

Supporting Information

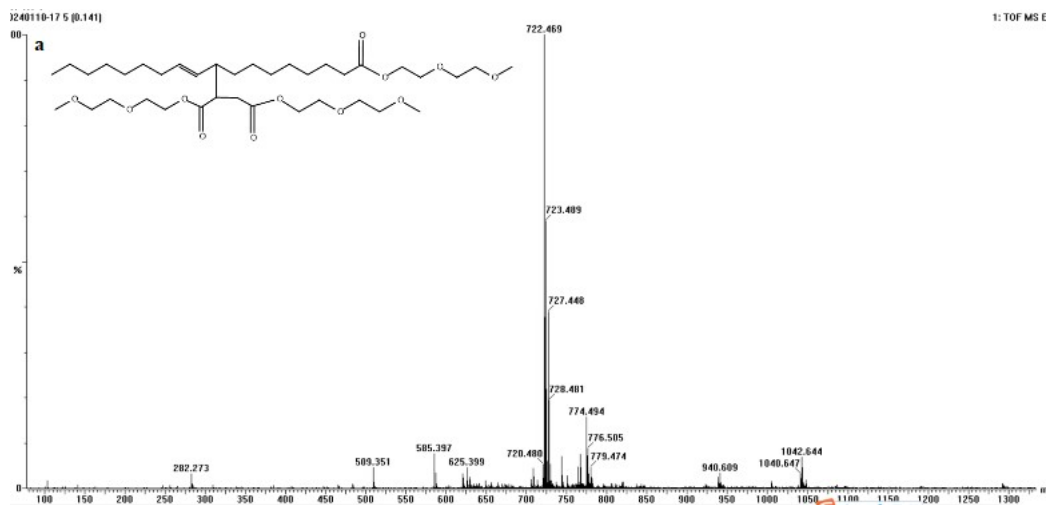
A highly efficient bio-based plasticizer constructed from renewable oleic acids for plasticizing and enhancing the properties of Polylactic acid

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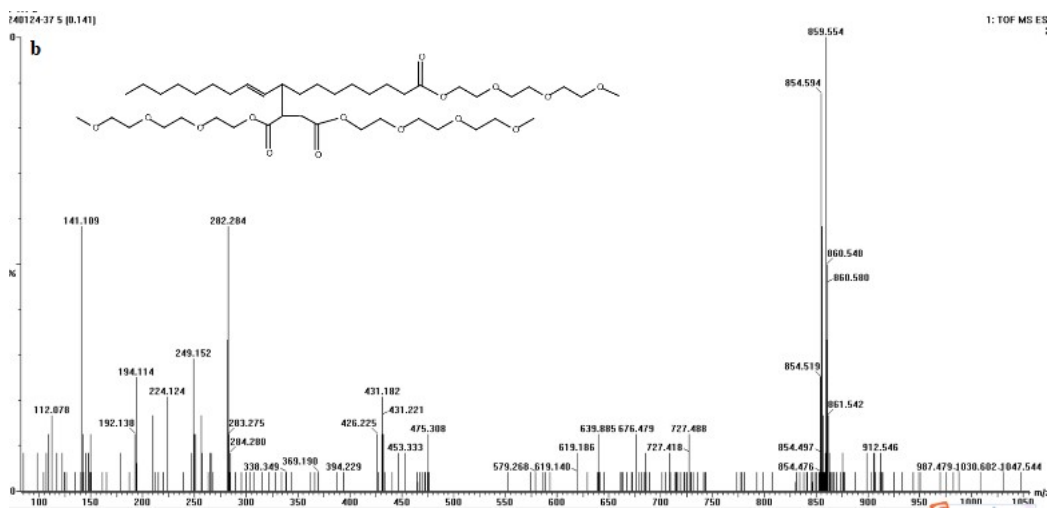
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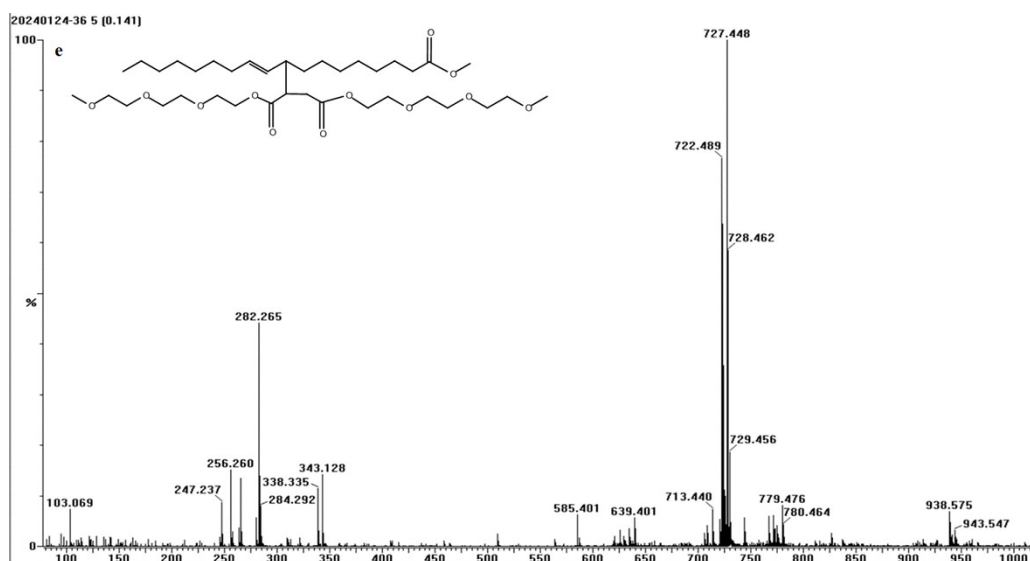
1. ESI-MS spectra of plasticizers



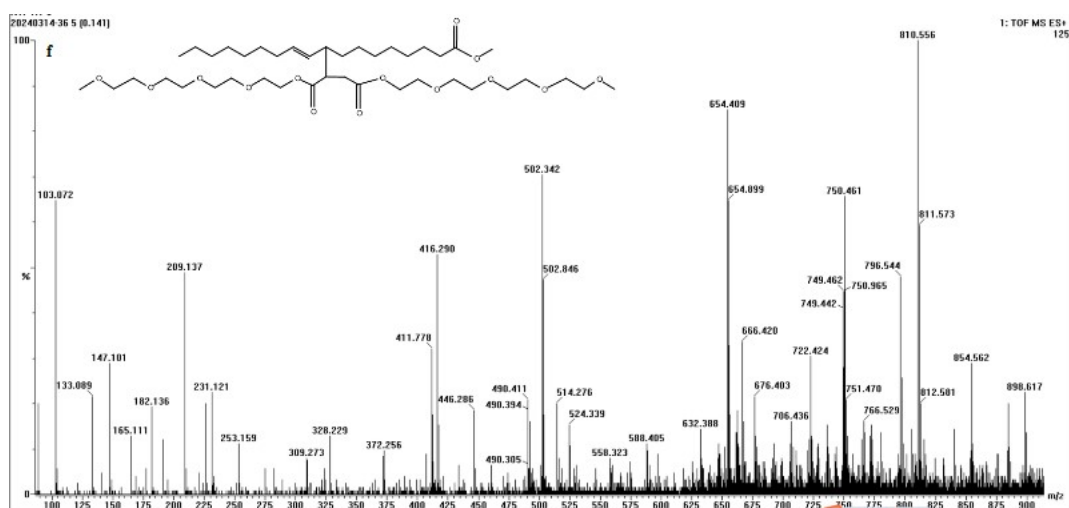
BTA-OA-MME (M=704), m/z=727: $[M+23(\text{Na})]^+$, m/z=723 $[M+19(\text{H}_2\text{O}+\text{H})]^+$



BTA-OA-TEGDM (M=836), m/z=859 $[M+23(\text{Na})]^+$



BTA-ME-TEGDM (M=704), $m/z=727 [M+23(\text{Na})]^+$



BTA-ME-MTEG (M=792), $m/z=811 [M+19(\text{H}_2\text{O}+\text{H})]^+$

Fig.S1 Mass spectra of different plasticizer molecules: a: BTA-OA-MME, b: BTA-OA-TEGDM, c: BTA-OA-MTEG, d: BTA-ME-MME, e: BTA-ME-TEGDM, f: BTA-ME-MTEG.

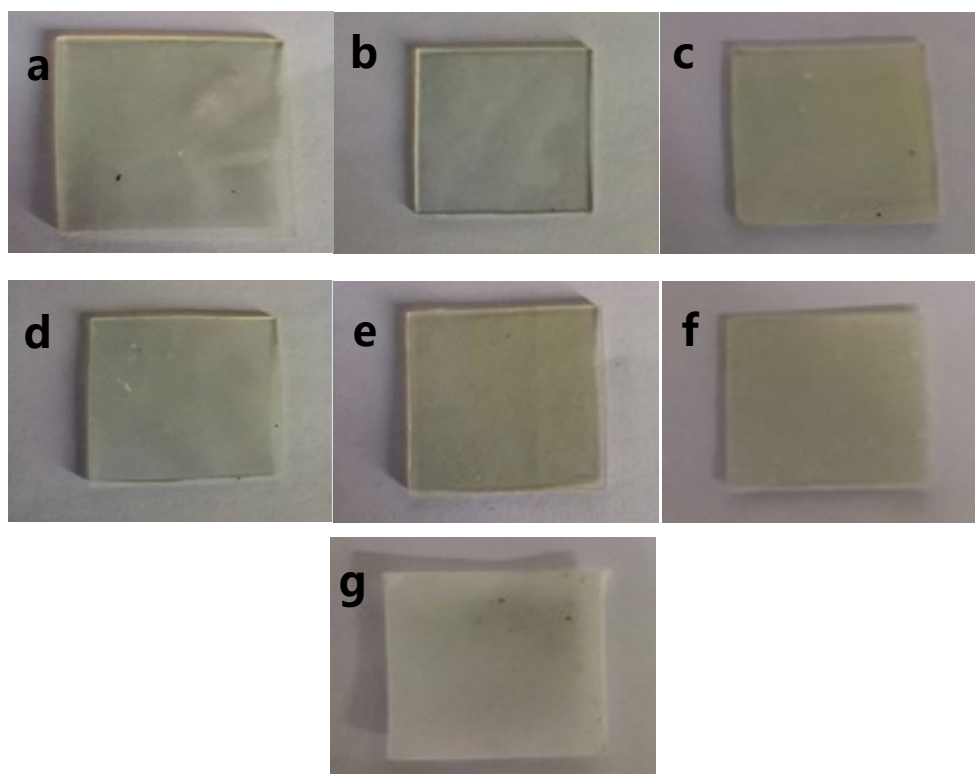


Fig.S2 the image of plasticized PLA blend with: a: BTA-OA-MME, b: BTA-OA-TEGDM, c: BTA-OA-MTEG, d: BTA-ME-MME, e: BTA-ME-TEGDM, f: BTA-ME-MTEG, g: DOTP.