E+01	3.95E+05	5.51E+05	5.55E+05	4.59E+05
6.47E+01	1.25E+05	7.37E+01	2.16E+05	7.37E+01	3.80E+05	5.42E+05	5.20E+05	4.21E+05
6.72E+01	1.25E+05	7.98E+01	2.10E+05	7.98E+01	3.59E+05	5.15E+05	5.06E+05	4.08E+05
7.00E+01	1.15E+05	8.65E+01	2.01E+05	8.65E+01	3.43E+05	4.98E+05	4.83E+05	3.97E+05
7.28E+01	1.36E+05	9.39E+01	2.05E+05	9.39E+01	3.44E+05	4.84E+05	4.77E+05	3.73E+05
7.58E+01	1.45E+05	1.02E+02	1.91E+05	1.02E+02	3.31E+05	4.45E+05	4.27E+05	3.48E+05
7.89E+01	1.40E+05	1.11E+02	1.93E+05	1.11E+02	3.14E+05	4.27E+05	4.34E+05	3.19E+05
8.22E+01	1.37E+05	1.11E+02	1.99E+05	1.11E+02	3.13E+05	4.17E+05	4.39E+05	3.20E+05

8.56E+01	1.35E+05	1.11E+02	1.96E+05	1.11E+02	3.14E+05	4.15E+05	4.37E+05	3.21E+05
8.92E+01	1.28E+05	1.11E+02	2.02E+05	1.11E+02	3.16E+05	4.20E+05	4.33E+05	3.22E+05
9.30E+01	1.26E+05	1.11E+02	2.04E+05	1.11E+02	3.19E+05	4.23E+05	4.30E+05	3.21E+05
9.69E+01	1.20E+05	1.11E+02	1.99E+05	1.11E+02	3.20E+05	4.24E+05	4.29E+05	3.22E+05
1.01E+02	1.19E+05	1.11E+02	1.94E+05	1.11E+02	3.17E+05	4.24E+05	4.27E+05	3.15E+05
1.05E+02	1.17E+05	1.11E+02	1.94E+05	1.11E+02	3.13E+05	4.23E+05	4.26E+05	3.09E+05
1.10E+02	1.14E+05	1.11E+02	1.92E+05	1.11E+02	3.11E+05	4.18E+05	4.28E+05	3.09E+05
1.11E+02	1.15E+05	1.11E+02	1.94E+05	1.11E+02	3.10E+05	4.18E+05	4.31E+05	3.11E+05
1.12E+02	1.14E+05	1.11E+02	1.96E+05	1.11E+02	3.14E+05	4.24E+05	4.38E+05	3.13E+05
1.13E+02	1.14E+05	1.11E+02	1.93E+05	1.11E+02	3.16E+05	4.26E+05	4.42E+05	3.20E+05
1.14E+02	1.13E+05	1.11E+02	1.90E+05	1.11E+02	3.10E+05	4.28E+05	4.42E+05	3.17E+05
1.15E+02	1.11E+05	1.11E+02	1.92E+05	1.11E+02	3.13E+05	4.32E+05	4.43E+05	3.18E+05
1.16E+02	1.09E+05	1.11E+02	1.90E+05	1.11E+02	3.14E+05	4.31E+05	4.44E+05	3.29E+05
1.16E+02	1.12E+05	1.11E+02	1.91E+05	1.11E+02	3.11E+05	4.34E+05	4.44E+05	3.33E+05
1.17E+02	1.14E+05	1.11E+02	1.97E+05	1.11E+02	3.11E+05	4.37E+05	4.47E+05	3.23E+05
1.18E+02	1.13E+05	1.11E+02	1.96E+05	1.11E+02	3.12E+05	4.39E+05	4.48E+05	3.23E+05
1.19E+02	1.12E+05	1.11E+02	1.96E+05	1.11E+02	3.07E+05	4.42E+05	4.44E+05	3.21E+05
1.20E+02	1.13E+05	1.11E+02	1.94E+05	1.11E+02	3.10E+05	4.44E+05	4.41E+05	3.18E+05
1.21E+02	1.12E+05	1.11E+02	1.96E+05	1.11E+02	3.14E+05	4.46E+05	4.35E+05	3.26E+05
1.21E+02	1.10E+05	1.11E+02	1.94E+05	1.11E+02	3.15E+05	4.48E+05	4.36E+05	3.26E+05
1.22E+02	1.12E+05	1.11E+02	1.91E+05	1.11E+02	3.15E+05	4.48E+05	4.36E+05	3.24E+05
1.23E+02	1.13E+05	1.11E+02	1.92E+05	1.11E+02	3.16E+05	4.48E+05	4.40E+05	3.25E+05
1.24E+02	1.12E+05	1.11E+02	1.96E+05	1.11E+02	3.14E+05	4.48E+05	4.41E+05	3.19E+05
1.25E+02	1.10E+05	1.11E+02	1.95E+05	1.11E+02	3.14E+05	4.48E+05	4.40E+05	3.26E+05
1.25E+02	1.05E+05	1.11E+02	1.93E+05	1.11E+02	3.10E+05	4.44E+05	4.42E+05	3.38E+05
1.26E+02	1.07E+05	1.11E+02	1.95E+05	1.11E+02	3.09E+05	4.39E+05	4.39E+05	3.45E+05
1.27E+02	1.05E+05	1.11E+02	1.96E+05	1.11E+02	3.11E+05	4.36E+05	4.39E+05	3.43E+05
1.28E+02	1.04E+05	1.11E+02	1.94E+05	1.11E+02	3.08E+05	4.36E+05	4.38E+05	3.45E+05
1.29E+02	1.02E+05	1.11E+02	1.90E+05	1.11E+02	3.08E+05	4.38E+05	4.36E+05	3.43E+05
1.31E+02	9.95E+04	1.11E+02	1.88E+05	1.11E+02	3.10E+05	4.38E+05	4.36E+05	3.36E+05
1.32E+02	1.02E+05	1.11E+02	1.89E+05	1.11E+02	3.14E+05	4.33E+05	4.34E+05	3.41E+05
1.33E+02	1.05E+05	1.11E+02	1.92E+05	1.11E+02	3.11E+05	4.33E+05	4.36E+05	3.51E+05
1.35E+02	1.01E+05	1.11E+02	1.87E+05	1.11E+02	3.07E+05	4.40E+05	4.37E+05	3.59E+05
1.36E+02	1.02E+05	1.12E+02	1.91E+05	1.11E+02	3.07E+05	4.30E+05	4.36E+05	3.36E+05
1.38E+02	1.01E+05	1.12E+02	1.89E+05	1.11E+02	3.12E+05	4.28E+05	4.28E+05	3.40E+05
1.39E+02	1.03E+05	1.12E+02	1.93E+05	1.12E+02	3.11E+05	4.28E+05	4.30E+05	3.42E+05
1.41E+02	1.00E+05	1.12E+02	1.88E+05	1.12E+02	3.18E+05	4.29E+05	4.26E+05	3.36E+05
1.43E+02	1.00E+05	1.12E+02	1.87E+05	1.12E+02	3.13E+05	4.32E+05	4.30E+05	3.23E+05
1.45E+02	9.99E+04	1.12E+02	1.91E+05	1.12E+02	3.14E+05	4.36E+05	4.27E+05	3.28E+05
1.47E+02	9.75E+04	1.12E+02	1.86E+05	1.12E+02	3.05E+05	4.36E+05	4.25E+05	3.35E+05
1.49E+02	9.77E+04	1.12E+02	1.89E+05	1.12E+02	3.11E+05	4.32E+05	4.35E+05	3.30E+05
1.51E+02	9.72E+04	1.12E+02	1.92E+05	1.12E+02	3.10E+05	4.31E+05	4.30E+05	3.34E+05
1.54E+02	9.34E+04	1.12E+02	1.91E+05	1.12E+02	3.02E+05	4.33E+05	4.26E+05	3.22E+05
1.56E+02	9.33E+04	1.13E+02	1.98E+05	1.12E+02	3.15E+05	4.37E+05	4.28E+05	3.31E+05

1.59E+02	9.40E+04	1.13E+02	1.95E+05	1.12E+02	3.02E+05	4.26E+05	4.26E+05	3.33E+05
1.62E+02	9.23E+04	1.13E+02	1.89E+05	1.13E+02	3.05E+05	4.28E+05	4.34E+05	3.14E+05
1.65E+02	9.12E+04	1.13E+02	1.88E+05	1.13E+02	3.07E+05	4.25E+05	4.31E+05	3.19E+05
1.69E+02	9.18E+04	1.14E+02	1.90E+05	1.13E+02	3.03E+05	4.27E+05	4.37E+05	3.26E+05
1.72E+02	9.11E+04	1.14E+02	1.92E+05	1.13E+02	3.06E+05	4.27E+05	4.27E+05	3.26E+05
1.76E+02	8.99E+04	1.14E+02	2.01E+05	1.13E+02	3.00E+05	4.30E+05	4.18E+05	3.29E+05
1.80E+02	8.91E+04	1.15E+02	1.93E+05	1.14E+02	3.12E+05	4.31E+05	4.34E+05	3.21E+05
1.84E+02	8.90E+04	1.15E+02	1.91E+05	1.14E+02	3.03E+05	4.23E+05	4.21E+05	3.20E+05
1.88E+02	8.68E+04	1.16E+02	1.88E+05	1.14E+02	3.14E+05	4.18E+05	4.17E+05	3.12E+05
1.93E+02	9.08E+04	1.16E+02	1.92E+05	1.15E+02	3.07E+05	4.18E+05	4.33E+05	3.09E+05
1.98E+02	9.13E+04	1.17E+02	1.94E+05	1.15E+02	3.01E+05	4.23E+05	4.24E+05	3.01E+05
2.03E+02	8.94E+04	1.18E+02	1.95E+05	1.16E+02	3.06E+05	4.19E+05	4.21E+05	3.02E+05
2.09E+02	9.26E+04	1.18E+02	1.95E+05	1.17E+02	3.07E+05	4.19E+05	4.29E+05	3.20E+05
2.15E+02	8.40E+04	1.19E+02	1.98E+05	1.17E+02	2.99E+05	4.10E+05	4.22E+05	3.14E+05
2.21E+02	8.59E+04	1.20E+02	2.02E+05	1.18E+02	3.03E+05	4.07E+05	4.19E+05	3.09E+05
2.27E+02	8.34E+04	1.22E+02	1.91E+05	1.19E+02	3.09E+05	4.11E+05	4.32E+05	2.96E+05
2.34E+02	8.52E+04	1.23E+02	1.86E+05	1.20E+02	3.11E+05	4.18E+05	4.35E+05	3.05E+05
2.42E+02	8.15E+04	1.24E+02	1.88E+05	1.21E+02	3.02E+05	4.04E+05	4.24E+05	3.03E+05
2.50E+02	8.02E+04	1.26E+02	1.79E+05	1.22E+02	2.88E+05	4.14E+05	4.24E+05	2.95E+05
2.58E+02	8.67E+04	1.28E+02	1.82E+05	1.23E+02	3.03E+05	4.19E+05	4.25E+05	2.88E+05
2.67E+02	8.49E+04	1.30E+02	1.75E+05	1.25E+02	3.05E+05	4.13E+05	4.19E+05	2.94E+05
2.76E+02	8.11E+04	1.32E+02	1.83E+05	1.26E+02	2.93E+05	4.26E+05	4.19E+05	2.92E+05
2.86E+02	7.95E+04	1.35E+02	1.78E+05	1.28E+02	2.91E+05	4.06E+05	4.26E+05	2.87E+05
2.97E+02	8.46E+04	1.38E+02	1.80E+05	1.30E+02	2.96E+05	3.98E+05	4.25E+05	2.75E+05
3.08E+02	8.61E+04	1.41E+02	1.91E+05	1.32E+02	2.83E+05	4.15E+05	4.14E+05	2.75E+05
3.20E+02	8.79E+04	1.45E+02	1.99E+05	1.35E+02	2.75E+05	3.95E+05	4.09E+05	2.53E+05
3.32E+02	8.32E+04	1.49E+02	1.98E+05	1.38E+02	2.89E+05	3.84E+05	4.10E+05	2.48E+05
3.45E+02	8.84E+04	1.54E+02	1.90E+05	1.41E+02	2.71E+05	3.92E+05	3.86E+05	2.38E+05
3.59E+02	9.24E+04	1.59E+02	1.88E+05	1.44E+02	2.73E+05	3.81E+05	3.94E+05	2.34E+05
3.74E+02	8.73E+04	1.65E+02	1.90E+05	1.48E+02	2.81E+05	3.66E+05	3.84E+05	2.32E+05
3.90E+02	8.72E+04	1.72E+02	1.87E+05	1.53E+02	2.71E+05	3.67E+05	3.77E+05	2.31E+05
4.07E+02	8.39E+04	1.80E+02	1.98E+05	1.57E+02	2.55E+05	3.57E+05	3.76E+05	2.27E+05
4.24E+02	8.58E+04	1.88E+02	1.85E+05	1.63E+02	2.55E+05	3.53E+05	3.75E+05	2.06E+05
4.43E+02	8.95E+04	1.98E+02	1.74E+05	1.69E+02	2.56E+05	3.64E+05	3.67E+05	2.09E+05
4.63E+02	8.80E+04	2.09E+02	1.77E+05	1.76E+02	2.52E+05	3.53E+05	3.50E+05	2.17E+05
4.84E+02	8.89E+04	2.21E+02	1.79E+05	1.83E+02	2.46E+05	3.56E+05	3.55E+05	1.61E+05
5.06E+02	8.34E+04	2.34E+02	1.86E+05	1.92E+02	2.40E+05	3.25E+05	3.48E+05	1.73E+05
5.30E+02	8.98E+04	2.49E+02	1.80E+05	2.02E+02	2.40E+05	3.11E+05	3.46E+05	1.60E+05
5.55E+02	8.45E+04	2.66E+02	1.79E+05	2.12E+02	2.43E+05	3.27E+05	3.52E+05	1.55E+05
5.81E+02	8.55E+04	2.86E+02	1.86E+05	2.24E+02	2.27E+05	3.04E+05	3.47E+05	1.44E+05
6.09E+02	8.58E+04	3.07E+02	1.90E+05	2.37E+02	2.20E+05	2.94E+05	3.35E+05	1.45E+05
6.39E+02	8.24E+04	3.31E+02	1.79E+05	2.52E+02	2.10E+05	2.82E+05	3.24E+05	1.21E+05
6.71E+02	8.39E+04	3.59E+02	1.81E+05	2.69E+02	2.10E+05	2.68E+05	3.16E+05	1.37E+05
7.04E+02	9.21E+04	3.89E+02	1.79E+05	2.88E+02	2.00E+05	2.52E+05	2.96E+05	8.52E+04

7.39E+02	9.33E+04	4.23E+02	1.84E+05	3.08E+02	2.01E+05	2.64E+05	3.01E+05	8.09E+04
7.77E+02	9.26E+04	4.62E+02	1.78E+05	3.32E+02	1.96E+05	2.25E+05	2.92E+05	6.68E+04
8.17E+02	9.86E+04	5.05E+02	1.85E+05	3.57E+02	1.86E+05	2.41E+05	2.77E+05	6.70E+04
8.59E+02	9.09E+04	5.54E+02	1.79E+05	3.86E+02	1.68E+05	2.20E+05	2.77E+05	5.12E+04
9.03E+02	8.90E+04	6.09E+02	1.91E+05	4.19E+02	1.74E+05	1.96E+05	2.92E+05	6.58E+04
9.51E+02	8.76E+04	6.70E+02	1.88E+05	4.55E+02	1.57E+05	1.96E+05	2.80E+05	4.74E+04
1.00E+03	9.25E+04	7.39E+02	1.94E+05	4.96E+02	1.46E+05	1.79E+05	2.64E+05	7.28E+03
1.05E+03	9.51E+04	8.16E+02	1.83E+05	5.41E+02	1.34E+05	1.75E+05	2.60E+05	1.30E+04
1.11E+03	1.04E+05	9.03E+02	1.90E+05	5.91E+02	1.54E+05	1.51E+05	2.75E+05	3.82E+04
1.11E+03	1.09E+05	1.00E+03	2.12E+05	6.48E+02	1.38E+05	1.41E+05	2.68E+05	2.83E+04
1.11E+03	1.09E+05	1.11E+03	2.07E+05	7.11E+02	1.39E+05	1.26E+05	2.52E+05	7.94E+03

**III.10 Data of the stress relaxation ($G(t)$) of PPO/PI-100 (40/60) blends
(Figure 3.10). % Strain = 0.4, Temperature = 50°C, Time = 0-1000 s**

C _{tb} = 0 wt %				Time (second)	C _{tb} =1 wt%	C _{tb} =9 wt%	Time (second)	C _{tb} = 20 wt %	
Time (second)	G(t) dyn/cm ²	Time (second) (repeat)	G(t) dyn/cm ² (repeat)		G(t) dyn/cm ²	G(t) dyn/cm ²		G(t) dyn/cm ²	G(t) dyn/cm ² (repeat)
1.0E-02	8.06E+05	1.0E-02	3.64E+06	1.0E-02	1.01E+06	1.60E+06	1.0E-02	2.05E+06	3.77E+06
2.0E-02	6.11E+05	2.0E-02	2.22E+06	2.0E-02	7.84E+05	1.22E+06	2.0E-02	1.52E+06	9.79E+05
3.0E-02	5.08E+05	3.0E-02	1.69E+06	3.0E-02	6.80E+05	9.40E+05	3.0E-02	7.72E+05	3.16E+05
4.0E-02	4.40E+05	4.0E-02	1.43E+06	4.0E-02	5.72E+05	7.21E+05	4.0E-02	5.03E+05	2.12E+05
5.0E-02	3.93E+05	5.0E-02	1.28E+06	5.0E-02	4.73E+05	5.56E+05	5.0E-02	3.44E+05	1.80E+05
6.0E-02	3.60E+05	6.0E-02	1.19E+06	6.0E-02	3.89E+05	4.33E+05	6.0E-02	1.98E+05	1.32E+05
7.0E-02	3.38E+05	7.0E-02	1.12E+06	7.0E-02	3.25E+05	3.41E+05	7.0E-02	1.59E+05	4.33E+04
8.0E-02	3.22E+05	8.0E-02	1.08E+06	8.0E-02	2.74E+05	2.72E+05	8.0E-02	1.31E+05	4.85E+04
9.0E-02	3.11E+05	9.0E-02	1.05E+06	9.0E-02	2.36E+05	2.26E+05	9.0E-02	1.15E+05	5.69E+04
1.0E-01	3.04E+05	1.0E-01	1.03E+06	1.0E-01	2.08E+05	1.93E+05	1.0E-01	1.03E+05	7.75E+04
1.1E-01	2.98E+05	1.1E-01	1.01E+06	1.1E-01	1.87E+05	1.70E+05	1.1E-01	9.48E+04	8.57E+04
1.2E-01	2.95E+05	1.2E-01	9.96E+05	1.2E-01	1.73E+05	1.57E+05	1.2E-01	9.32E+04	8.60E+04
1.3E-01	2.92E+05	1.3E-01	9.85E+05	1.3E-01	1.62E+05	1.48E+05	1.3E-01	9.12E+04	8.11E+04
1.4E-01	2.89E+05	1.4E-01	9.75E+05	1.4E-01	1.55E+05	1.42E+05	1.4E-01	9.04E+04	7.31E+04
1.5E-01	2.88E+05	1.5E-01	9.71E+05	1.5E-01	1.51E+05	1.41E+05	1.5E-01	9.42E+04	6.40E+04
1.6E-01	2.86E+05	1.6E-01	9.63E+05	1.6E-01	1.46E+05	1.38E+05	1.6E-01	9.59E+04	5.47E+04
1.7E-01	2.84E+05	1.7E-01	9.60E+05	1.7E-01	1.44E+05	1.37E+05	1.7E-01	9.54E+04	4.57E+04
1.8E-01	2.83E+05	1.8E-01	9.55E+05	1.8E-01	1.41E+05	1.38E+05	1.8E-01	9.80E+04	3.76E+04
1.9E-01	2.81E+05	1.9E-01	9.48E+05	1.9E-01	1.38E+05	1.38E+05	1.9E-01	9.93E+04	3.01E+04
2.0E-01	2.80E+05	2.0E-01	9.46E+05	2.0E-01	1.37E+05	1.38E+05	2.0E-01	9.89E+04	2.30E+04
2.1E-01	2.79E+05	2.1E-01	9.39E+05	2.1E-01	1.34E+05	1.40E+05	2.1E-01	1.01E+05	1.68E+04

2.2E-01	2.78E+05	2.2E-01	9.39E+05	2.2E-01	1.33E+05	1.39E+05	2.2E-01	1.03E+05	1.12E+04
2.3E-01	2.76E+05	2.3E-01	9.35E+05	2.3E-01	1.31E+05	1.37E+05	2.3E-01	1.02E+05	5.82E+04
2.4E-01	2.75E+05	2.4E-01	9.34E+05	2.4E-01	1.29E+05	1.38E+05	2.4E-01	1.04E+05	1.36E+04
2.5E-01	2.74E+05	2.5E-01	9.35E+05	2.5E-01	1.29E+05	1.37E+05	2.5E-01	1.05E+05	2.24E+04
2.6E-01	2.73E+05	2.6E-01	9.27E+05	2.6E-01	1.26E+05	1.35E+05	2.6E-01	1.02E+05	5.85E+04
2.7E-01	2.73E+05	2.7E-01	9.26E+05	2.7E-01	1.25E+05	1.36E+05	2.7E-01	1.01E+05	8.91E+04
2.8E-01	2.71E+05	2.8E-01	9.21E+05	2.8E-01	1.23E+05	1.35E+05	2.8E-01	1.02E+05	1.12E+04
2.9E-01	2.71E+05	2.9E-01	9.19E+05	2.9E-01	1.21E+05	1.33E+05	2.9E-01	1.00E+05	1.36E+04
3.0E-01	2.70E+05	3.0E-01	9.17E+05	3.0E-01	1.21E+05	1.34E+05	3.0E-01	1.00E+05	1.60E+04
3.1E-01	2.69E+05	3.1E-01	9.13E+05	3.1E-01	1.18E+05	1.33E+05	3.1E-01	1.03E+05	1.78E+04
3.2E-01	2.68E+05	3.2E-01	9.14E+05	3.2E-01	1.18E+05	1.31E+05	3.2E-01	1.01E+05	1.95E+04
3.3E-01	2.67E+05	3.3E-01	9.12E+05	3.3E-01	1.16E+05	1.33E+05	3.3E-01	9.97E+04	2.14E+04
3.4E-01	2.66E+05	3.4E-01	9.13E+05	3.4E-01	1.15E+05	1.32E+05	3.4E-01	1.01E+05	2.26E+04
3.5E-01	2.65E+05	3.5E-01	9.15E+05	3.5E-01	1.15E+05	1.30E+05	3.5E-01	9.94E+04	2.35E+04
3.6E-01	2.63E+05	3.6E-01	9.10E+05	3.6E-01	1.11E+05	1.31E+05	3.6E-01	9.85E+04	2.47E+04
3.7E-01	2.63E+05	3.7E-01	9.11E+05	3.7E-01	1.11E+05	1.31E+05	3.7E-01	9.96E+04	2.60E+04
3.8E-01	2.62E+05	3.8E-01	9.06E+05	3.8E-01	1.08E+05	1.29E+05	3.8E-01	9.77E+04	2.67E+04
3.9E-01	2.62E+05	3.9E-01	9.08E+05	3.9E-01	1.07E+05	1.29E+05	3.9E-01	9.72E+04	2.74E+04
4.0E-01	2.62E+05	4.0E-01	9.08E+05	4.0E-01	1.07E+05	1.28E+05	4.0E-01	9.97E+04	2.86E+04
4.1E-01	2.61E+05	4.1E-01	9.05E+05	4.1E-01	1.05E+05	1.26E+05	4.1E-01	9.88E+04	2.92E+04
4.2E-01	2.61E+05	4.2E-01	9.07E+05	4.2E-01	1.06E+05	1.27E+05	4.2E-01	9.72E+04	2.98E+04
4.3E-01	2.60E+05	4.3E-01	9.02E+05	4.3E-01	1.04E+05	1.26E+05	4.3E-01	9.88E+04	3.07E+04
4.4E-01	2.59E+05	4.4E-01	9.02E+05	4.4E-01	1.04E+05	1.23E+05	4.4E-01	9.75E+04	3.14E+04
4.5E-01	2.59E+05	4.5E-01	8.98E+05	4.5E-01	1.03E+05	1.24E+05	4.5E-01	9.44E+04	3.16E+04
4.6E-01	2.59E+05	4.6E-01	8.94E+05	4.6E-01	1.01E+05	1.23E+05	4.6E-01	9.50E+04	3.21E+04
4.7E-01	2.58E+05	4.7E-01	8.95E+05	4.7E-01	1.02E+05	1.21E+05	4.7E-01	9.29E+04	3.28E+04
4.8E-01	2.58E+05	4.8E-01	8.90E+05	4.8E-01	9.99E+04	1.22E+05	4.8E-01	9.04E+04	3.29E+04
4.9E-01	2.57E+05	4.9E-01	8.93E+05	4.9E-01	9.92E+04	1.20E+05	4.9E-01	9.30E+04	3.31E+04
5.0E-01	2.57E+05	5.0E-01	8.92E+05	5.0E-01	9.93E+04	1.18E+05	5.0E-01	9.44E+04	3.36E+04
5.1E-01	2.57E+05	5.1E-01	8.94E+05	5.1E-01	9.72E+04	1.19E+05	5.1E-01	9.28E+04	3.38E+04
5.2E-01	2.56E+05	5.2E-01	8.97E+05	5.2E-01	9.86E+04	1.18E+05	5.2E-01	9.38E+04	3.36E+04
5.3E-01	2.56E+05	5.3E-01	8.94E+05	5.3E-01	9.72E+04	1.16E+05	5.3E-01	9.37E+04	3.39E+04
5.4E-01	2.56E+05	5.4E-01	8.95E+05	5.4E-01	9.71E+04	1.17E+05	5.4E-01	9.05E+04	3.45E+04
5.5E-01	2.56E+05	5.5E-01	8.92E+05	5.5E-01	9.77E+04	1.16E+05	5.5E-01	9.11E+04	3.46E+04
5.6E-01	2.56E+05	5.6E-01	8.91E+05	5.6E-01	9.56E+04	1.13E+05	5.6E-01	9.13E+04	3.50E+04
5.7E-01	2.55E+05	5.7E-01	8.90E+05	5.7E-01	9.70E+04	1.14E+05	5.7E-01	8.92E+04	3.57E+04
5.8E-01	2.55E+05	5.8E-01	8.86E+05	5.8E-01	9.56E+04	1.14E+05	5.8E-01	9.21E+04	3.59E+04
5.9E-01	2.55E+05	5.9E-01	8.89E+05	5.9E-01	9.52E+04	1.12E+05	5.9E-01	9.51E+04	3.60E+04
6.0E-01	2.54E+05	6.0E-01	8.86E+05	6.0E-01	9.56E+04	1.14E+05	6.0E-01	9.41E+04	3.64E+04
6.1E-01	2.54E+05	6.1E-01	8.88E+05	6.1E-01	9.34E+04	1.14E+05	6.1E-01	9.48E+04	3.69E+04
6.2E-01	2.54E+05	6.2E-01	8.88E+05	6.2E-01	9.43E+04	1.11E+05	6.2E-01	9.48E+04	3.67E+04

6.3E-01	2.53E+05	6.3E-01	8.83E+05	6.3E-01	9.25E+04	1.12E+05	6.3E-01	8.96E+04	3.68E+04
6.4E-01	2.52E+05	6.4E-01	8.86E+05	6.4E-01	9.20E+04	1.13E+05	6.4E-01	8.67E+04	3.71E+04
6.5E-01	2.52E+05	6.5E-01	8.83E+05	6.5E-01	9.26E+04	1.11E+05	6.5E-01	8.71E+04	3.71E+04
6.6E-01	2.51E+05	6.6E-01	8.84E+05	6.6E-01	9.09E+04	1.12E+05	6.6E-01	8.33E+04	3.71E+04
6.7E-01	2.52E+05	6.7E-01	8.85E+05	6.7E-01	9.25E+04	1.13E+05	6.7E-01	8.08E+04	3.75E+04
6.8E-01	2.51E+05	6.8E-01	8.83E+05	6.8E-01	9.10E+04	1.11E+05	6.8E-01	8.28E+04	3.79E+04
6.9E-01	2.51E+05	6.9E-01	8.86E+05	6.9E-01	9.04E+04	1.12E+05	6.9E-01	8.26E+04	3.79E+04
7.0E-01	2.51E+05	7.0E-01	8.82E+05	7.0E-01	9.10E+04	1.12E+05	7.0E-01	8.32E+04	3.82E+04
7.1E-01	2.50E+05	7.1E-01	8.85E+05	7.1E-01	8.87E+04	1.09E+05	7.1E-01	8.72E+04	3.86E+04
7.2E-01	2.50E+05	7.2E-01	8.86E+05	7.2E-01	9.02E+04	1.10E+05	7.2E-01	8.71E+04	3.88E+04
7.3E-01	2.49E+05	7.3E-01	8.85E+05	7.3E-01	8.92E+04	1.11E+05	7.3E-01	8.64E+04	3.87E+04
7.4E-01	2.49E+05	7.4E-01	8.89E+05	7.4E-01	8.90E+04	1.09E+05	7.4E-01	8.75E+04	3.91E+04
7.5E-01	2.49E+05	7.5E-01	8.83E+05	7.5E-01	8.99E+04	1.09E+05	7.5E-01	8.34E+04	3.93E+04
7.6E-01	2.48E+05	7.6E-01	8.86E+05	7.6E-01	8.78E+04	1.10E+05	7.6E-01	7.90E+04	3.92E+04
7.7E-01	2.48E+05	7.7E-01	8.86E+05	7.7E-01	8.88E+04	1.08E+05	7.7E-01	8.05E+04	3.94E+04
7.8E-01	2.48E+05	7.8E-01	8.83E+05	7.8E-01	8.78E+04	1.08E+05	7.8E-01	8.16E+04	3.99E+04
7.9E-01	2.47E+05	7.9E-01	8.85E+05	7.9E-01	8.73E+04	1.10E+05	7.9E-01	8.23E+04	3.99E+04
8.0E-01	2.48E+05	8.0E-01	8.80E+05	8.0E-01	8.83E+04	1.08E+05	8.0E-01	8.61E+04	3.98E+04
8.1E-01	2.47E+05	8.1E-01	8.81E+05	8.1E-01	8.62E+04	1.08E+05	8.1E-01	8.60E+04	4.01E+04
8.2E-01	2.47E+05	8.2E-01	8.80E+05	8.2E-01	8.74E+04	1.08E+05	8.2E-01	8.23E+04	4.02E+04
8.3E-01	2.47E+05	8.3E-01	8.78E+05	8.3E-01	8.55E+04	1.06E+05	8.3E-01	8.25E+04	4.00E+04
8.4E-01	2.47E+05	8.4E-01	8.80E+05	8.4E-01	8.43E+04	1.06E+05	8.4E-01	8.14E+04	4.01E+04
8.5E-01	2.47E+05	8.5E-01	8.75E+05	8.5E-01	8.46E+04	1.07E+05	8.5E-01	7.81E+04	4.03E+04
8.6E-01	2.47E+05	8.6E-01	8.77E+05	8.6E-01	8.23E+04	1.05E+05	8.6E-01	7.99E+04	4.02E+04
8.7E-01	2.46E+05	8.7E-01	8.73E+05	8.7E-01	8.43E+04	1.06E+05	8.7E-01	8.05E+04	4.01E+04
8.8E-01	2.47E+05	8.8E-01	8.72E+05	8.8E-01	8.35E+04	1.07E+05	8.8E-01	7.92E+04	4.04E+04
8.9E-01	2.47E+05	8.9E-01	8.73E+05	8.9E-01	8.32E+04	1.05E+05	8.9E-01	8.05E+04	4.06E+04
9.0E-01	2.46E+05	9.0E-01	8.68E+05	9.0E-01	8.42E+04	1.04E+05	9.0E-01	8.17E+04	4.03E+04
9.1E-01	2.46E+05	9.1E-01	8.71E+05	9.1E-01	8.23E+04	1.06E+05	9.1E-01	7.94E+04	4.04E+04
9.2E-01	2.46E+05	9.2E-01	8.69E+05	9.2E-01	8.35E+04	1.04E+05	9.2E-01	8.14E+04	4.05E+04
9.3E-01	2.46E+05	9.3E-01	8.71E+05	9.3E-01	8.23E+04	1.04E+05	9.3E-01	8.23E+04	4.03E+04
9.4E-01	2.46E+05	9.4E-01	8.72E+05	9.4E-01	8.20E+04	1.05E+05	9.4E-01	7.91E+04	4.03E+04
9.5E-01	2.46E+05	9.5E-01	8.71E+05	9.5E-01	8.35E+04	1.03E+05	9.5E-01	7.91E+04	4.07E+04
9.6E-01	2.47E+05	9.6E-01	8.77E+05	9.6E-01	8.22E+04	1.03E+05	9.6E-01	8.08E+04	4.08E+04
9.7E-01	2.47E+05	9.7E-01	8.74E+05	9.7E-01	8.40E+04	1.05E+05	9.7E-01	7.84E+04	4.05E+04
9.8E-01	2.46E+05	9.8E-01	8.78E+05	9.8E-01	8.29E+04	1.03E+05	9.8E-01	7.65E+04	4.06E+04
9.9E-01	2.46E+05	9.9E-01	8.80E+05	9.9E-01	8.25E+04	1.02E+05	9.9E-01	7.70E+04	4.08E+04
1.0E+00	2.46E+05	1.0E+00	8.76E+05	1.0E+00	8.35E+04	1.03E+05	1.0E+00	7.32E+04	4.08E+04
1.0E+00	2.46E+05	1.0E+00	8.77E+05	1.0E+00	8.13E+04	1.02E+05	1.0E+00	7.08E+04	4.09E+04
1.0E+00	2.46E+05	1.0E+00	8.73E+05	1.0E+00	8.30E+04	1.01E+05	1.0E+00	7.22E+04	4.12E+04
1.0E+00	2.45E+05	1.0E+00	8.75E+05	1.0E+00	8.22E+04	1.03E+05	1.0E+00	7.11E+04	4.12E+04

1.0E+00	2.45E+05	1.0E+00	8.73E+05	1.0E+00	8.19E+04	1.01E+05	1.0E+00	7.05E+04	4.08E+04
1.1E+00	2.45E+05	1.1E+00	8.71E+05	1.1E+00	7.76E+04	9.97E+04	1.1E+00	7.29E+04	4.17E+04
1.1E+00	2.44E+05	1.1E+00	8.75E+05	1.2E+00	7.85E+04	1.01E+05	1.2E+00	7.27E+04	4.16E+04
1.1E+00	2.44E+05	1.1E+00	8.69E+05	1.3E+00	7.73E+04	9.95E+04	1.3E+00	6.86E+04	4.19E+04
1.1E+00	2.43E+05	1.1E+00	8.68E+05	1.4E+00	7.34E+04	9.59E+04	1.4E+00	6.69E+04	4.27E+04
1.1E+00	2.44E+05	1.1E+00	8.65E+05	1.5E+00	7.40E+04	9.57E+04	1.5E+00	6.61E+04	4.34E+04
1.1E+00	2.44E+05	1.1E+00	8.62E+05	1.6E+00	7.24E+04	9.41E+04	1.6E+00	6.82E+04	4.40E+04
1.1E+00	2.43E+05	1.1E+00	8.67E+05	1.7E+00	6.99E+04	9.01E+04	1.7E+00	5.72E+04	4.42E+04
1.1E+00	2.43E+05	1.1E+00	8.63E+05	1.8E+00	6.90E+04	8.84E+04	1.8E+00	7.01E+04	4.46E+04
1.1E+00	2.43E+05	1.1E+00	8.65E+05	1.9E+00	6.75E+04	8.76E+04	1.9E+00	6.02E+04	4.51E+04
1.1E+00	2.42E+05	1.1E+00	8.63E+05	2.0E+00	6.52E+04	8.68E+04	2.0E+00	6.45E+04	4.52E+04
1.2E+00	2.43E+05	1.2E+00	8.60E+05	2.1E+00	6.62E+04	8.68E+04	2.1E+00	5.79E+04	4.50E+04
1.2E+00	2.43E+05	1.2E+00	8.62E+05	2.2E+00	6.39E+04	8.27E+04	2.2E+00	5.42E+04	4.60E+04
1.2E+00	2.43E+05	1.2E+00	8.60E+05	2.3E+00	6.41E+04	8.26E+04	2.3E+00	5.56E+04	4.59E+04
1.2E+00	2.42E+05	1.2E+00	8.64E+05	2.4E+00	6.44E+04	8.10E+04	2.4E+00	5.72E+04	4.57E+04
1.2E+00	2.41E+05	1.2E+00	8.63E+05	2.5E+00	6.25E+04	7.97E+04	2.5E+00	5.82E+04	4.60E+04
1.2E+00	2.41E+05	1.2E+00	8.63E+05	2.6E+00	6.26E+04	8.01E+04	2.6E+00	5.53E+04	4.66E+04
1.2E+00	2.41E+05	1.2E+00	8.66E+05	2.7E+00	6.07E+04	7.94E+04	2.7E+00	5.18E+04	4.68E+04
1.2E+00	2.41E+05	1.2E+00	8.63E+05	2.8E+00	6.13E+04	7.88E+04	2.8E+00	5.33E+04	4.68E+04
1.2E+00	2.42E+05	1.2E+00	8.66E+05	3.0E+00	6.00E+04	7.83E+04	3.0E+00	5.01E+04	4.69E+04
1.2E+00	2.42E+05	1.2E+00	8.64E+05	3.1E+00	5.91E+04	7.67E+04	3.1E+00	4.79E+04	4.66E+04
1.3E+00	2.42E+05	1.3E+00	8.61E+05	3.2E+00	5.99E+04	7.61E+04	3.2E+00	4.94E+04	4.61E+04
1.3E+00	2.42E+05	1.3E+00	8.64E+05	3.4E+00	6.17E+04	7.45E+04	3.4E+00	4.79E+04	4.67E+04
1.3E+00	2.41E+05	1.3E+00	8.59E+05	3.6E+00	5.78E+04	7.46E+04	3.6E+00	4.77E+04	4.66E+04
1.3E+00	2.41E+05	1.3E+00	8.63E+05	3.8E+00	5.72E+04	7.36E+04	3.8E+00	4.59E+04	4.63E+04
1.3E+00	2.41E+05	1.3E+00	8.60E+05	4.0E+00	5.80E+04	7.10E+04	4.0E+00	4.68E+04	4.76E+04
1.3E+00	2.40E+05	1.3E+00	8.59E+05	4.2E+00	5.79E+04	6.96E+04	4.2E+00	4.75E+04	4.74E+04
1.3E+00	2.40E+05	1.3E+00	8.59E+05	4.4E+00	5.65E+04	7.08E+04	4.4E+00	4.63E+04	4.75E+04
1.3E+00	2.40E+05	1.3E+00	8.54E+05	4.6E+00	5.61E+04	6.80E+04	4.6E+00	4.25E+04	4.76E+04
1.3E+00	2.41E+05	1.3E+00	8.59E+05	4.9E+00	5.41E+04	6.50E+04	4.9E+00	4.27E+04	4.68E+04
1.3E+00	2.41E+05	1.3E+00	8.56E+05	5.2E+00	5.49E+04	6.41E+04	5.2E+00	4.18E+04	4.67E+04
1.4E+00	2.41E+05	1.4E+00	8.58E+05	5.5E+00	5.59E+04	6.37E+04	5.5E+00	4.30E+04	4.76E+04
1.4E+00	2.42E+05	1.4E+00	8.56E+05	5.8E+00	5.45E+04	6.10E+04	5.8E+00	4.10E+04	4.67E+04
1.4E+00	2.42E+05	1.4E+00	8.53E+05	6.2E+00	5.30E+04	6.11E+04	6.2E+00	4.00E+04	4.64E+04
1.4E+00	2.42E+05	1.4E+00	8.56E+05	6.6E+00	5.26E+04	5.78E+04	6.6E+00	3.94E+04	4.68E+04
1.4E+00	2.43E+05	1.4E+00	8.53E+05	7.0E+00	5.23E+04	5.60E+04	7.0E+00	3.70E+04	4.73E+04
1.4E+00	2.43E+05	1.4E+00	8.55E+05	7.4E+00	5.20E+04	5.33E+04	7.4E+00	3.83E+04	4.69E+04
1.4E+00	2.42E+05	1.4E+00	8.56E+05	7.9E+00	5.13E+04	5.42E+04	7.9E+00	3.70E+04	4.71E+04
1.4E+00	2.42E+05	1.4E+00	8.56E+05	8.4E+00	4.98E+04	5.05E+04	8.4E+00	3.80E+04	4.64E+04
1.5E+00	2.40E+05	1.4E+00	8.59E+05	9.0E+00	4.80E+04	4.83E+04	9.0E+00	3.61E+04	4.75E+04
1.5E+00	2.38E+05	1.4E+00	8.54E+05	9.6E+00	4.93E+04	4.88E+04	9.6E+00	3.61E+04	4.73E+04

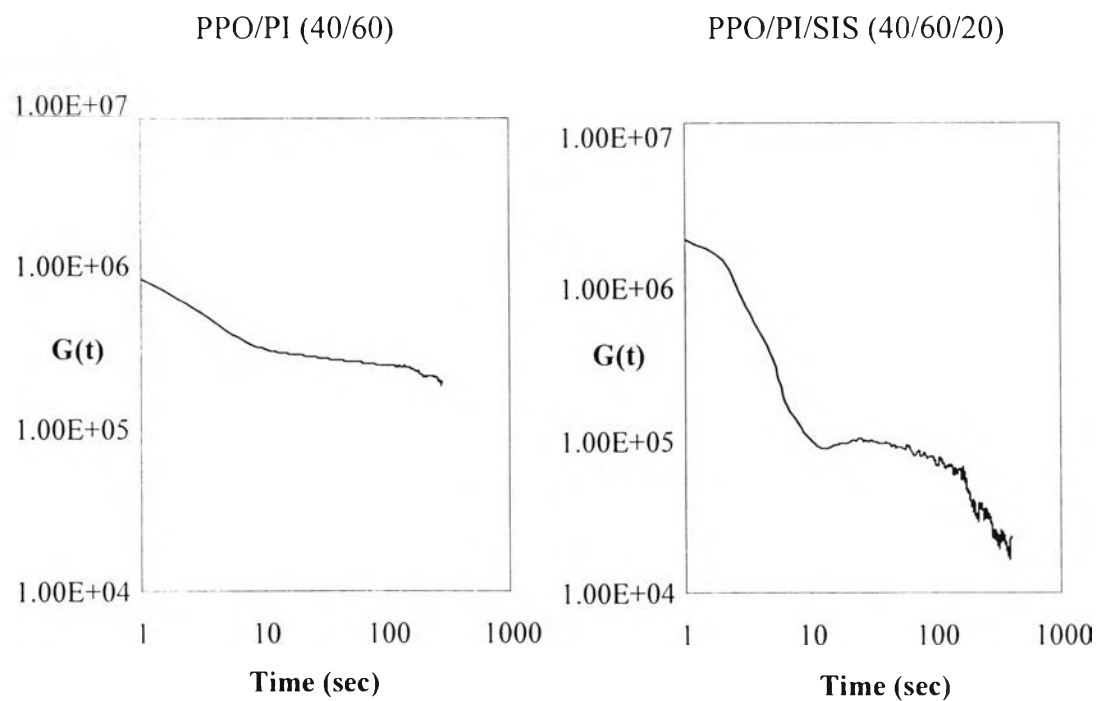
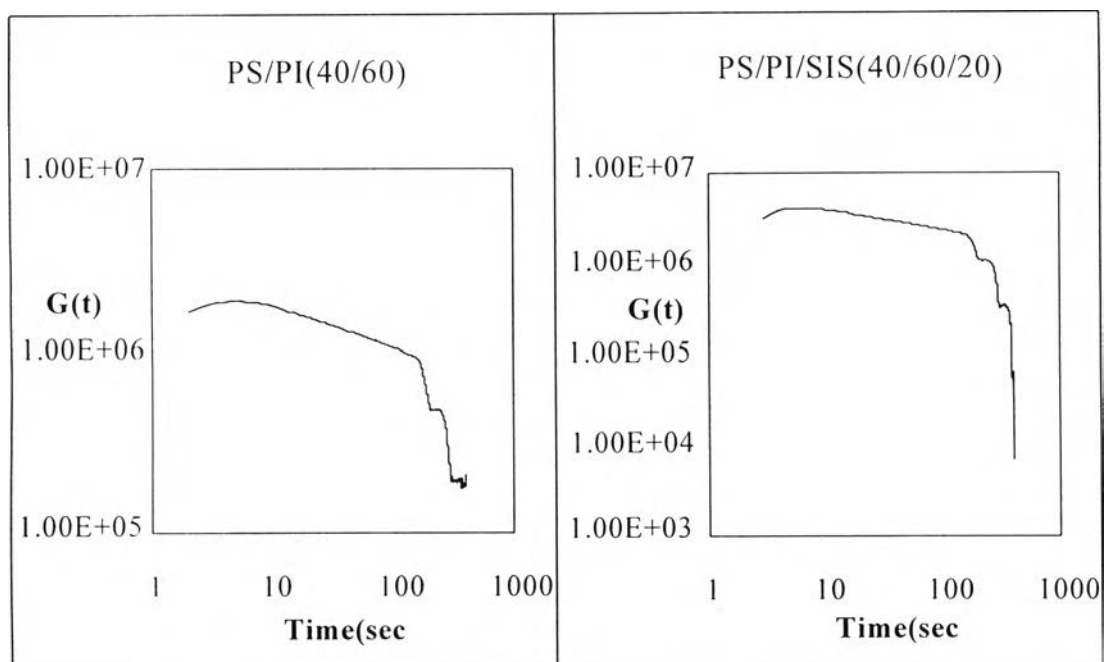
1.6E+00	2.39E+05	1.6E+00	8.55E+05	1.0E+01	4.77E+04	4.53E+04	1.0E+01	3.47E+04	4.80E+04
1.6E+00	2.39E+05	1.6E+00	8.50E+05	1.1E+01	4.60E+04	4.77E+04	1.1E+01	3.62E+04	4.86E+04
1.7E+00	2.40E+05	1.7E+00	8.54E+05	1.1E+01	4.83E+04	4.54E+04	1.1E+01	3.32E+04	4.84E+04
1.8E+00	2.37E+05	1.7E+00	8.45E+05	1.1E+01	4.68E+04	4.68E+04	1.1E+01	3.01E+04	4.80E+04
1.8E+00	2.38E+05	1.8E+00	8.43E+05	1.1E+01	4.74E+04	4.61E+04	1.1E+01	3.19E+04	4.83E+04
1.9E+00	2.39E+05	1.9E+00	8.42E+05	1.1E+01	4.84E+04	4.35E+04	1.1E+01	3.17E+04	4.86E+04
2.0E+00	2.38E+05	2.0E+00	8.37E+05	1.1E+01	4.73E+04	4.28E+04	1.1E+01	3.26E+04	4.86E+04
2.1E+00	2.38E+05	2.1E+00	8.37E+05	1.2E+01	4.71E+04	3.80E+04	1.2E+01	3.61E+04	4.87E+04
2.2E+00	2.36E+05	2.2E+00	8.35E+05	1.2E+01	4.70E+04	4.02E+04	1.2E+01	3.34E+04	4.87E+04
2.3E+00	2.36E+05	2.3E+00	8.32E+05	1.2E+01	4.67E+04	4.29E+04	1.2E+01	3.25E+04	4.88E+04
2.5E+00	2.35E+05	2.4E+00	8.31E+05	1.2E+01	4.65E+04	4.47E+04	1.2E+01	3.34E+04	4.85E+04
2.6E+00	2.35E+05	2.5E+00	8.33E+05	1.2E+01	4.58E+04	4.37E+04	1.2E+01	3.67E+04	4.78E+04
2.8E+00	2.35E+05	2.6E+00	8.33E+05	1.2E+01	4.62E+04	4.16E+04	1.2E+01	3.75E+04	4.76E+04
2.9E+00	2.34E+05	2.7E+00	8.35E+05	1.2E+01	4.57E+04	4.06E+04	1.2E+01	3.43E+04	4.75E+04
3.1E+00	2.33E+05	2.8E+00	8.33E+05	1.2E+01	4.61E+04	3.91E+04	1.2E+01	3.06E+04	4.77E+04
3.3E+00	2.34E+05	3.0E+00	8.29E+05	1.2E+01	4.66E+04	4.55E+04	1.2E+01	3.59E+04	4.74E+04
3.5E+00	2.33E+05	3.1E+00	8.30E+05	1.2E+01	4.76E+04	3.83E+04	1.2E+01	3.67E+04	4.79E+04
3.8E+00	2.32E+05	3.2E+00	8.28E+05	1.2E+01	4.61E+04	4.43E+04	1.2E+01	3.37E+04	4.81E+04
4.1E+00	2.32E+05	3.4E+00	8.24E+05	1.2E+01	4.65E+04	4.03E+04	1.2E+01	3.38E+04	4.82E+04
4.4E+00	2.32E+05	3.6E+00	8.22E+05	1.3E+01	4.73E+04	3.81E+04	1.3E+01	3.16E+04	4.76E+04
4.7E+00	2.32E+05	3.8E+00	8.20E+05	1.3E+01	4.67E+04	4.23E+04	1.3E+01	3.26E+04	4.70E+04
5.1E+00	2.31E+05	4.0E+00	8.20E+05	1.3E+01	4.57E+04	3.64E+04	1.3E+01	3.48E+04	4.73E+04
5.5E+00	2.29E+05	4.2E+00	8.19E+05	1.3E+01	4.56E+04	4.12E+04	1.3E+01	3.30E+04	4.74E+04
6.0E+00	2.29E+05	4.4E+00	8.17E+05	1.3E+01	4.52E+04	3.82E+04	1.3E+01	3.49E+04	4.79E+04
6.5E+00	2.28E+05	4.6E+00	8.13E+05	1.3E+01	4.55E+04	3.83E+04	1.3E+01	3.32E+04	4.78E+04
7.0E+00	2.28E+05	4.9E+00	8.15E+05	1.4E+01	4.54E+04	3.78E+04	1.4E+01	3.08E+04	4.76E+04
7.6E+00	2.27E+05	5.2E+00	8.13E+05	1.4E+01	4.41E+04	3.58E+04	1.4E+01	3.48E+04	4.79E+04
8.3E+00	2.26E+05	5.5E+00	8.07E+05	1.4E+01	4.41E+04	3.75E+04	1.4E+01	3.18E+04	4.73E+04
9.0E+00	2.26E+05	5.8E+00	8.13E+05	1.4E+01	4.47E+04	3.64E+04	1.4E+01	3.47E+04	4.79E+04
9.8E+00	2.23E+05	6.2E+00	8.07E+05	1.5E+01	4.59E+04	3.52E+04	1.5E+01	3.17E+04	4.81E+04
1.1E+01	2.23E+05	6.6E+00	8.07E+05	1.5E+01	4.41E+04	3.25E+04	1.5E+01	3.29E+04	4.80E+04
1.2E+01	2.23E+05	7.0E+00	8.06E+05	1.6E+01	4.39E+04	3.49E+04	1.6E+01	3.09E+04	4.85E+04
1.3E+01	2.22E+05	7.4E+00	8.00E+05	1.6E+01	4.29E+04	3.27E+04	1.6E+01	3.11E+04	4.91E+04
1.4E+01	2.21E+05	7.9E+00	8.07E+05	1.7E+01	4.29E+04	3.41E+04	1.7E+01	3.20E+04	4.87E+04
1.5E+01	2.22E+05	8.4E+00	8.00E+05	1.7E+01	4.32E+04	3.01E+04	1.7E+01	3.14E+04	5.00E+04
1.6E+01	2.26E+05	9.0E+00	7.96E+05	1.8E+01	4.28E+04	3.06E+04	1.8E+01	3.23E+04	4.97E+04
1.8E+01	2.22E+05	9.6E+00	7.94E+05	1.8E+01	4.51E+04	3.14E+04	1.8E+01	3.08E+04	4.90E+04
2.0E+01	2.20E+05	1.0E+01	7.92E+05	1.9E+01	3.94E+04	2.82E+04	1.9E+01	3.08E+04	4.95E+04
2.1E+01	2.19E+05	1.1E+01	7.97E+05	2.0E+01	4.11E+04	3.10E+04	2.0E+01	2.82E+04	5.04E+04
2.3E+01	2.19E+05	1.1E+01	7.96E+05	2.1E+01	3.99E+04	2.96E+04	2.1E+01	3.10E+04	4.94E+04
2.6E+01	2.19E+05	1.1E+01	7.97E+05	2.2E+01	4.11E+04	3.10E+04	2.2E+01	2.96E+04	4.87E+04

2.8E+01	2.18E+05	1.2E+01	7.96E+05	2.3E+01	4.03E+04	2.83E+04	2.3E+01	3.10E+04	4.92E+04
3.1E+01	2.17E+05	1.2E+01	7.85E+05	2.4E+01	3.99E+04	2.84E+04	2.4E+01	2.83E+04	4.89E+04
3.4E+01	2.16E+05	1.3E+01	7.83E+05	2.5E+01	4.22E+04	2.66E+04	2.5E+01	2.84E+04	4.96E+04
3.7E+01	2.16E+05	1.4E+01	7.84E+05	2.6E+01	4.13E+04	2.90E+04	2.6E+01	2.66E+04	4.96E+04
4.0E+01	2.15E+05	1.5E+01	7.79E+05	2.8E+01	4.11E+04	2.67E+04	2.8E+01	2.90E+04	5.06E+04
4.4E+01	2.14E+05	1.5E+01	7.82E+05	3.0E+01	3.83E+04	2.72E+04	3.0E+01	2.67E+04	5.09E+04
4.8E+01	2.14E+05	1.6E+01	7.77E+05	3.1E+01	3.93E+04	2.51E+04	3.1E+01	2.72E+04	5.06E+04
5.3E+01	2.15E+05	1.7E+01	7.72E+05	3.3E+01	3.85E+04	2.75E+04	3.3E+01	2.51E+04	5.09E+04
5.8E+01	2.12E+05	1.8E+01	7.80E+05	3.6E+01	3.97E+04	2.38E+04	3.6E+01	2.75E+04	5.07E+04
6.4E+01	2.13E+05	1.9E+01	7.69E+05	3.8E+01	3.77E+04	2.29E+04	3.8E+01	2.38E+04	5.01E+04
7.0E+01	2.11E+05	2.0E+01	7.66E+05	4.1E+01	3.73E+04	2.30E+04	4.1E+01	2.29E+04	5.04E+04
7.7E+01	2.09E+05	2.1E+01	7.67E+05	5.0E+01	4.03E+04	2.66E+04	4.4E+01	2.30E+04	5.09E+04
8.4E+01	2.08E+05	2.2E+01	7.66E+05	5.4E+01	3.71E+04	2.29E+04	4.7E+01	2.66E+04	5.23E+04
9.2E+01	2.07E+05	2.3E+01	7.64E+05	5.8E+01	3.59E+04	2.52E+04	5.0E+01	2.29E+04	5.20E+04
1.0E+02	2.09E+05	2.4E+01	7.66E+05	6.3E+01	3.86E+04	2.49E+04	5.4E+01	2.52E+04	4.20E+04
1.0E+02	2.10E+05	2.5E+01	7.66E+05	6.8E+01	3.81E+04	2.26E+04	5.8E+01	2.49E+04	5.38E+04
1.0E+02	2.09E+05	2.6E+01	7.66E+05	7.4E+01	3.76E+04	2.36E+04	6.3E+01	2.26E+04	5.34E+04
1.0E+02	2.09E+05	2.8E+01	7.64E+05	8.0E+01	3.40E+04	2.24E+04	6.8E+01	2.36E+04	5.34E+04
1.0E+02	2.10E+05	3.0E+01	7.58E+05	8.7E+01	3.86E+04	2.34E+04	7.4E+01	2.24E+04	5.44E+04
1.0E+02	2.09E+05	3.1E+01	7.67E+05	9.4E+01	3.43E+04	2.47E+04	8.0E+01	2.34E+04	5.47E+04
1.0E+02	2.10E+05	3.3E+01	7.54E+05	1.0E+02	3.63E+04	2.63E+04	8.7E+01	2.47E+04	5.33E+04
1.0E+02	2.09E+05	3.6E+01	7.53E+05	1.1E+02	3.84E+04	2.36E+04	9.4E+01	2.63E+04	5.32E+04
1.0E+02	2.09E+05	3.8E+01	7.51E+05	1.1E+02	3.72E+04	2.40E+04	1.0E+02	2.36E+04	5.48E+04
1.0E+02	2.09E+05	4.1E+01	7.49E+05	1.1E+02	3.49E+04	2.21E+04	1.1E+02	2.40E+04	5.52E+04
1.0E+02	2.08E+05	4.4E+01	7.47E+05	1.1E+02	3.44E+04	2.46E+04	1.1E+02	2.21E+04	5.44E+04
1.0E+02	2.09E+05	4.7E+01	7.43E+05	1.1E+02	3.27E+04	2.34E+04	1.1E+02	2.46E+04	5.49E+04
1.0E+02	2.09E+05	5.0E+01	7.42E+05	1.1E+02	3.52E+04	2.30E+04	1.1E+02	2.34E+04	5.49E+04
1.0E+02	2.08E+05	5.4E+01	7.36E+05	1.1E+02	3.29E+04	2.52E+04	1.1E+02	2.30E+04	5.46E+04
1.0E+02	2.09E+05	5.8E+01	7.30E+05	1.1E+02	3.35E+04	2.37E+04	1.1E+02	2.52E+04	5.48E+04
1.0E+02	2.09E+05	6.3E+01	7.27E+05	1.1E+02	3.48E+04	2.28E+04	1.1E+02	2.37E+04	5.51E+04
1.0E+02	2.09E+05	6.8E+01	7.25E+05	1.1E+02	3.28E+04	2.50E+04	1.1E+02	2.28E+04	5.46E+04
1.0E+02	2.10E+05	7.4E+01	7.28E+05	1.1E+02	3.52E+04	2.22E+04	1.1E+02	2.50E+04	5.39E+04
1.0E+02	2.09E+05	8.0E+01	7.29E+05	1.1E+02	3.33E+04	2.03E+04	1.1E+02	2.22E+04	5.43E+04
1.0E+02	2.09E+05	8.7E+01	7.22E+05	1.1E+02	3.33E+04	2.34E+04	1.1E+02	2.03E+04	5.44E+04
1.0E+02	2.10E+05	9.4E+01	7.11E+05	1.1E+02	3.48E+04	2.31E+04	1.1E+02	2.34E+04	5.40E+04
1.0E+02	2.11E+05	1.0E+02	7.25E+05	1.1E+02	3.27E+04	2.09E+04	1.1E+02	2.31E+04	5.40E+04
1.0E+02	2.11E+05	1.1E+02	7.14E+05	1.1E+02	3.50E+04	2.24E+04	1.1E+02	2.09E+04	5.44E+04
1.0E+02	2.10E+05	1.1E+02	7.12E+05	1.1E+02	3.37E+04	2.14E+04	1.1E+02	2.24E+04	5.41E+04
1.0E+02	2.10E+05	1.1E+02	7.09E+05	1.1E+02	3.28E+04	1.95E+04	1.1E+02	2.14E+04	5.37E+04
1.0E+02	2.11E+05	1.1E+02	7.11E+05	1.1E+02	3.44E+04	2.17E+04	1.1E+02	1.95E+04	5.39E+04
1.0E+02	2.10E+05	1.1E+02	7.12E+05	1.1E+02	3.16E+04	2.14E+04	1.1E+02	2.17E+04	5.40E+04

1.0E+02	2.12E+05	1.1E+02	7.09E+05	1.1E+02	3.36E+04	1.97E+04	1.1E+02	2.18E+04	5.40E+04
1.0E+02	2.12E+05	1.1E+02	7.15E+05	1.1E+02	3.37E+04	2.18E+04	1.1E+02	2.27E+04	5.44E+04
1.0E+02	2.10E+05	1.1E+02	7.10E+05	1.1E+02	3.29E+04	2.27E+04	1.1E+02	2.09E+04	5.39E+04
1.0E+02	2.09E+05	1.1E+02	7.12E+05	1.1E+02	3.53E+04	2.09E+04	1.1E+02	2.33E+04	5.43E+04
1.0E+02	2.10E+05	1.1E+02	7.11E+05	1.1E+02	3.32E+04	2.33E+04	1.1E+02	2.44E+04	5.52E+04
1.0E+02	2.09E+05	1.1E+02	7.08E+05	1.1E+02	3.48E+04	2.44E+04	1.1E+02	2.17E+04	5.52E+04
1.0E+02	2.09E+05	1.1E+02	7.12E+05	1.1E+02	3.37E+04	2.17E+04	1.1E+02	2.31E+04	5.52E+04
1.0E+02	2.08E+05	1.1E+02	7.05E+05	1.1E+02	3.49E+04	2.31E+04	1.1E+02	2.56E+04	5.58E+04
1.0E+02	2.09E+05	1.1E+02	7.10E+05	1.1E+02	3.49E+04	2.56E+04	1.1E+02	2.39E+04	5.60E+04
1.0E+02	2.10E+05	1.1E+02	7.08E+05	1.1E+02	3.52E+04	2.39E+04	1.1E+02	2.40E+04	5.55E+04
1.0E+02	2.08E+05	1.1E+02	7.04E+05	1.1E+02	3.47E+04	2.40E+04	1.1E+02	2.35E+04	5.52E+04
1.0E+02	2.07E+05	1.1E+02	7.08E+05	1.1E+02	3.35E+04	2.44E+04	1.1E+02	2.48E+04	5.50E+04
1.1E+02	2.08E+05	1.1E+02	7.02E+05	1.1E+02	3.26E+04	2.42E+04	1.1E+02	2.44E+04	5.49E+04
1.1E+02	2.09E+05	1.1E+02	7.05E+05	1.1E+02	3.20E+04	2.51E+04	1.1E+02	2.53E+04	5.46E+04
1.1E+02	2.10E+05	1.1E+02	7.04E+05	1.1E+02	3.15E+04	2.35E+04	1.1E+02	2.42E+04	5.51E+04
1.1E+02	2.09E+05	1.1E+02	7.02E+05	1.1E+02	3.13E+04	2.48E+04	1.1E+02	2.29E+04	5.58E+04
1.1E+02	2.09E+05	1.1E+02	7.07E+05	1.1E+02	3.41E+04	2.44E+04	1.1E+02	2.50E+04	5.56E+04
1.1E+02	2.11E+05	1.1E+02	6.99E+05	1.1E+02	3.40E+04	2.53E+04	1.1E+02	2.59E+04	5.53E+04
1.1E+02	2.10E+05	1.1E+02	7.02E+05	1.1E+02	3.38E+04	2.42E+04	1.1E+02	2.23E+04	5.53E+04
1.2E+02	2.11E+05	1.1E+02	6.99E+05	1.1E+02	3.49E+04	2.29E+04	1.1E+02	2.31E+04	5.51E+04
1.2E+02	2.11E+05	1.2E+02	7.05E+05	1.2E+02	3.40E+04	2.50E+04	1.1E+02	2.41E+04	5.42E+04
1.2E+02	2.08E+05	1.2E+02	7.01E+05	1.2E+02	3.23E+04	2.59E+04	1.1E+02	2.29E+04	5.48E+04
1.3E+02	2.08E+05	1.2E+02	7.03E+05	1.2E+02	3.22E+04	2.23E+04	1.2E+02	2.15E+04	5.47E+04
1.3E+02	2.08E+05	1.2E+02	7.11E+05	1.2E+02	3.22E+04	2.20E+04	1.2E+02	2.19E+04	5.45E+04
1.4E+02	2.06E+05	1.2E+02	7.08E+05	1.2E+02	3.27E+04	2.43E+04	1.2E+02	2.18E+04	5.52E+04
1.4E+02	2.08E+05	1.2E+02	7.05E+05	1.2E+02	3.20E+04	2.30E+04	1.3E+02	1.95E+04	5.56E+04
1.5E+02	2.10E+05	1.3E+02	6.97E+05	1.2E+02	3.35E+04	2.43E+04	1.3E+02	2.15E+04	5.47E+04
1.6E+02	2.06E+05	1.3E+02	7.10E+05	1.2E+02	3.26E+04	2.31E+04	1.3E+02	2.23E+04	5.49E+04
1.7E+02	2.07E+05	1.3E+02	7.07E+05	1.2E+02	3.41E+04	2.41E+04	1.3E+02	2.05E+04	5.59E+04
1.8E+02	2.05E+05	1.3E+02	7.03E+05	1.3E+02	3.48E+04	2.29E+04	1.4E+02	1.89E+04	4.98E+04
1.9E+02	2.06E+05	1.4E+02	7.24E+05	1.3E+02	3.41E+04	2.15E+04	1.4E+02	2.03E+04	5.60E+04
2.1E+02	2.02E+05	1.4E+02	7.23E+05	1.3E+02	3.19E+04	2.19E+04	1.4E+02	1.86E+04	5.55E+04
2.3E+02	2.07E+05	1.4E+02	7.08E+05	1.3E+02	3.35E+04	2.16E+04	1.5E+02	2.05E+04	5.61E+04
2.5E+02	2.04E+05	1.5E+02	7.01E+05	1.4E+02	3.49E+04	2.09E+04	1.5E+02	1.92E+04	5.67E+04
2.8E+02	2.02E+05	1.5E+02	6.87E+05	1.4E+02	3.37E+04	2.22E+04	1.5E+02	1.98E+04	5.53E+04
3.1E+02	2.04E+05	1.5E+02	6.95E+05	1.4E+02	3.41E+04	2.07E+04	1.6E+02	1.88E+04	5.38E+04
3.4E+02	1.99E+05	1.6E+02	6.83E+05	1.5E+02	3.54E+04	2.20E+04	1.7E+02	1.89E+04	5.46E+04
3.9E+02	1.95E+05	1.7E+02	6.71E+05	1.5E+02	3.68E+04	2.17E+04	1.7E+02	1.81E+04	5.39E+04
4.4E+02	1.99E+05	1.8E+02	6.66E+05	1.6E+02	3.47E+04	2.22E+04	1.8E+02	1.74E+04	5.46E+04
5.0E+02	1.98E+05	1.9E+02	6.63E+05	1.7E+02	3.51E+04	2.14E+04	1.9E+02	2.02E+04	5.37E+04
5.7E+02	1.97E+05	2.0E+02	6.68E+05	1.8E+02	3.34E+04	2.12E+04	2.0E+02	2.05E+04	5.49E+04

6.5E+02	1.95E+05	2.1E+02	6.59E+05	1.9E+02	3.49E+04	2.18E+04	2.1E+02	1.92E+04	5.50E+04
7.4E+02	1.98E+05	2.2E+02	6.63E+05	2.0E+02	3.26E+04	1.95E+04	2.2E+02	1.85E+04	5.54E+04
8.6E+02	1.95E+05	2.3E+02	6.65E+05	2.1E+02	3.45E+04	2.15E+04	2.3E+02	2.09E+04	5.39E+04
9.9E+02	1.91E+05	2.5E+02	6.56E+05	2.3E+02	3.20E+04	2.23E+04	2.5E+02	2.04E+04	5.41E+04
1.1E+03	1.96E+05	2.7E+02	6.52E+05	2.4E+02	3.35E+04	2.05E+04	2.7E+02	1.82E+04	5.49E+04
1.3E+03	1.89E+05	2.9E+02	6.53E+05	2.6E+02	3.39E+04	1.89E+04	2.9E+02	2.01E+04	5.27E+04
1.6E+03	1.92E+05	3.1E+02	6.64E+05	2.9E+02	3.11E+04	2.03E+04	3.1E+02	1.91E+04	5.31E+04
1.8E+03	1.89E+05	3.3E+02	6.49E+05	3.1E+02	3.40E+04	1.86E+04	3.3E+02	2.12E+04	5.67E+04
2.1E+03	1.84E+05	3.6E+02	6.53E+05	3.4E+02	3.41E+04	2.05E+04	3.6E+02	2.22E+04	5.49E+04
2.5E+03	1.88E+05	3.9E+02	6.46E+05	3.8E+02	3.16E+04	1.92E+04	3.9E+02	1.66E+04	4.59E+04
2.9E+03	1.92E+05	4.2E+02	6.40E+05	4.2E+02	3.45E+04	1.98E+04	4.2E+02	2.07E+04	4.98E+04
3.4E+03	1.90E+05	4.6E+02	6.38E+05	4.6E+02	3.48E+04	1.88E+04	4.6E+02	1.93E+04	4.95E+04
4.0E+03	1.95E+05	5.1E+02	6.39E+05	5.2E+02	3.31E+04	1.89E+04	5.1E+02	2.19E+04	5.05E+04
4.6E+03	1.94E+05	5.5E+02	6.31E+05	5.8E+02	3.26E+04	1.81E+04	5.5E+02	2.32E+04	5.01E+04
5.4E+03	1.93E+05	6.1E+02	6.34E+05	6.5E+02	3.46E+04	1.74E+04	6.1E+02	2.39E+04	4.85E+04

III.11 Repeat data of the stress relaxation ($G(t)$) of PS/PI-100 (40/60) blends and PPO/PI-100 (40/60) blends.



III.12 Data of the relaxation spectrum ($H(\lambda)$) of PS/PI-100 (40/60) blends

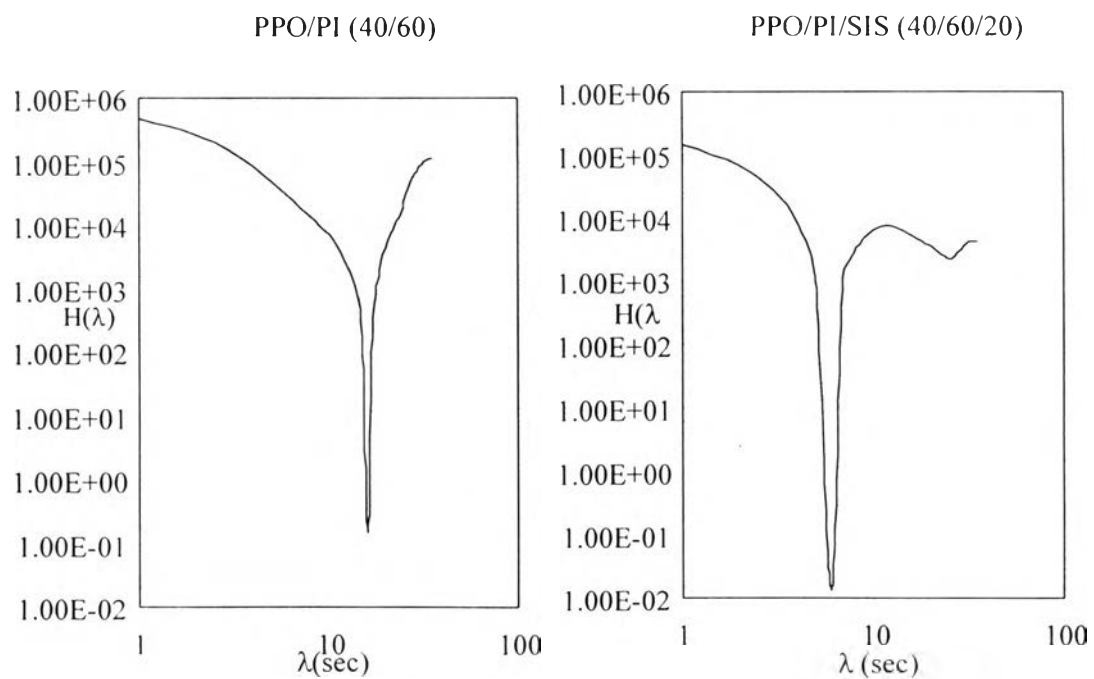
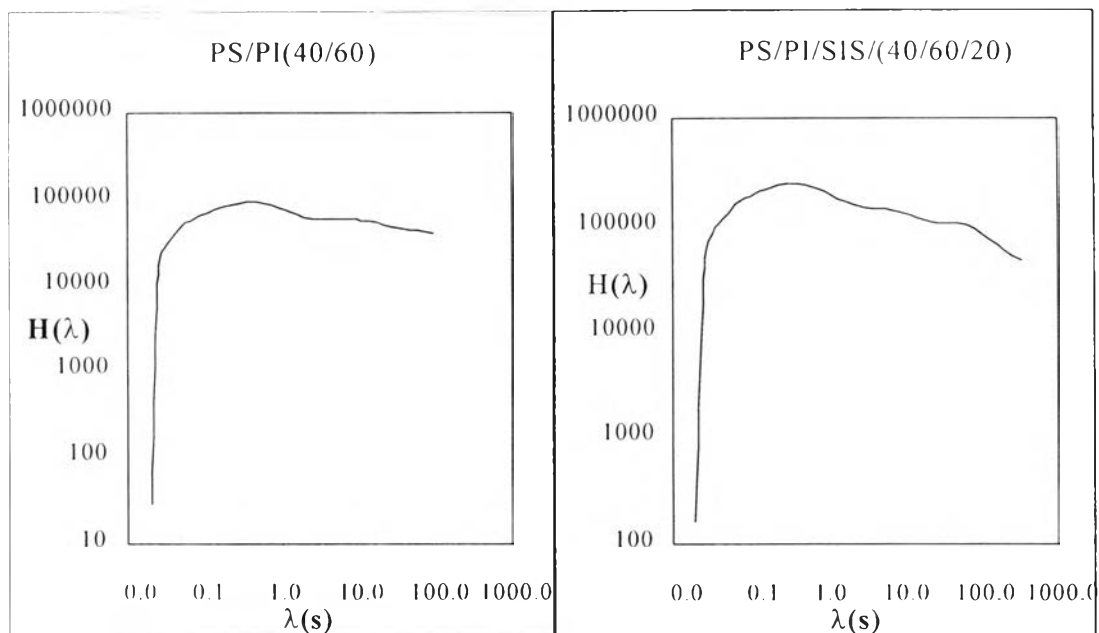
(Figure 3.9)

Ctb = 0 wt %				Ctb = 1 wt %		Ctb = 9 wt %		Ctb = 20 wt %			
λ	$H(\lambda)$	λ (repeat)	$H(\lambda)$ (repeat)	λ	$H(\lambda)$	λ	$H(\lambda)$	λ	$H(\lambda)$	λ (repeat)	$H(\lambda)$ (repeat)
1.00E-01	6.52E+00	2.00E-02	2.83E+01	2.00E-02	7.44E+01	3.00E-02	4.47E+00	2.00E-02	9.39E-01	2.00E-02	1.61E+02
2.31E-01	1.52E+05	2.55E-02	1.71E+04	2.61E-02	2.59E+04	3.97E-02	4.73E+04	2.56E-02	3.98E+04	2.64E-02	4.93E+04
5.34E-01	1.08E+05	3.24E-02	3.03E+04	3.42E-02	4.51E+04	5.25E-02	8.98E+04	3.27E-02	6.83E+04	3.48E-02	8.70E+04
1.23E+00	1.04E+05	4.13E-02	4.11E+04	4.47E-02	6.06E+04	6.95E-02	1.12E+05	4.19E-02	9.00E+04	4.60E-02	1.18E+05
2.85E+00	1.24E+05	5.26E-02	5.04E+04	5.84E-02	7.38E+04	9.19E-02	1.17E+05	5.36E-02	1.07E+05	6.07E-02	1.45E+05
6.58E+00	1.57E+05	6.69E-02	5.84E+04	7.64E-02	8.54E+04	1.22E-01	1.14E+05	6.85E-02	1.22E+05	8.01E-02	1.68E+05
1.52E+01	1.14E+05	8.52E-02	6.55E+04	9.99E-02	9.60E+04	1.61E-01	1.07E+05	8.77E-02	1.34E+05	1.06E-01	1.89E+05
3.51E+01	6.17E+04	1.08E-01	7.19E+04	1.31E-01	1.06E+05	2.13E-01	1.00E+05	1.12E-01	1.46E+05	1.40E-01	2.08E+05
8.12E+01	1.88E+04	1.38E-01	7.77E+04	1.71E-01	1.15E+05	2.82E-01	9.64E+04	1.43E-01	1.58E+05	1.84E-01	2.24E+05
1.87E+02	1.45E+04	1.76E-01	8.29E+04	2.23E-01	1.23E+05	3.73E-01	9.68E+04	1.84E-01	1.71E+05	2.43E-01	2.37E+05
4.33E+02	4.41E+04	2.24E-01	8.75E+04	2.92E-01	1.31E+05	4.93E-01	1.00E+05	2.35E-01	1.83E+05	3.21E-01	2.45E+05
1.00E+03	7.44E+04	2.85E-01	9.13E+04	3.82E-01	1.35E+05	6.53E-01	1.04E+05	3.00E-01	1.95E+05	4.24E-01	2.47E+05
		3.63E-01	9.35E+04	4.99E-01	1.35E+05	8.64E-01	1.05E+05	3.84E-01	2.04E+05	5.59E-01	2.40E+05
		4.62E-01	9.34E+04	6.52E-01	1.31E+05	1.14E+00	1.04E+05	4.92E-01	2.06E+05	7.38E-01	2.25E+05
		5.88E-01	9.07E+04	8.53E-01	1.23E+05	1.51E+00	1.02E+05	6.29E-01	2.03E+05	9.74E-01	2.06E+05
		7.49E-01	8.58E+04	1.12E+00	1.14E+05	2.00E+00	9.97E+04	8.04E-01	1.93E+05	1.29E+00	1.87E+05
		9.54E-01	7.98E+04	1.46E+00	1.06E+05	2.65E+00	9.91E+04	1.03E+00	1.82E+05	1.70E+00	1.71E+05
		1.21E+00	7.36E+04	1.91E+00	9.81E+04	3.50E+00	1.01E+05	1.32E+00	1.69E+05	2.24E+00	1.58E+05
		1.55E+00	6.81E+04	2.49E+00	9.27E+04	4.63E+00	1.06E+05	1.68E+00	1.58E+05	2.96E+00	1.50E+05
		1.97E+00	6.36E+04	3.26E+00	8.96E+04	6.13E+00	1.12E+05	2.15E+00	1.50E+05	3.90E+00	1.46E+05
		2.51E+00	6.05E+04	4.26E+00	8.85E+04	8.11E+00	1.16E+05	2.76E+00	1.46E+05	5.15E+00	1.43E+05
		3.19E+00	5.90E+04	5.57E+00	8.84E+04	1.07E+01	1.16E+05	3.53E+00	1.46E+05	6.80E+00	1.41E+05
		4.06E+00	5.89E+04	7.28E+00	8.79E+04	1.42E+01	1.13E+05	4.51E+00	1.48E+05	8.98E+00	1.35E+05
		5.17E+00	5.96E+04	9.52E+00	8.60E+04	1.88E+01	1.06E+05	5.77E+00	1.52E+05	1.18E+01	1.27E+05
		6.59E+00	6.01E+04	1.24E+01	8.28E+04	2.49E+01	9.70E+04	7.38E+00	1.53E+05	1.56E+01	1.18E+05
		8.39E+00	5.99E+04	1.63E+01	7.90E+04	3.29E+01	8.51E+04	9.44E+00	1.52E+05	2.06E+01	1.11E+05
		1.07E+01	5.86E+04	2.13E+01	7.60E+04	4.35E+01	7.11E+04	1.21E+01	1.47E+05	2.72E+01	1.06E+05
		1.36E+01	5.65E+04	2.78E+01	7.48E+04	5.76E+01	5.77E+04	1.55E+01	1.40E+05	3.60E+01	1.05E+05
		1.73E+01	5.40E+04	3.64E+01	7.62E+04	7.62E+01	4.91E+04	1.98E+01	1.33E+05	4.75E+01	1.04E+05
		2.20E+01	5.16E+04	4.75E+01	7.92E+04	1.01E+02	4.92E+04	2.53E+01	1.26E+05	6.27E+01	1.01E+05
		2.81E+01	4.93E+04	6.22E+01	8.13E+04	1.33E+02	5.82E+04	3.24E+01	1.19E+05	8.27E+01	9.24E+04
		3.57E+01	4.73E+04	8.13E+01	8.04E+04	1.76E+02	7.33E+04	4.14E+01	1.11E+05	1.09E+02	8.09E+04
		4.55E+01	4.55E+04	1.06E+02	7.63E+04	2.33E+02	9.08E+04	5.30E+01	1.02E+05	1.44E+02	6.96E+04
		5.79E+01	4.38E+04	1.39E+02	7.04E+04	3.09E+02	1.07E+05	6.77E+01	9.15E+04	1.90E+02	6.00E+04
		7.37E+01	4.23E+04	1.82E+02	6.44E+04	4.09E+02	1.22E+05	8.67E+01	8.11E+04	2.51E+02	5.25E+04
		9.39E+01	4.09E+04	2.37E+02	5.91E+04	5.41E+02	1.33E+05	1.11E+02	7.15E+04	3.31E+02	4.68E+04

II.13 Data of the relaxation spectrum ($H(\lambda)$) of PPO/PI-100 (40/60) blends (Figure 3.11)

$C_{ib} = 0 \text{ wt } \%$				$C_{ib} = 1 \text{ wt } \%$		$C_{ib} = 9 \text{ wt } \%$		$C_{ib} = 20 \text{ wt } \%$			
λ	$H(\lambda)$	λ (repeat)	$H(\lambda)$ (repeat)	λ	$H(\lambda)$	λ	$H(\lambda)$	λ	$H(\lambda)$	λ (repeat)	$H(\lambda)$ (repeat)
2.00E-02	1.94E+05	2.00E-02	8.59E+05	2.00E-02	5.21E+05	2.00E-02	4.34E+05	2.00E-02	2.52E+05	2.00E-02	4.34E+05
2.53E-02	1.29E+05	2.72E-02	4.77E+05	2.66E-02	3.82E+05	2.90E-02	2.36E+05	2.65E-02	1.45E+05	2.90E-02	2.36E+05
3.20E-02	8.48E+04	3.69E-02	2.66E+05	3.53E-02	2.40E+05	4.20E-02	1.16E+05	3.52E-02	7.10E+04	4.20E-02	1.16E+05
4.06E-02	5.46E+04	5.01E-02	1.49E+05	4.69E-02	1.29E+05	6.09E-02	5.83E+04	4.66E-02	2.83E+04	6.09E-02	5.83E+04
5.13E-02	3.43E+04	6.81E-02	8.40E+04	6.23E-02	6.30E+04	8.83E-02	3.44E+04	6.18E-02	8.39E+03	8.83E-02	3.44E+04
6.50E-02	2.10E+04	9.25E-02	4.89E+04	8.28E-02	3.13E+04	1.28E-01	2.48E+04	8.20E-02	1.27E+03	1.28E-01	2.48E+04
8.23E-02	1.24E+04	1.26E-01	2.98E+04	1.10E-01	1.86E+04	1.86E-01	2.11E+04	1.09E-01	1.29E+02	1.86E-01	2.11E+04
1.04E-01	6.88E+03	1.71E-01	1.94E+04	1.46E-01	1.44E+04	2.69E-01	1.97E+04	1.44E-01	1.09E+03	2.69E-01	1.97E+04
1.32E-01	3.42E+03	2.32E-01	1.35E+04	1.94E-01	1.33E+04	3.90E-01	1.89E+04	1.91E-01	2.97E+03	3.90E-01	1.89E+04
1.67E-01	1.34E+03	3.15E-01	9.80E+03	2.58E-01	1.31E+04	5.65E-01	1.78E+04	2.53E-01	4.89E+03	5.65E-01	1.78E+04
2.11E-01	2.71E+02	4.28E-01	7.12E+03	3.43E-01	1.27E+04	8.20E-01	1.60E+04	3.36E-01	6.45E+03	8.20E-01	1.60E+04
2.67E-01	2.61E+00	5.81E-01	4.96E+03	4.55E-01	1.17E+04	1.19E+00	1.42E+04	4.46E-01	7.39E+03	1.19E+00	1.42E+04
3.38E-01	3.46E+02	7.89E-01	3.19E+03	6.05E-01	1.04E+04	1.72E+00	1.27E+04	5.91E-01	7.63E+03	1.72E+00	1.27E+04
4.28E-01	1.09E+03	1.07E+00	1.81E+03	8.03E-01	8.82E+03	2.50E+00	1.17E+04	7.84E-01	7.30E+03	2.50E+00	1.17E+04
5.42E-01	2.03E+03	1.46E+00	8.15E+02	1.07E+00	7.39E+03	3.62E+00	1.15E+04	1.04E+00	6.66E+03	3.62E+00	1.15E+04
6.86E-01	3.00E+03	1.98E+00	1.90E+02	1.42E+00	6.19E+03	5.25E+00	1.17E+04	1.38E+00	5.94E+03	5.25E+00	1.17E+04
8.69E-01	3.88E+03	2.69E+00	1.47E-01	1.88E+00	5.23E+03	7.60E+00	1.15E+04	1.83E+00	5.28E+03	7.60E+00	1.15E+04
1.10E+00	4.68E+03	3.65E+00	3.44E+02	2.50E+00	4.44E+03	1.10E+01	8.29E+03	2.42E+00	4.72E+03	1.10E+01	8.29E+03
1.39E+00	5.39E+03	4.95E+00	1.27E+03	3.33E+00	3.74E+03	1.60E+01	2.60E+03	3.21E+00	4.27E+03	1.60E+01	2.60E+03
1.76E+00	6.08E+03	6.73E+00	2.71E+03	4.42E+00	3.04E+03	2.32E+01	6.30E+02	4.26E+00	3.91E+03	2.32E+01	6.30E+02
2.23E+00	6.78E+03	9.14E+00	4.50E+03	5.87E+00	2.32E+03	3.36E+01	1.92E+02	5.65E+00	3.58E+03	3.36E+01	1.92E+02
2.82E+00	7.52E+03	1.24E+01	6.46E+03	7.80E+00	1.60E+03	4.87E+01	7.40E+01	7.49E+00	3.25E+03	4.87E+01	7.40E+01
3.57E+00	8.35E+03	1.69E+01	8.61E+03	1.04E+01	9.36E+02	7.06E+01	3.38E+01	9.93E+00	2.92E+03	7.06E+01	3.38E+01
4.52E+00	9.27E+03	2.29E+01	1.14E+04	1.38E+01	4.07E+02	1.02E+02	1.72E+01	1.32E+01	2.62E+03	1.02E+02	1.72E+01
5.72E+00	1.03E+04	3.11E+01	1.59E+04	1.83E+01	7.02E+01	1.48E+02	9.41E+00	1.75E+01	2.38E+03	1.48E+02	9.41E+00
7.25E+00	1.15E+04	4.23E+01	2.32E+04	2.43E+01	1.22E+00	2.15E+02	5.28E+00	2.32E+01	2.25E+03	2.15E+02	5.28E+00
9.17E+00	1.28E+04	5.74E+01	3.35E+04	3.23E+01	2.98E+02	3.12E+02	2.94E+00	3.07E+01	2.29E+03	3.12E+02	2.94E+00
1.16E+01	1.43E+04	7.80E+01	4.60E+04	4.29E+01	1.03E+03	4.52E+02	1.56E+00	4.07E+01	2.52E+03	4.52E+02	1.56E+00
1.47E+01	1.60E+04	1.06E+02	5.92E+04	5.70E+01	2.16E+03	6.55E+02	7.31E-01	5.40E+01	2.91E+03	6.55E+02	7.31E-01
1.86E+01	1.78E+04	1.44E+02	7.18E+04	7.57E+01	3.55E+03	9.49E+02	2.72E-01	7.16E+01	3.36E+03	9.49E+02	2.72E-01
2.35E+01	1.97E+04	1.95E+02	8.29E+04	1.01E+02	4.99E+03	1.38E+03	5.87E-02	9.49E+01	3.77E+03	1.38E+03	5.87E-02
2.98E+01	2.16E+04	2.65E+02	9.24E+04	1.34E+02	6.30E+03	1.99E+03	4.36E-03	1.26E+02	4.07E+03	1.99E+03	4.36E-03
3.77E+01	2.36E+04	3.60E+02	1.00E+05	1.78E+02	7.36E+03	2.89E+03	4.31E-02	1.67E+02	4.23E+03	2.89E+03	4.31E-02
4.78E+01	2.54E+04	4.90E+02	1.07E+05	2.36E+02	8.17E+03	4.19E+03	1.28E-01	2.21E+02	4.29E+03	4.19E+03	1.28E-01
6.04E+01	2.70E+04	6.65E+02	1.12E+05	3.13E+02	8.76E+03	6.08E+03	2.27E-01	2.93E+02	4.29E+03	6.08E+03	2.27E-01

III.14 Repeat data of the relaxation spectrum ($H(\lambda)$) of PS/PI-100 (40/60) blends and PPO/PI-100 (40/60) blends.



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