

**REACTION SYSTEM, CATALYST AND METHOD FOR PREPARING
 β -PHENYLETHANOL**

ABSTRACT

5 Disclosed is a method for preparing β -phenylethanol. The method comprises the following steps: (1) reducing a catalyst in a reactor in advance; (2) introducing pre-heated hydrogen gas to warm the reactor to a predetermined temperature; and (3) introducing a raw material styrene oxide to perform a hydrogenation reaction so as to obtain the β -phenylethanol. The catalyst is Ni-Cu/ Al_2O_3 nanosized self-assembled catalyst. The
10 reactor is an ultrasonic field micro-packed bed reactor. The method of the present invention enables the selectivity of the β -phenylethanol to reach 99% or more.

Figure 5