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**Silica supported polyphosphoric acid (PPA-SiO<sub>2</sub>): an efficient and reusable heterogeneous catalyst for the one-pot synthesis of  $\alpha$  -amino phosphonates**

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**Abstract:** An efficient green protocol is described for the preparation of  $\alpha$  -amino phosphonates, employing a one-pot three-component condensation reaction between aldehydes, amines, and trialkyl phosphites in the presence of PPA-SiO<sub>2</sub> under solvent-free conditions at 80 °C. The present procedure offer advantages such as high to excellent yields, short reaction time, inexpensiveness, recovery, and reusability of catalyst.

**Key Words:**  $\alpha$  -Amino phosphonates; PPA-SiO<sub>2</sub>; heterogeneous catalyst; trialkyl phosphites

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