Enhancement performance of application mussel-biomimetic adhesive primer for dentin adhesives

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S.1. $^1$H NMR characterization of DMA monomer

$^1$H NMR (500MHz, DMSO-D$_6$): 8.74 (s, 1H, HO-phenyl), 8.63 (s, 1H, HO-phenyl), 7.93 (t, 1H, -NHCO-), 6.64 (d, 1H, C$_6$H$_2$(OH)$_2$-), 6.58 (d, 1H, C$_6$H$_2$(OH)$_2$-), 6.43 (dd, 1H, C$_6$H$_2$(OH)$_2$-), 5.62 (s, 1H, -C(=O)-C(-CH$_3$)=CHH), 5.30 (s, 1H, -C(=O)-C(-CH$_3$)=CHH), 3.24 (m, 2H, C$_6$H$_3$(OH)$_2$-CH$_2$-CH$_2$(NH)-C(=O)-), 2.56 (t, 2H, C$_6$H$_3$(OH)$_2$-CH$_2$-CH$_2$(NH)-C(=O)-), 1.84 (s, 3H, -C(=O)-C(-CH$_3$)=CH$_2$).

| Characterized group | wavenumber          |
|---------------------|---------------------|
| phenolic hydroxyl (Ph-OH) | 3367 cm$^{-1}$, 1190 cm$^{-1}$, 1207 cm$^{-1}$, 1360 cm$^{-1}$ |
| N-H stretching vibration | 3201cm$^{-1}$, 1554 cm$^{-1}$ |
| C = O stretching vibration | 1650 cm$^{-1}$ |
| C=C resonance vibration in aromatic ring | 1593 cm$^{-1}$, 1464 cm$^{-1}$ |
| methacrylate C=C double bonds | 1631cm$^{-1}$ |