

Two Variations of Solvent-Reduced Wittig Olefination Reactions – Comparison of Solventless Wittig Reactions to Wittig Reactions under Ultrasonication with Minimal Work-up [1]

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Stabilized and semi-stabilized phosphoranes can be subjected to solventless Wittig reactions with carbaldehydes. Simple heating of a mixture of added components at 100 °C in an electric oven gives the corresponding olefins in good yield. Alternatively, the Wittig reactions can be carried out in a biphasic medium under ultrasonication. In this case, the Wittig products can be isolated by simple evaporation of the organic phase without additional work-up.

Key words: Wittig Olefination, Ultrasound, Solventless Reaction