

Supporting Information

Preparation and Properties of Plant-Oil-Based Epoxy

Acrylate-like Resins for UV-Curable Coatings

Jijun Tang ^{1,†}, Jinshuai Zhang ^{2,†}, Jianyu Lu ^{1,2}, Jia Huang ², Fei Zhang ², Yun Hu ², Chengguo Liu ^{2,*}, Rongrong An ^{3,*}, Hongcheng Miao ^{2,4}, Yuanyuan Chen ^{2,4}, Tian Huang ^{2,4} and Yonghong Zhou ^{2,*}

Figures. S1–S11

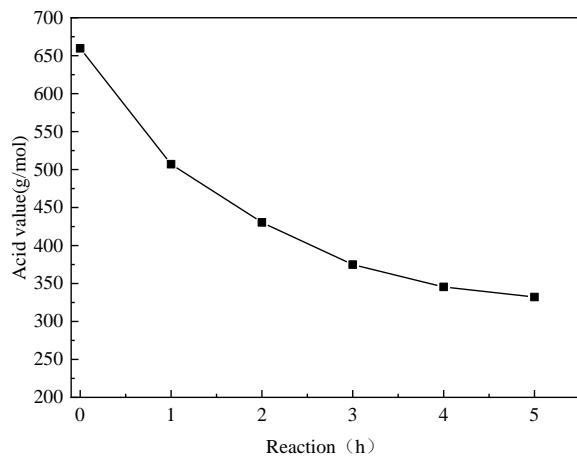


Figure. S1 Acid values of MAAMA

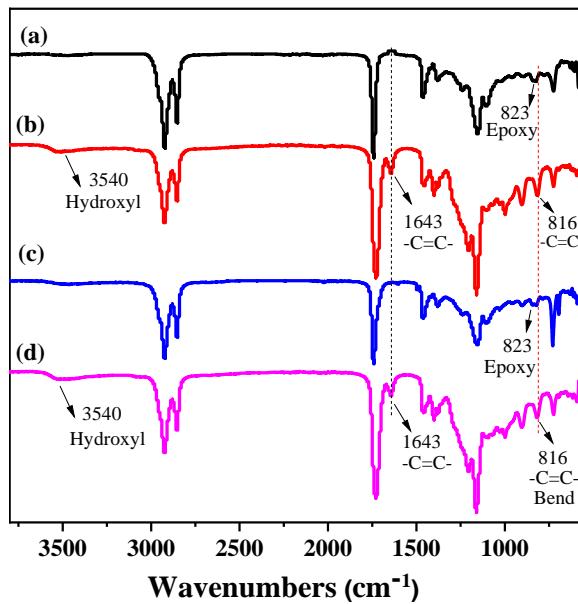


Figure. S2 FT-IR spectra of (a) ERSO, (b) MMERSO, (c) EWSO, and (d) MMEWSO

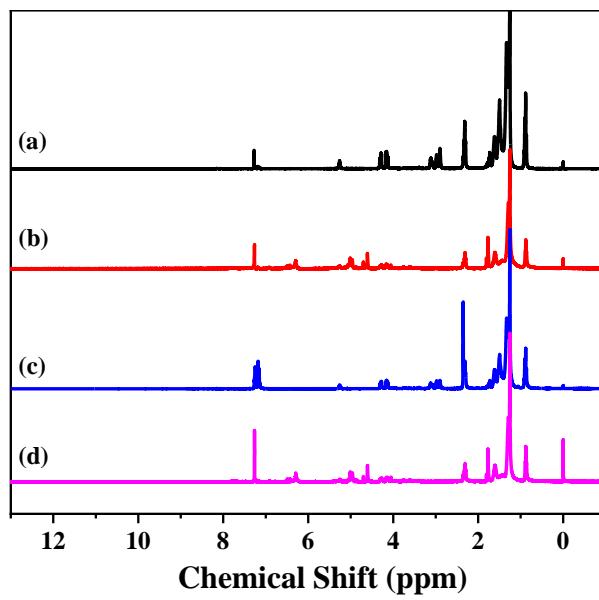


Figure. S3 ¹H NMR spectrum of (a) ERSO, (b) MMERSO, (c) EWSO, and (d)
MMEWSO

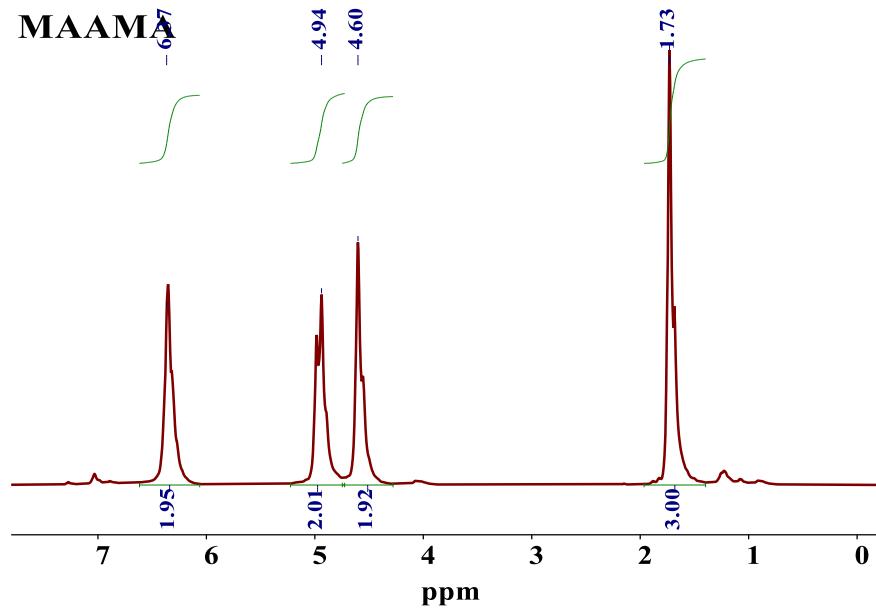


Figure. S4 ¹H NMR spectrum of MAAMA

ESO

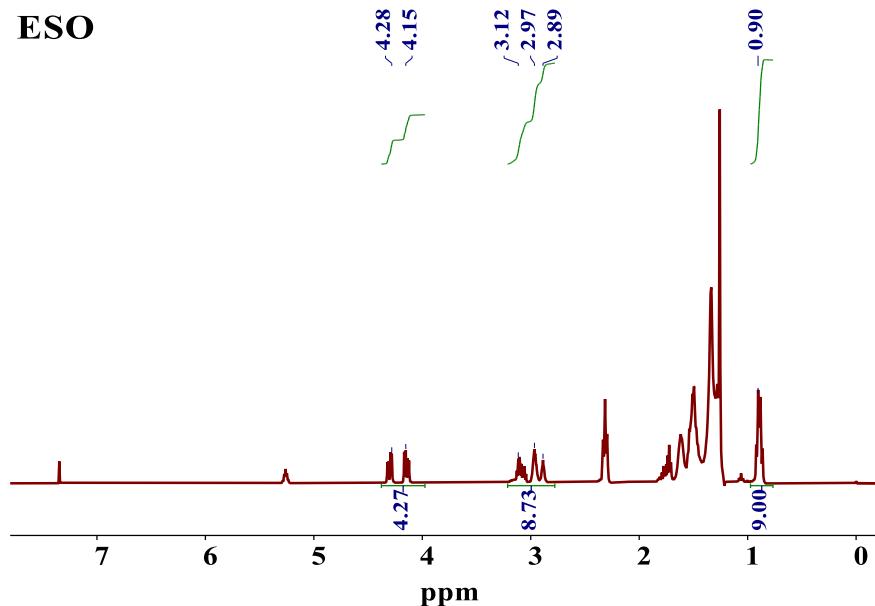


Figure. S5 ¹H NMR spectrum of ESO

ERSO

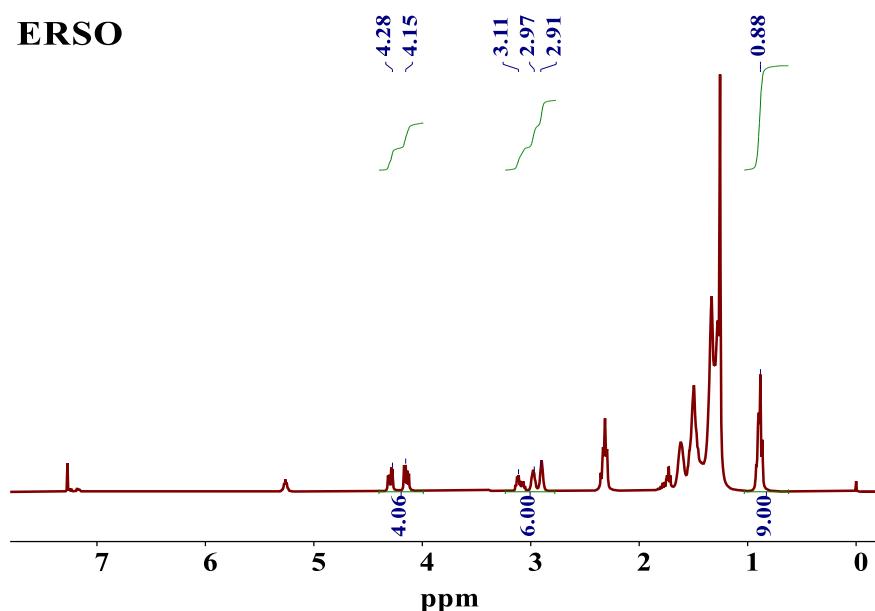


Figure. S6 ¹H NMR spectrum of ERSO

EWSO

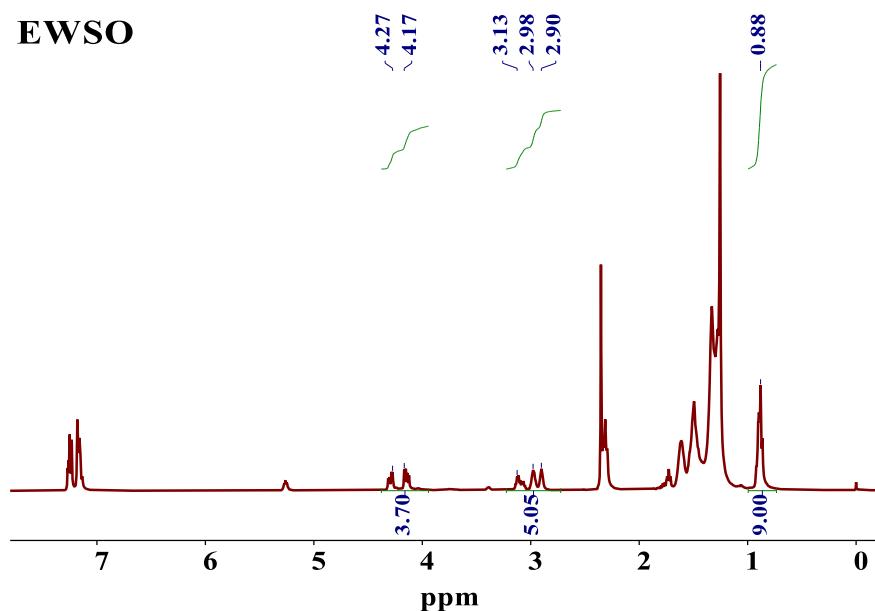


Figure. S7 ¹H NMR spectrum of EWSO

MMESO

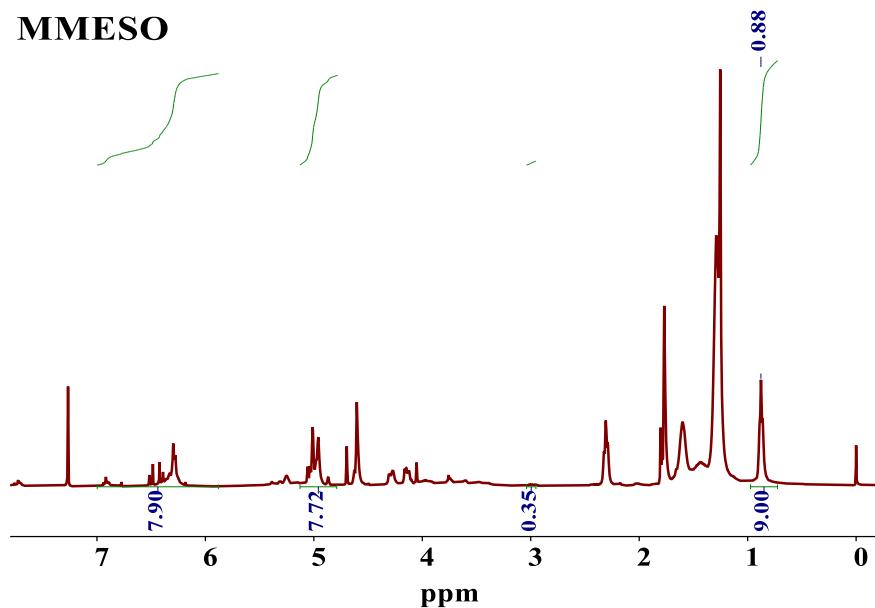


Figure. S8 ¹H NMR spectrum of MMESO

MMERSO

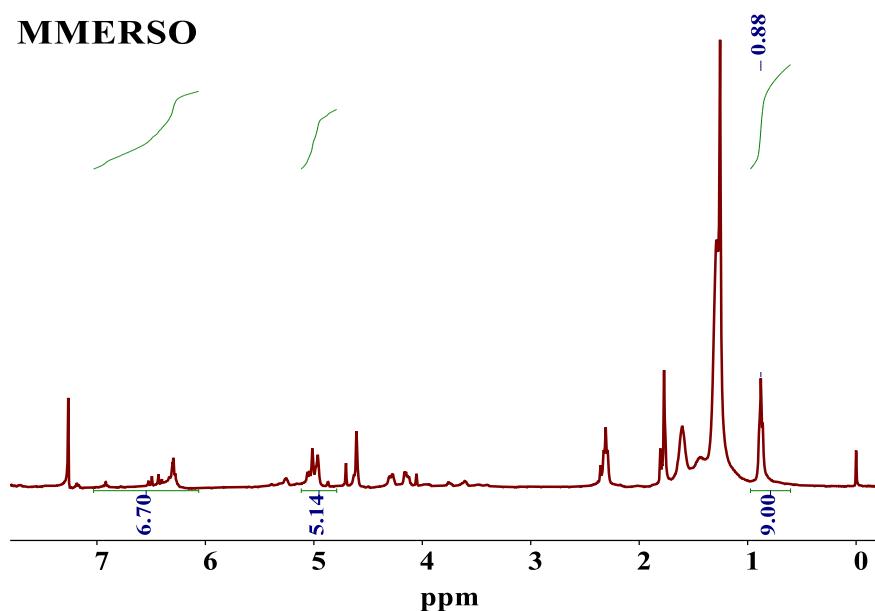


Figure. S9 ¹H NMR spectrum of MMERSO

MMEWSO

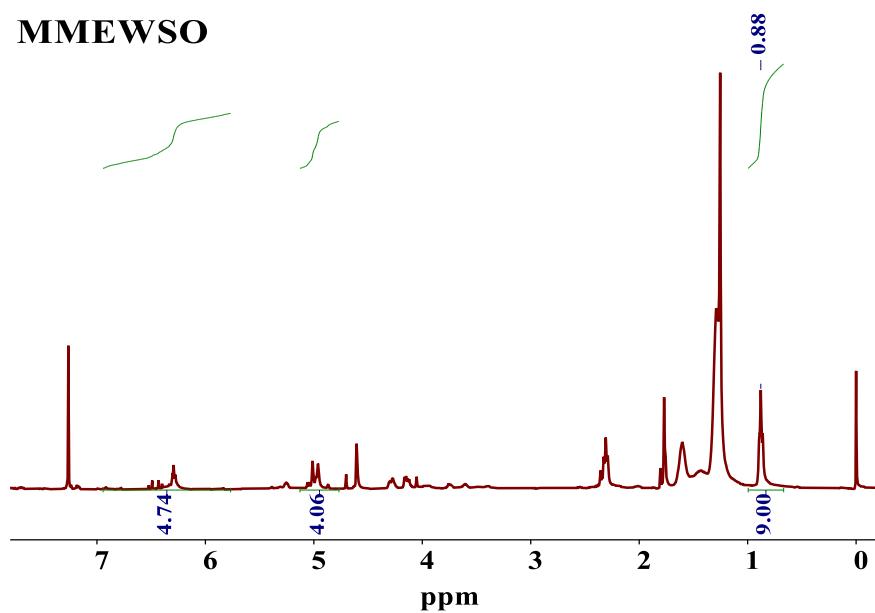


Figure. S10 ¹H NMR spectrum of MMEWSO

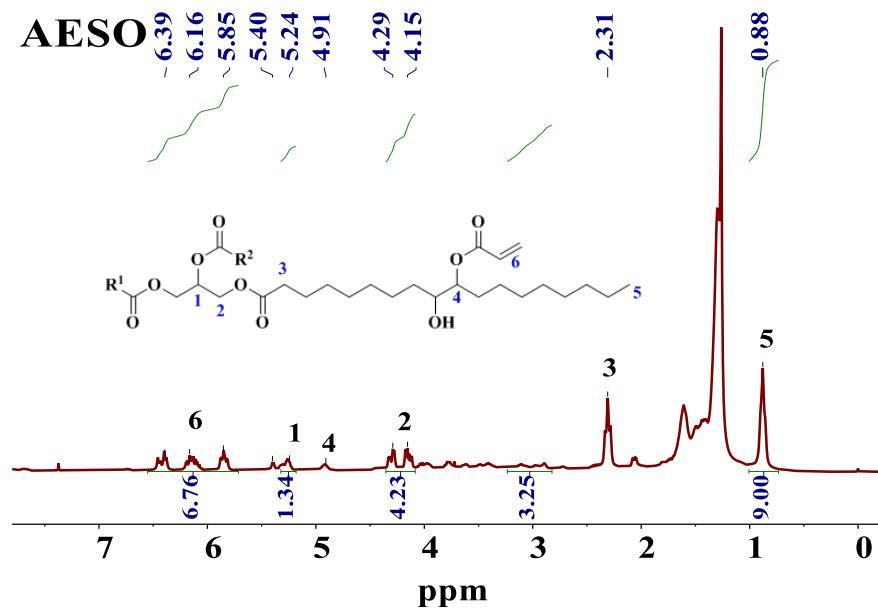


Figure. S11 ¹H NMR spectrum of AESO

Equation. S1 Determining the grafted C=C functionality for AESO

$$N_{\text{C}=\text{C}} = \frac{A_{5.6-6.7\text{ppm}}/3}{A_{0.88\text{ppm}}/9} = \frac{3A_{5.6-6.7\text{ppm}}}{A_{0.88\text{ppm}}} \quad (\text{S1})$$