

Supporting Information

Alkali metal inorganic acid salts catalyzed β -hydroxyethylation of thiols

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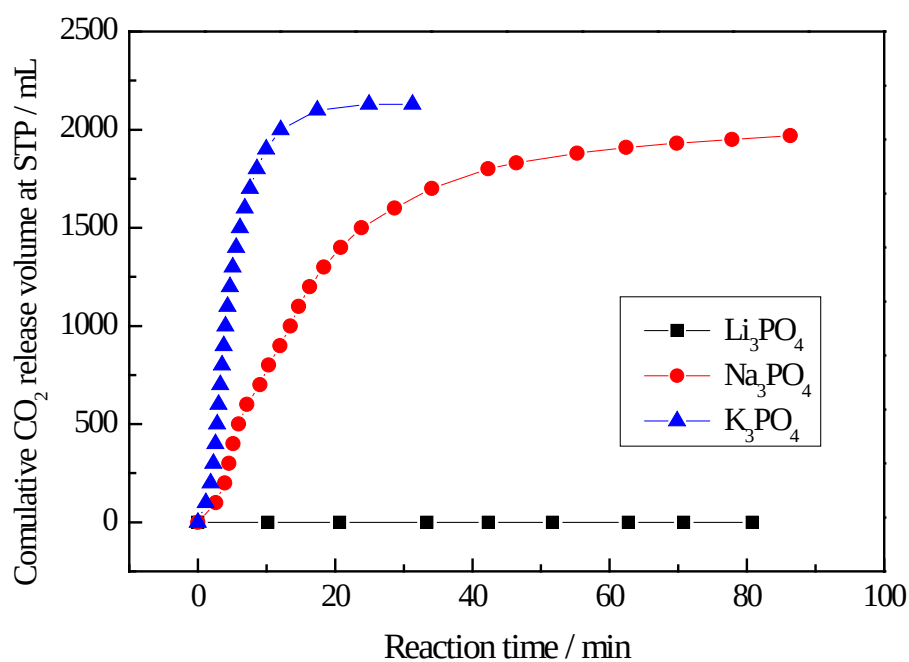


图 S1 M_3PO_4 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)

Figure S1 Kinetic curves of CO_2 release of M_3PO_4 catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

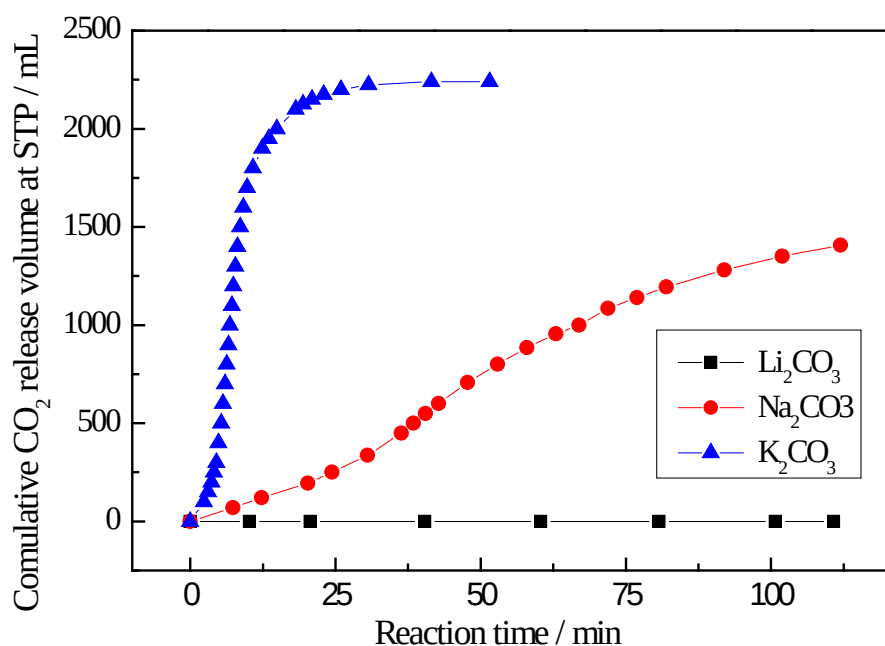


Figure S2 M_2CO_3 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)

Figure S2 Kinetic curves of CO_2 release of M_2CO_3 catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

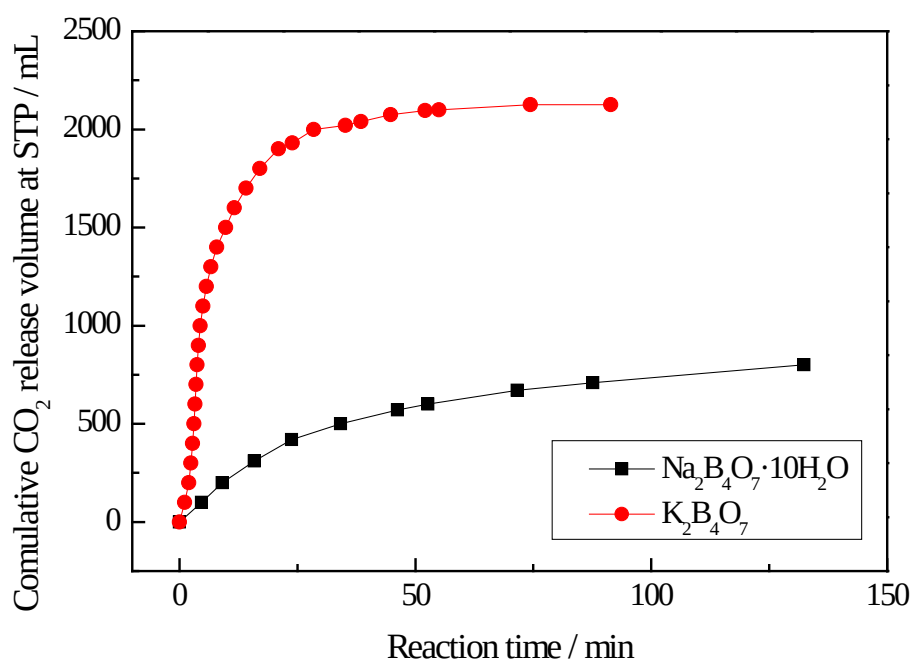


图 S3 $M_2B_4O_7$ 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)

Figure S3 Kinetic curves of CO_2 release of $M_2B_4O_7$ catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

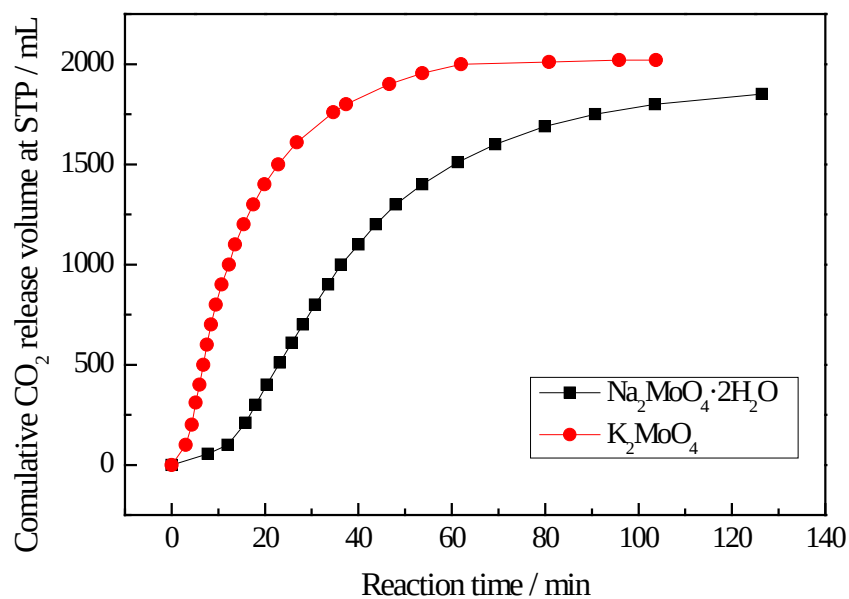


图 S4 M_2MoO_4 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)
Figure S4 Kinetic curves of CO_2 release of M_2MoO_4 catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

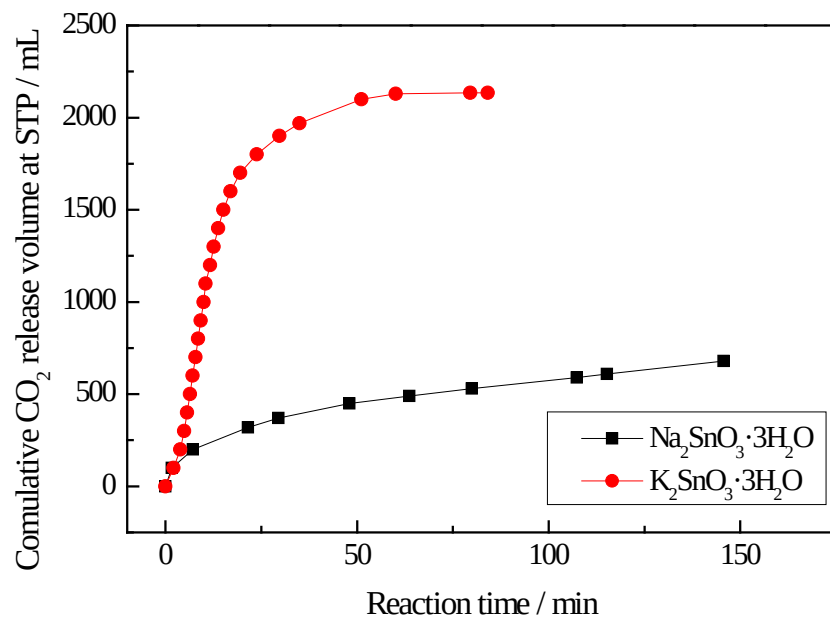


图 S5 M_2SnO_3 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)
Figure S5 Kinetic curves of CO_2 release of M_2SnO_3 catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

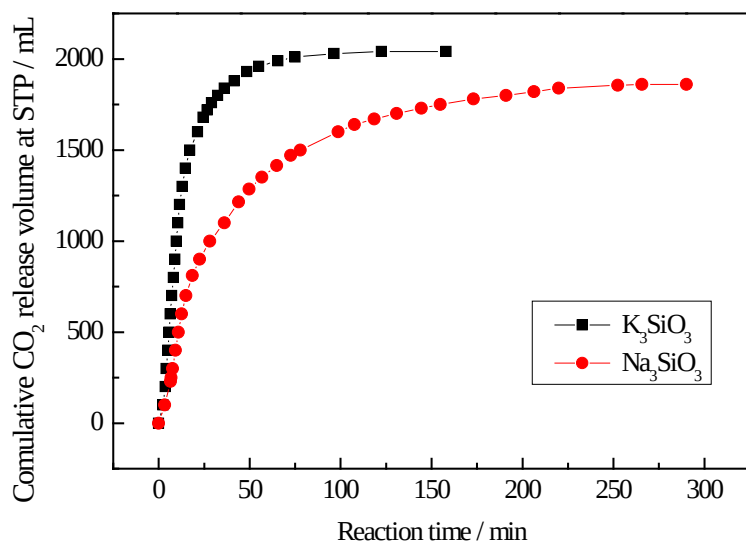


图 S6 M_3SiO_3 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)
Figure S6 Kinetic curves of CO_2 release of M_3SiO_3 catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

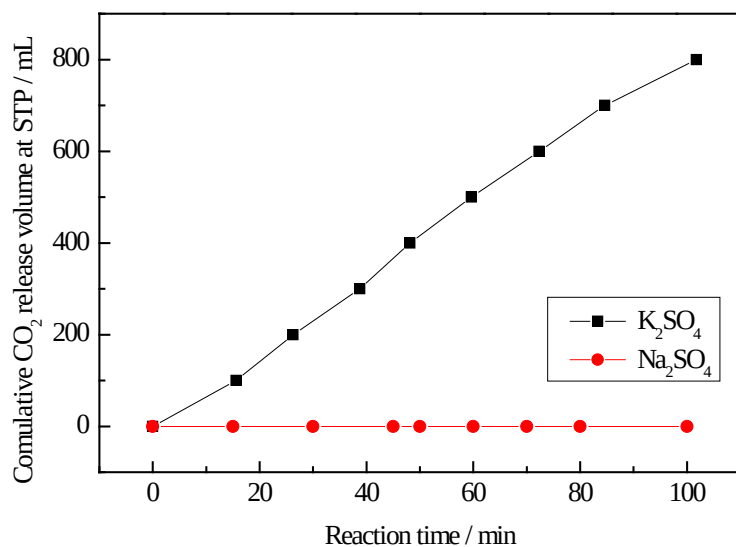


图 S7 M_2SO_4 催化正辛硫醇与 EC 反应释放 CO_2 动力学曲线(反应条件同表 1)
Figure S7 Kinetic curves of CO_2 release of M_3SiO_3 catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

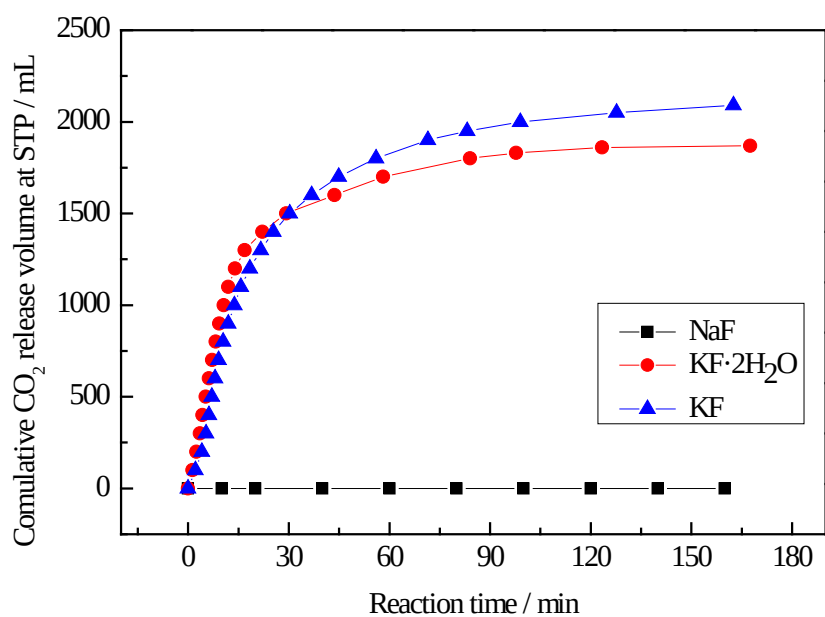


图 S8 MF 催化正辛硫醇与 EC 反应释放 CO₂ 动力学曲线(反应条件同表 1)
Figure S8 Kinetic curves of CO₂ release of MF catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

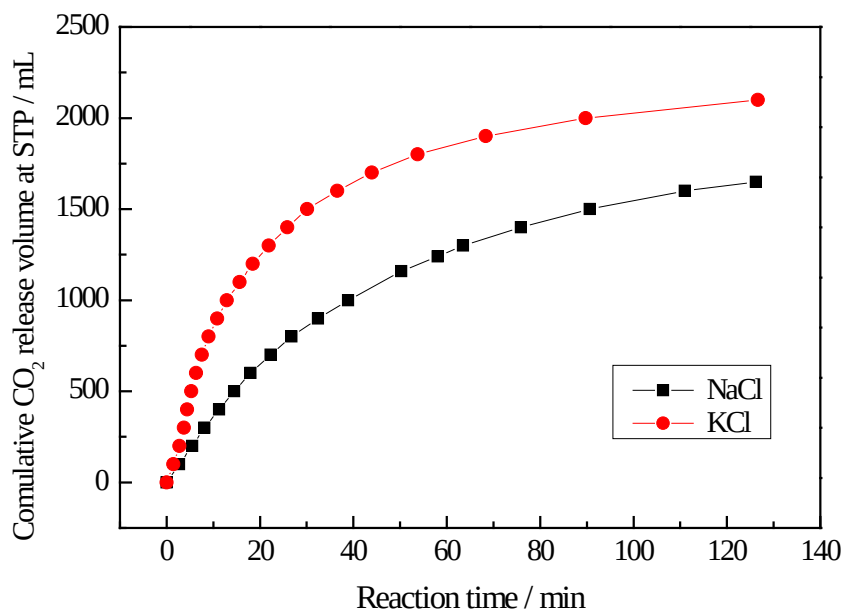


图 S9 MCl 催化正辛硫醇与 EC 反应释放 CO₂ 动力学曲线(反应条件同表 1)
Figure S9 Kinetic curves of CO₂ release of MCl catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

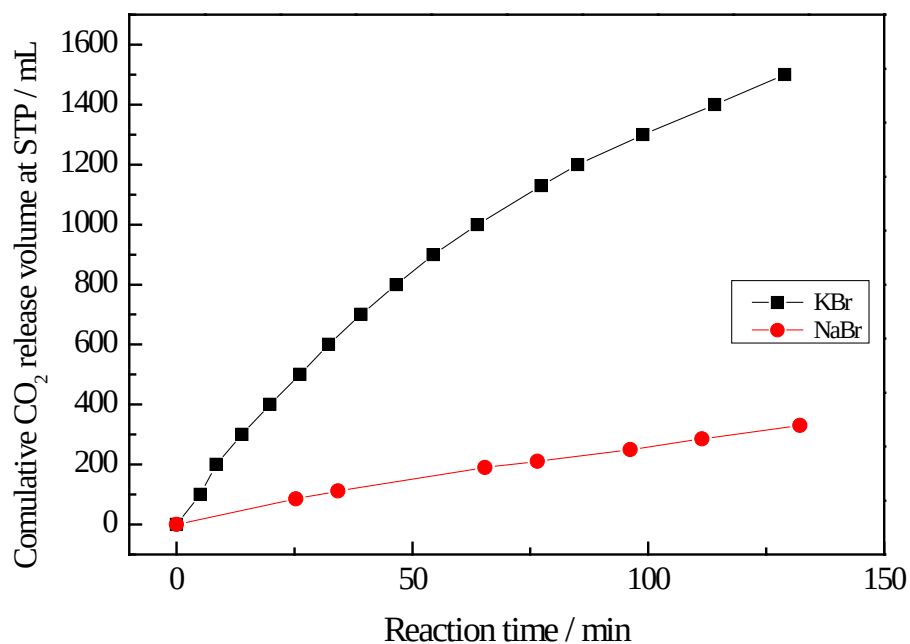


图 S10 MBr 催化正辛硫醇与 EC 反应释放 CO₂ 动力学曲线(反应条件同表 1)

Figure S10 Kinetic curves of CO₂ release of MBr catalyzed β -hydroxyethylation of *n*-octyl mercaptan with EC (reaction conditions are the same as in Table 1).

图 S11 K₃PO₄·3H₂O 和 Na₃PO₄·12H₂O 结构示意图

Figure S11 Structure diagram of K₃PO₄·3H₂O and Na₃PO₄·12H₂O

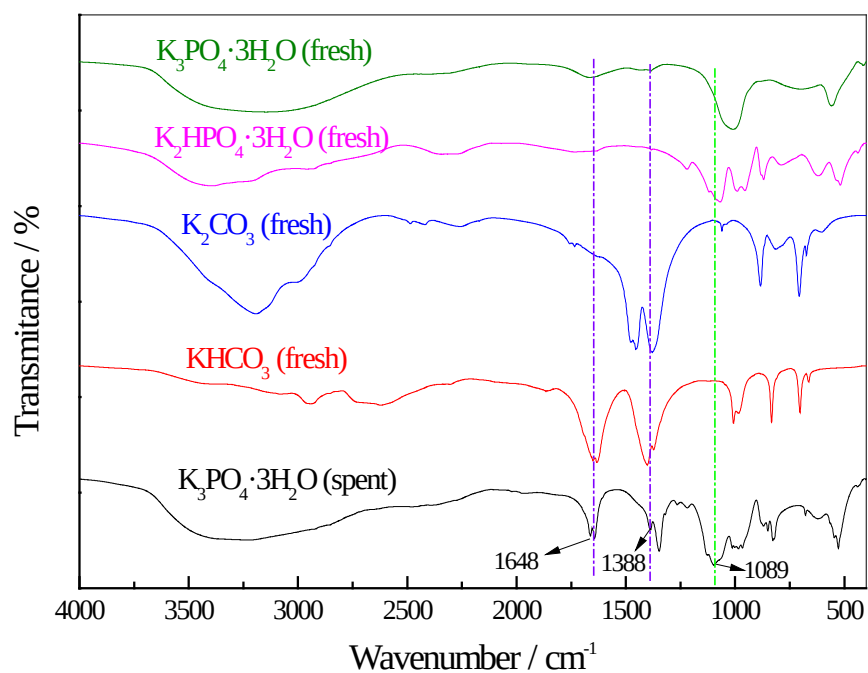


图 S12 回收后 $\text{K}_3\text{PO}_4 \cdot 3\text{H}_2\text{O}$ 催化剂的 FTIR 对比分析

Figure S12 Comparative analysis of FTIR of $\text{K}_3\text{PO}_4 \cdot 3\text{H}_2\text{O}$ catalyst after recovery

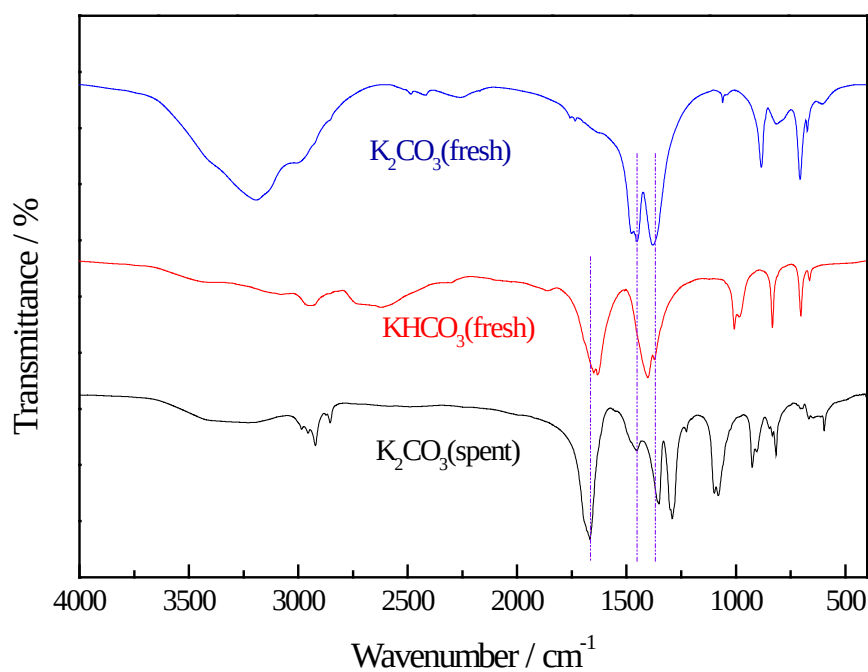


图 S13 回收后 K_2CO_3 催化剂的 FTIR 对比分析

Figure S13 Comparative analysis of FTIR of K_2CO_3 catalyst after recovery