

Supporting information

Study on compatibility of aliphatic polyketone/poly(acrylonitrile-*r*-methyl methacrylate) blend

Jungyeon Park¹, Younggon Son² 

¹ Korea Automotive Technology Institute, 303 Pungse-ro, Pungse-myeon, Dongnam-gu, Cheonan-si, Chungnam 31214, Republic of Korea

² Advanced Materials Science and Engineering, College of Engineering, Kongju National University, Cheonan, Chungnam 31080, Republic of Korea

Table S1 Measured AN content in p(AN-*r*-MMA)s as a function of the feed composition of AN.

Feed composition of AN		AN content in copolymer (mol.%)
wt.%	mol.%	
0.0	0.0	0.0
10.0	17.3	17.7
20.0	32.1	29.1
30.0	44.7	33.7
40.0	55.7	41.2
50.0	65.4	46.5
70.0	81.5	58.8
80.0	88.3	66.8

Table S2 Thermal properties of PK6 phases in PK6/p(AN-*r*-MMA)(9/1) blends.

Code (°C)	T _g (°C)	T _m (°C)	ΔH _m (J/g)
PK6	12.4	190.7	41.2
PK6/p(AN0- <i>r</i> -MMA100)(9/1)	14.0	186.0	28.3
PK6/p(AN18- <i>r</i> -MMA82)(9/1)	15.1	183.1	27.3
PK6/p(AN32- <i>r</i> -MMA63)(9/1)	17.4	183.0	26.6
PK6/p(AN45- <i>r</i> -MMA55)(9/1)	18.7	180.0	25.9
PK6/p(AN56- <i>r</i> -MMA44)(9/1)	20.9	179.1	20.2
PK6/p(AN65- <i>r</i> -MMA35)(9/1)	22.8	176.2	17.9
PK6/p(AN82- <i>r</i> -MMA18)(9/1)	24.2	170.5	11.9
PK6/p(AN88- <i>r</i> -MMA12)(9/1)	28.7	167.5	10.9

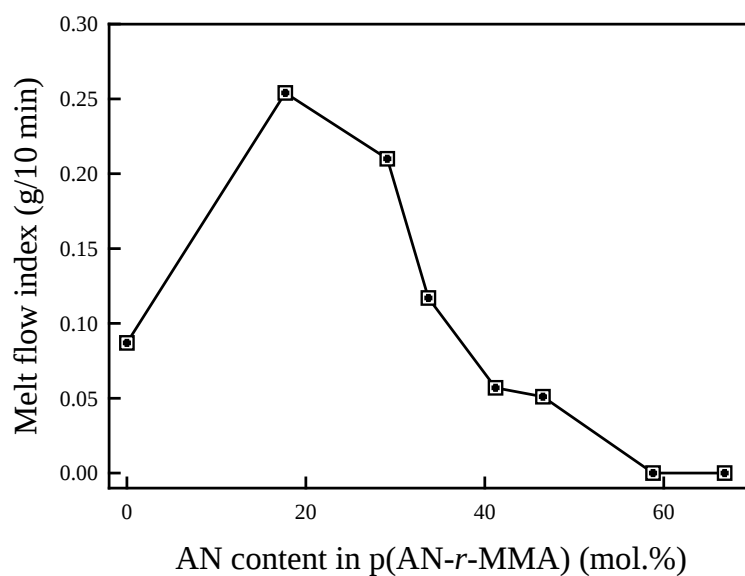


Figure S1 Melt flow index of p(AN-*r*-MMA) as a function of AN content in p(AN-*r*-MMA)

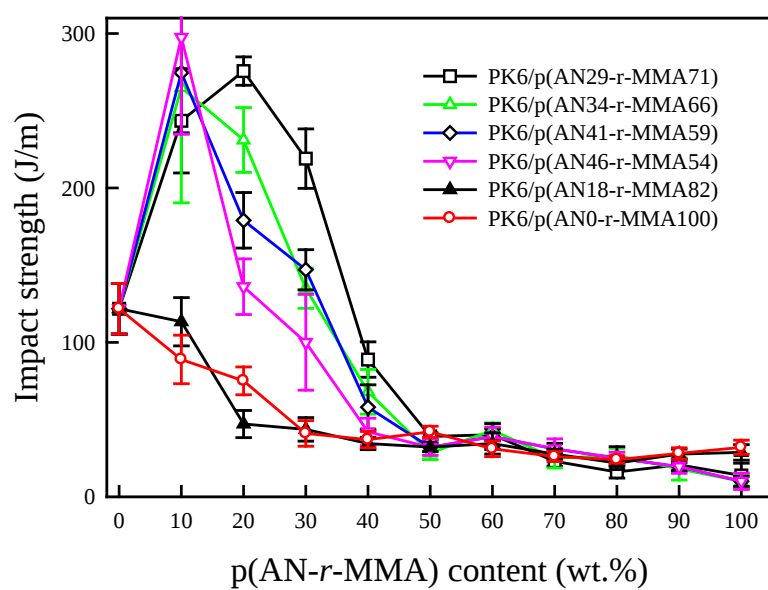


Figure S2 Izod impact strength of PK6/p(AN-*r*-MMA) blends.