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APPENDIX

(Experimental Results)

A. Test Results from the Studies of Phase Diagrams

Table A.1 The cloud point temperatures of SAN/PMMA blends cast from methylene chloride at a drying time of 1 to 7 days in vacuum oven.

Weight percent of SAN	Cloud point temperature (°C)						
	Drying time in vacuum oven (days)						
	1	2	3	4	5	6	7
10	246	245	247	245	244	244	244
20	247	243	242	241	242	243	246
30	256	256	254	255	255	254	254
40	256	255	254	253	252	252	252
50	265	263	261	261	259	260	260
60	270	270	270	271	271	270	270
70	273	273	273	271	273	273	273
80	286	283	282	281	281	281	281
90	287	288	287	285	285	285	284

Table A.2 The cloud point temperatures of SAN/PMMA blends cast from acetone at a drying time of 1 to 7 days in vacuum oven.

Weight percent of SAN	Cloud point temperature (°C)						
	Drying time in vacuum oven (days)						
	1	2	3	4	5	6	7
10	261	255	252	252	252	248	248
20	256	250	250	249	249	248	248
30	260	259	256	255	254	252	251
40	259	257	254	253	252	252	252
50	264	264	263	263	261	260	260
60	277	274	272	272	271	271	271
70	283	276	276	275	275	275	275
80	284	282	282	281	281	281	281
90	289	287	286	285	284	284	284

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Table A.3 The cloud point temperatures of SAN/PMMA blend cast from tetrahydrofuran at a drying time of 1 to 7 days in vacuum oven.

Weight percent of SAN	Cloud point temperature (°C)						
	Drying time in vacuum oven (days)						
	1	2	3	4	5	6	7
10	260	255	256	255	245	246	245
20	256	252	250	249	250	246	247
30	258	257	257	256	254	254	252
40	258	256	254	253	252	252	252
50	264	264	263	263	261	260	260
60	276	273	273	272	272	271	271
70	277	276	275	275	274	275	274
80	284	283	282	281	281	281	281
90	289	287	287	286	285	284	284

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Table A.4 The cloud point temperatures of SAN/PMMA blends cast from methyl ethyl ketone at a drying time of 1 to 7 days in vacuum oven.

Weight percent of SAN	Cloud point temperature (°C)						
	Drying time in vacuum oven (days)						
	1	2	3	4	5	6	7
10	265	253	250	251	246	245	246
20	265	262	261	256	251	248	247
30	265	264	261	259	256	257	254
40	261	259	257	257	256	253	253
50	276	271	269	264	260	262	262
60	276	275	276	274	274	274	274
70	284	282	277	276	273	273	273
80	301	297	295	292	290	287	281
90	297	295	288	288	286	285	284

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Table A.5 The cloud point temperatures of SAN/PMMA blends cast from 1,2-dichloroethane at a drying time of 1 to 7 days in vacuum oven.

Weight percent of SAN	Cloud point temperature (°C)						
	Drying time in vacuum oven (days)						
	1	2	3	4	5	6	7
10	245	242	242	242	242	241	243
20	247	247	246	246	247	247	246
30	255	254	254	255	251	251	251
40	254	253	252	252	252	252	253
50	261	260	260	260	260	261	269
60	271	269	269	269	269	269	269
70	284	274	273	274	274	274	274
80	281	281	281	281	281	280	280
90	285	285	284	284	284	284	284

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Table A.6 The cloud point temperatures of SAN/PMMA blends from melt mixing.

Weight percent of SAN	Cloud point temperature (°C)
10	230
20	235
30	240
40	244
50	251
60	256
70	263
80	267
90	272

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B. Test Results from the Studies of Tensile Strength

Table B.1 Tensile strength of SAN/PMMA blends at various compositions.

Weight percent of SAN	Tensile strength (N/mm ²)
10	40.8
20	40.7
30	40.4
40	40.5
50	39.5
60	39.1
70	38.9
80	37.1
90	36.1

Table B.2 Tensile strength of SAN/PMMA blends with methylene chloride.

Weight percent of SAN	Tensile strength (N/mm ²)
10	31.8
20	32.5
30	35.3
40	36.8
50	35.7
60	39.6
70	41.4
80	41.6
90	41.0

Table B.3 Tensile strength of SAN/PMMA blends with acetone.

Weight percent of SAN	Tensile strength (N/mm ²)
10	40.3
20	39.7
30	36.5
40	39.5
50	38.1
60	39.8
70	41.4
80	41.1
90	40.7

Table B.4 Tensile strength of SAN/PMMA blends with tetrahydrofuran.

Weight percent of SAN	Tensile strength (N/mm ²)
10	42.1
20	42.9
30	38.9
40	41.0
50	38.6
60	40.8
70	39.4
80	39.6
90	41.2

Table B.5 Tensile strength of SAN/PMMA blends with methyl ethyl ketone.

Weight percent of SAN	Tensile strength (N/mm ²)
10	41.4
20	41.8
30	40.1
40	41.3
50	41.2
60	40.5
70	40.7
80	40.1
90	39.7

Table B.6 Tensile strength of SAN/PMMA blends with 1,2-dichloroethane.

Weight percent of SAN	Tensile strength (N/mm ²)
10	40.3
20	40.5
30	40.3
40	41.3
50	41.2
60	39.2
70	38.7
80	40.7
90	40.4

C. Test Results from the Studies of Glass Transition Temperatures

Table C.1 The glass transition temperatures of SAN/PMMA blends at various compositions.

Weight percent of SAN	Glass transition temperature (°C)
10	100.8
20	109.8
30	108.7
40	108.7
50	109.9
60	108.9
70	107.2
80	108.0
90	105.8

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Table C.2 The glass transition temperatures of SAN/PMMA blends with methylene chloride.

Weight percent of SAN	Glass transition temperature (°C)
10	110.4
20	110.0
30	111.2
40	109.1
50	108.6
60	106.9
70	106.5
80	105.2
90	105.4

Table C.3 The glass transition temperatures of SAN/PMMA blends with acetone.

Weight percent of SAN	Glass transition temperature (°C)
10	112.5
20	111.7
30	110.5
40	109.4
50	108.4
60	108.0
70	106.3
80	105.4
90	106.0

Table C.4 The glass transition temperatures of SAN/PMMA blends with tetrahydrofuran.

Weight percent of SAN	Glass transition temperature (°C)
10	110.9
20	110.4
30	110.0
40	108.4
50	108.0
60	107.4
70	106.7
80	105.4
90	105.8

Table C.5 The glass transition temperatures of SAN/PMMA blends with methyl ethyl ketone.

Weight percent of SAN	Glass transition temperature (°C)
10	112.5
20	110.1
30	110.4
40	109.6
50	109.6
60	107.1
70	107.1
80	105.1
90	105.1

Table C.6 The glass transition temperatures of SAN/PMMA blends with 1,2-dichloroethane.

Weight percent of SAN	Glass transition temperature (°C)
10	112.6
20	109.9
30	109.0
40	108.9
50	108.2
60	108.5
70	107.6
80	105.7
90	104.7

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