

SUPPORTING INFORMATION

Sustainable Triazine Based Dehydro-condensation Agents for Amide Synthesis

by

R. Sole¹, V. Gatto^{1,2}, S. Conca¹, N. Bardella¹, A. Morandini¹, and V. Beghetto^{1,2*}

¹ Università Ca' Foscari di Venezia, Dipartimento di Scienze Molecolari e Nanosistemi, Via Torino 155, 30172 Venezia (Italy);

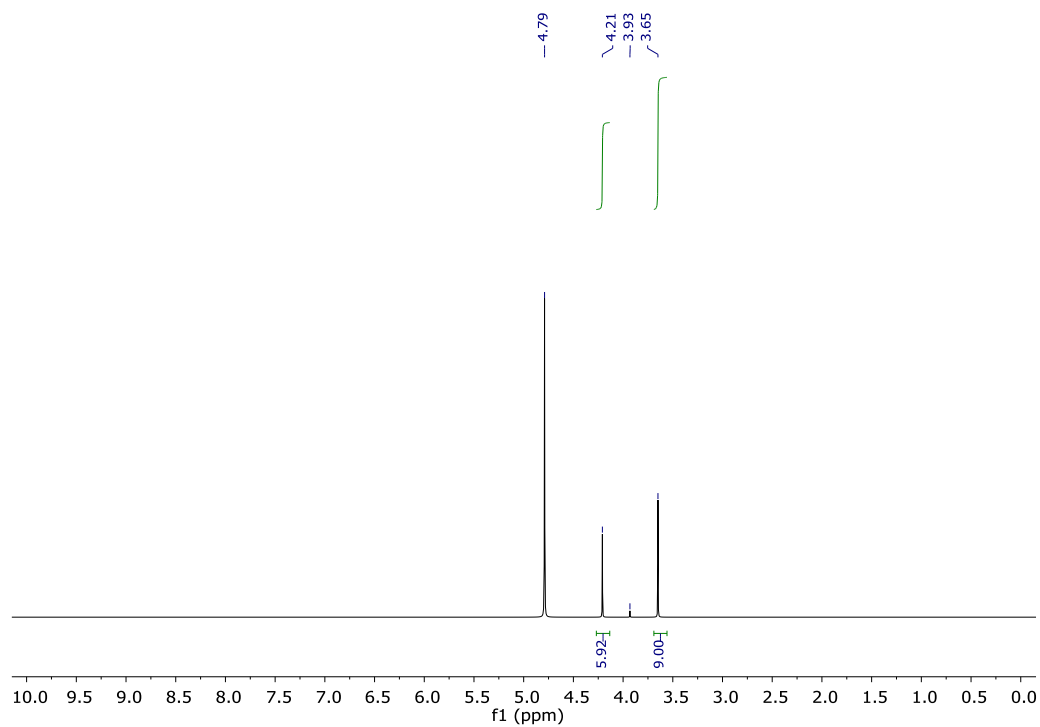
² Crossing srl, Viale della Repubblica 193/b, 31100 Treviso (Italy); vanessa.gatto@crossing-srl.com, valentina.beghetto@crossing-srl.com

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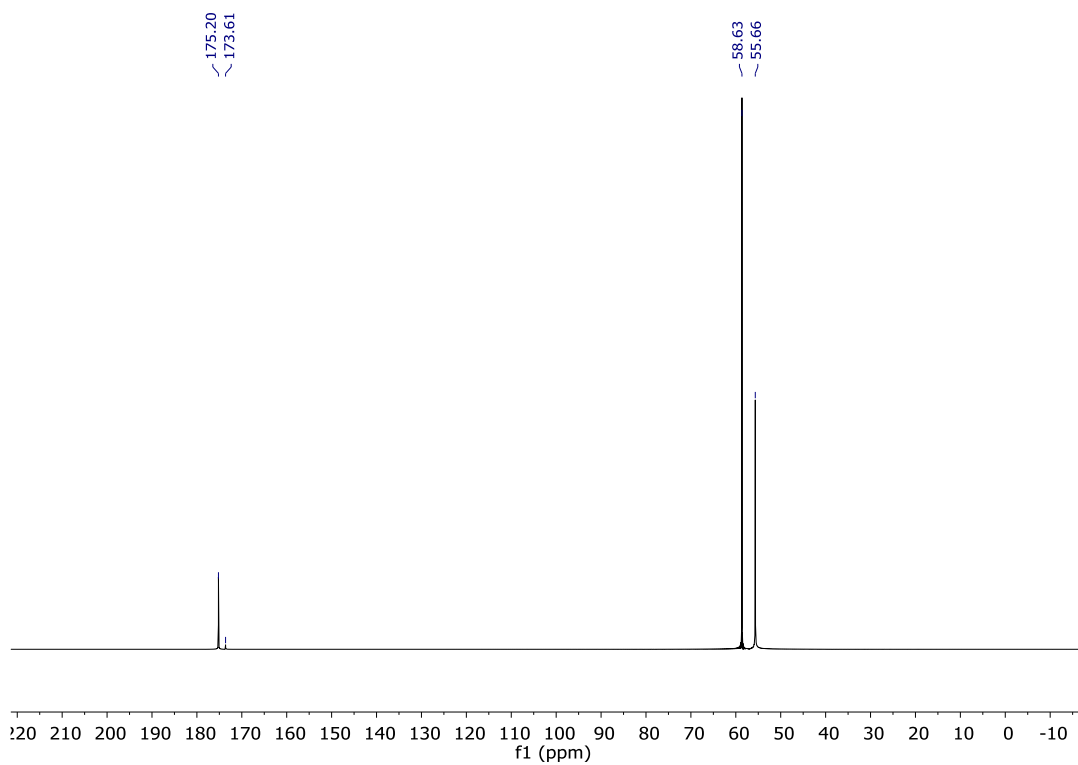
I. ¹H, ¹³C NMR and FT-IR of 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-trimethylamine perchlorate (DMTTMA(ClO₄))

II. NMR of reaction products

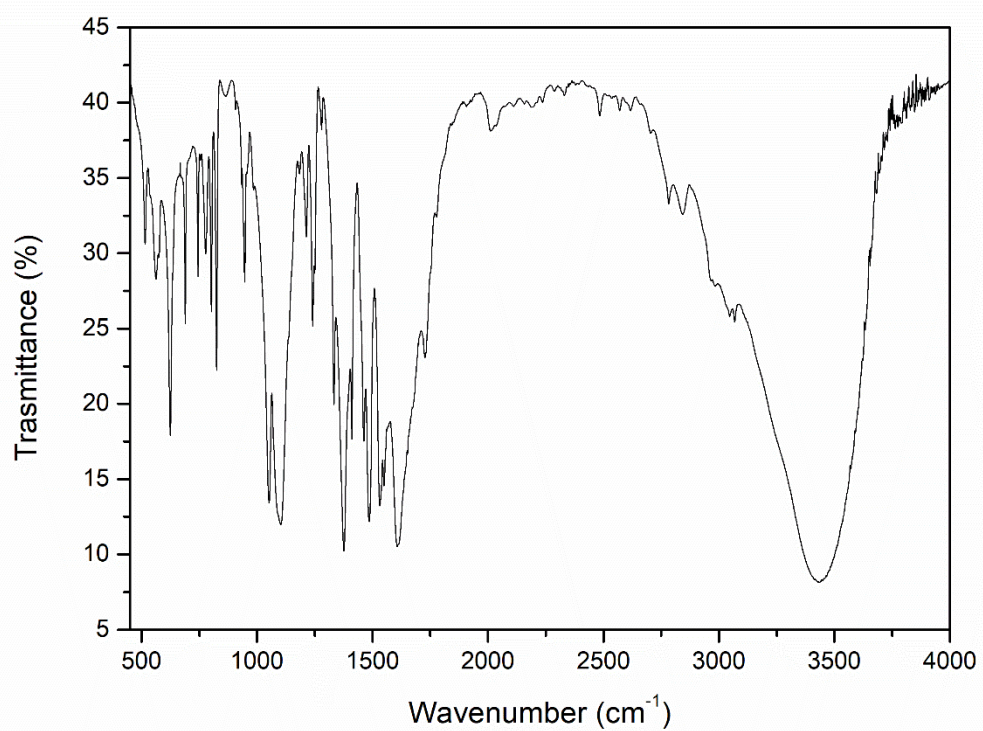
I. ^1H , ^{13}C NMR and FT-IR of 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-trimethylamine perchlorate (DMTTMA(ClO_4))



^1H NMR (300 MHz, D_2O , 25°C): $\delta=4.21$ (s, 6H), 3.65 ppm (s, 9H)

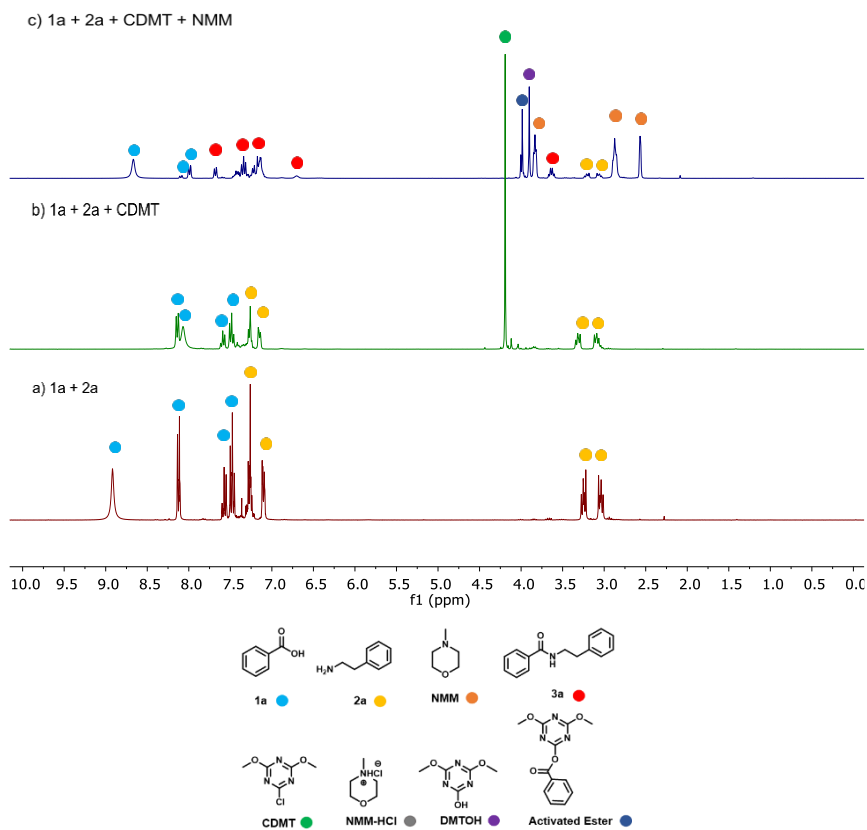


^{13}C NMR (75 MHz, D_2O , 25°C): $\delta=175.2$, 173.6, 58.6, 55.7 ppm

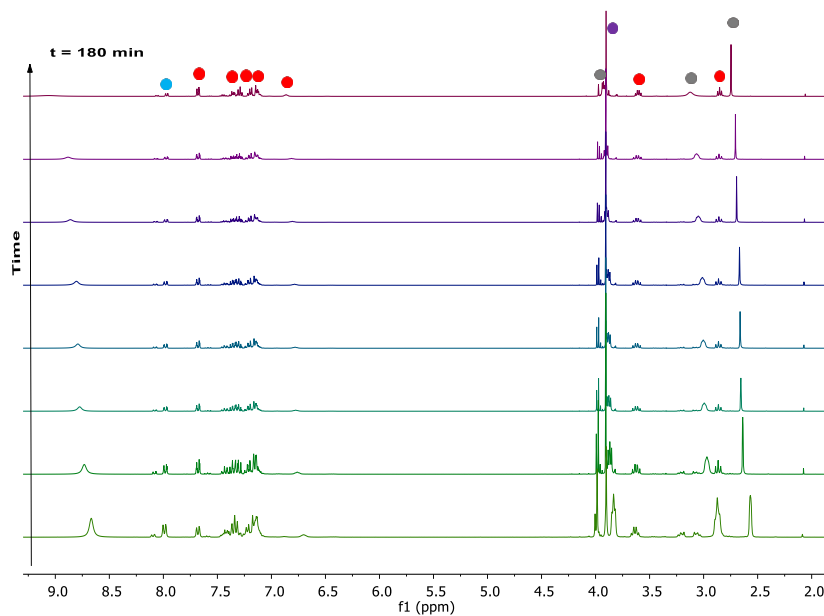


FT-IR (KBr): $\tilde{\nu}$ =1606, 1531, 1485, 1375, 1052, 311 825, 624 cm⁻¹

II. NMR study of reaction products



^1H NMR spectra (CDCl_3) of a) benzoic acid **1a** and phenylethylamine **2a** b) **1a** + **2a** + CDMT c) **1a** + **2a** + CDMT + NMM.



^1H NMR spectra (CDCl_3) in sequence over the time of **1a** + **2a** + CDMT + NMM, t = 0 at the bottom, t = 180 min at the top.