

Abstract

OXIDE CATALYST

An oxide catalyst for use in an oxidation reaction of an olefin and/or an alcohol, the oxide catalyst comprising: the oxide catalyst contains molybdenum, bismuth, iron, cobalt, and cerium; an atomic ratio a of bismuth to 12 atoms of molybdenum is $2 \leq a \leq 6$, an atomic ratio b of iron to 12 atoms of molybdenum is $2.5 < b \leq 5$, an atomic ratio c of cobalt to 12 atoms of molybdenum is $2 \leq c \leq 8$, an atomic ratio d of cerium to 12 atoms of molybdenum is $0.5 \leq d \leq 6$, and an atomic ratio of iron/cobalt is $0.4 \leq b/c \leq 2.5$; wherein when a spacing d of a complex oxide of cerium and molybdenum showing a peak at 33.50° in a X-ray diffraction is taken as a reference, a change rate of d is 5000 to 9000 ppm.

Figure 2