

ABSTRACT

The invention relates to a process for producing a metal oxide catalyst capable of producing acrylic acid, acrylonitrile or the like in one stage by catalytic oxidation reaction of propane in a high yield.

The invention is characterized by using one obtained by finely ground metallic Te or metallic Sb in water or an organic solvent as a raw material for the production of an oxide catalyst made of metal elements Mo-V-Nb-Te or metal elements Mo-V-Nb-Sb. The powder of the metallic Te or metallic Sb obtained by grinding preferably has a mode size of not more than 20 μm . By using the metal oxide obtained by the invention as a catalyst, it is possible to produce acrylic acid in a high yield of 35 % or more from propane by a one-stage oxidation reaction.