

# Hydrodeoxygenation of benzofuran over bimetallic

## Ni-Cu/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub> catalysts

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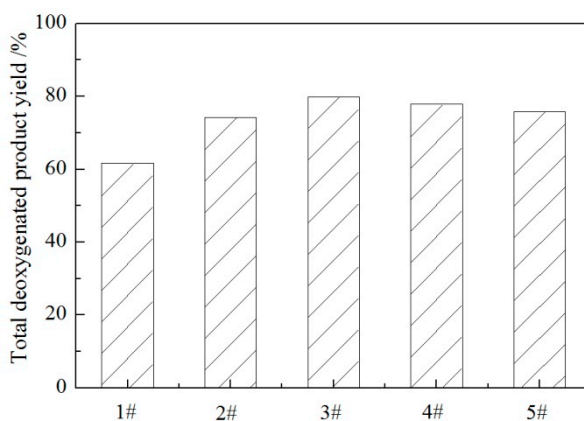


Fig. S1 Total deoxygenated product yield of Ni<sub>x</sub>Cu<sub>(10-x)</sub>/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub> catalysts at 8 h

(1#-Ni/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>; 2#-Ni<sub>7</sub>Cu<sub>3</sub>/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>; 3#-Ni<sub>5</sub>Cu<sub>5</sub>/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>; 4#-Ni<sub>3</sub>Cu<sub>7</sub>/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>; 5#-Cu/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>)

(Reaction conditions:  $T=300$  °C,  $p=3.0$  MPa, WHSV=4.0 h<sup>-1</sup>, and hydrogen/oil ratio=500(V/V))

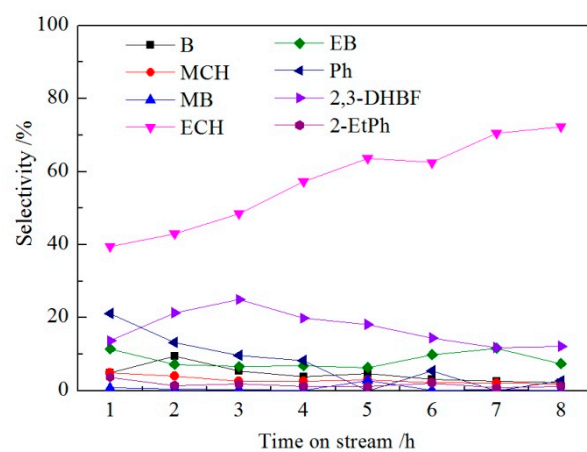


Fig. S2 Production distribution of  $\text{Ni}_5\text{Cu}_5/\gamma\text{-Al}_2\text{O}_3$  catalyst with the reaction time on stream  
 (Reaction conditions:  $T=300\text{ }^\circ\text{C}$ ,  $p=3.0\text{ MPa}$ ,  $\text{WHSV}=4.0\text{ h}^{-1}$ , and hydrogen/oil ratio=500(V/V))