

Catalytic oxidative behavior of Melamine glycol resin as a heterogeneous catalyst

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Development of clean, eco-friendly oxidative methodologies is an area of immense importance both from environment and economic point of view. Selective oxidation of cyclohexene to produce oxygenated products is a crucial transformation. These oxygenated products of cyclohexene and their derivatives are very important in organic synthesis owing to the existence of a highly reactive α , β -unsaturated carbonyl group, which are extensively used in the preparation of a range of chemical intermediates and products. Conventional oxidants used for cyclohexene oxidation are notably based on transitional metal ion, which produces copious amounts of undesirable wastes. Catalytic oxidation by molecular oxygen would be valuable and this strategy we have extended to air which will be more economic. So far, there is no report on Resin catalyzed oxidation and oxidative Michael addition of Cyclohexene by molecular oxygen. In here, we explore the oxidative properties of melamine glycol resin as a green eco-friendly & recyclable catalyst for cyclohexene oxidation and oxidative Michael addition reaction.