

## Abstract

A process for producing a high-performance catalyst for use in a reaction for acrylic acid production from propane or propylene through air oxidation, is provided.

A process for producing a metal oxide catalyst having the following composition formula, the process comprising the following steps (1) and (2):

Composition formula  $\text{MoV}_i\text{A}_j\text{B}_k\text{C}_x\text{O}_y$

(wherein A is Te or Sb; B is at least one element selected from the group consisting of Nb, Ta, and Ti; C is Si or Ge; i and j each are 0.01-1.5 and j/i is from 0.3 to 1.0; k is 0.001-3.0; x is 0.002-0.1; and y is a number determined by the oxidized states of the other elements),

Step (1): a step in which an aqueous liquid containing Mo, V, metal A and metal B is evaporated to dryness and the solid matter obtained is calcined at a high temperature to thereby obtain a metal oxide; and

Step (2): a step in which in an atmosphere containing substantially no water, a compound containing metallic element C is adhered to the metal oxide obtained in step (1) to form an oxide of metal C on the surface of the metal oxide.