

Supporting Information
for
**Copolymerization with Polyether Segments Improves the Mechanical
Properties of Biodegradable Polyesters**

*Shuyi Wu, Yang Zhang, Jiarui Han, Zhining Xie, Jun Xu, Baohua Guo**

Institute of Polymer Science and Engineering, Department of Chemical Engineering,
Tsinghua University, Beijing 100084, China

*Corresponding author: Prof. Baohua Guo. E-mail: bhguo@mail.tsinghua.edu.cn

List of Contents

Table S1. Mechanical properties of PBS and PBS-PBSTMG blend films

Table S2. Tear strength of PBS and PBS-PBSTMG blend films

Table S1. Mechanical properties of PBS and PBS-PBSTMG blend films

Sample	Thickness (mm)	Tensile strength (MPa)	Elongation at break (%)
PBS (MD)	0.038	21.1	106
PBS-10%PBSTMG (MD)	0.044	32.4	170
PBS-20%PBSTMG (MD)	0.073	27.2	258
PBS-30%PBSTMG (MD)	0.055	27.3	281
PBS (TD)	0.044	22.0	18
PBS-10%PBSTMG (TD)	0.035	15.6	37
PBS-20%PBSTMG (TD)	0.060	26.7	106
PBS-30%PBSTMG (TD)	0.045	23.4	198

Table S2. Tear strength of PBS and PBS-PBSTMG blend films

Sample	Thickness (mm)	Tear force (N)	Tear strength (kN/m)
PBS (TD)	0.045	2.37	52.7
PBS-10%PBSTMG (TD)	0.045	3.96	88.0
PBS-20%PBSTMG (TD)	0.056	3.81	68.0
PBS-30%PBSTMG (TD)	0.053	4.91	92.6
PBS (MD)	0.066	2.86	43.3
PBS-10%PBSTMG (MD)	0.075	4.00	53.3
PBS-20%PBSTMG (MD)	0.050	3.24	64.7
PBS-30%PBSTMG (MD)	0.045	0.98	21.8