



**Propylene Glycol: A Recyclable Solvent System for the Synthesis of Benzimidazole Derivatives Using ZnCl<sub>2</sub> as an Catalyst**

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**ABSTRACT**

*Zinc chloride efficiently catalysed the synthesis of benzimidazole derivatives from o-phenylenediamine and aldehydes in PPG. This method provides a novel route for the synthesis of benzimidazoles in good yields with little catalyst loading. The recovery and the successful reutilization of the solvent system are also presented. Moreover, the easy set-up and purification tasks of this sustainable method make it appealing for bulk industry applications.*

**Keywords:** Green synthesis, Zinc chloride, PPG, OPD, benzimidazoles, recyclability.

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