

Supplementary materials

Table S1 Sample preparation

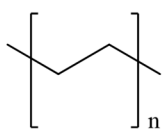
Sample name	Types of plastics	Ratio of MR and PE	Mass of MR (g)	Mass of plastics (g)
MR/PE-5:1	PE	5:1	5	1
MR/PE-2:1		2:1	4	2
MR/PE-1:1		1:1	3	3
MR/PE-1:2		1:2	2	4
MR/PE-1:5		1:5	1	5
MR/PP-1:1	PP	1:1	3	3
MR/PET-1:1	PET	1:1	3	3

Table S2 Samples for thermogravimetric analysis

	Heating rate (°C/min)	Name of sample
MR	10	MR-10 °C/min
PE		PE-10 °C/min
PP		PP-10 °C/min
PET		PET-10 °C/min
	10	MR/PE-1:1-10 °C/min
	20	MR/PE-1:1-20 °C/min
MR/PE-1:1	30	MR/PE-1:1-30 °C/min
	40	MR/PE-1:1-40 °C/min
MR/PE-5:1	10	MR/PE-5:1-10 °C/min
MR/PE-2:1		MR/PE-2:1-10 °C/min
MR/PE-1:2		MR/PE-1:2-10 °C/min
MR/PE-1:5		MR/PE-1:5-10 °C/min
MR/PP-1:1		MR/PEP-1:1-10 °C/min
MR/PET-1:1		MR/PET-1:1-10 °C/min



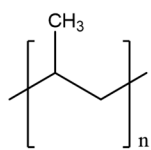
Plastic bags



Polyethylene (PE)



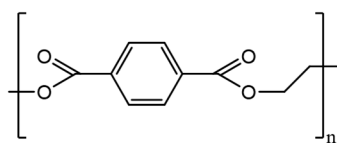
Plastic lunch boxes



Polypropylene (PP)



Plastic bottles



Polyethylene terephthalate (PET)

Figure S1. Chemical structure of PE, PP and PET.