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## Oxidation of Benzylic Alcohols to Their Corresponding Carbonyl Compounds in The Presence of 2-Bromoethyl(triphenylphosphonium)chlorochromate[(2-BETPP)ClCrO<sub>3</sub>] Versus 2-Bromoethyl(triphenylphosphonium)perchlorate[(2-BETPPP)ClO<sub>4</sub>]

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Oxidation of alcohols to the corresponding carbonyl compounds is one of the most fundamental reactions in organic synthesis.[1-3] In the

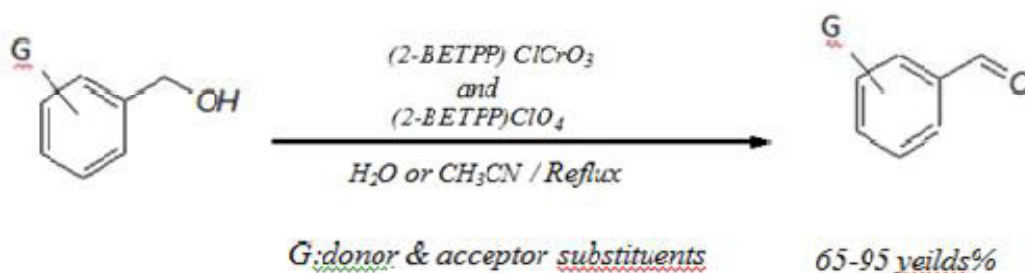
present communication we report on simple preparation of convenient quaternary phosphonium oxidants for example 2-bromoethyl(triphenylphosphonium) chlorochromate and 2-bromoethyl(triphenylphosphonium) perchlorate are efficient and mild

oxidizing agent for the oxidation of benzylic alcohols. These reagents[(2-BETPP)ClCrO<sub>3</sub>(I)& (2-BETPPP)ClO<sub>4</sub>(II)] are obtained by

simple addition of aqueous solution of 2-Bromoethyl(Triphenylphosphonium) Bromide to a freshly prepared Chlorochromate solution or

Sodium Perchlorate solution in water at room temperature respectively. Our quaternary phosphonium oxidants(I,II) have shown a highly

efficiency and selectivity in the oxidation of benzylic alcohols in comparison of aliphatic alcohols in the H<sub>2</sub>O/CH<sub>3</sub>CN under reflux conditions(Scheme1).



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In conclusion we have obtained the oxidant of 2-bromoethyl(triphenylphosphonium) chlorochromate more efficient than 2-bromoethyl(triphenylphosphonium) perchlorate in the oxidation of benzylic alcohols. Also over oxidation of product to the corresponding carboxylic acid wasn't observed at all.

### Reference

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