



COMPLEX OXIDE CATALYST AND PROCESS FOR PREPARATION OF ACRYLIC ACID

Abstract of the Disclosure

A catalyst which is a complex oxide catalyst represented by the following general formula (1):



(in which Mo is molybdenum; V is vanadium, W is tungsten, Cu is copper, A is at least an element selected from antimony, niobium and tin; B is at least an element selected from alkaline earth metals; C is at least an element selected from silicon, aluminum, titanium and zirconium; D is at least an element selected from phosphorus, tellurium, cerium, lead, arsenic and zinc; E is at least an element selected from Group IA and Group IIb elements of the periodic table, boron, iron, bismuth, cobalt, nickel and manganese; and O is oxygen; a, b, c, d, e, f, g, h, i and x denote the atomic ratios of Mo, V, W, Cu, A, B, C, D, E and O, respectively; and where $a = 12$, $2 \leq b \leq 15$, $0 \leq c \leq 10$, $0 < d \leq 6$, $0 \leq e \leq 6$, $0 < f \leq 10$, $0 < g \leq 10$, $0 \leq h \leq 5$, $0 \leq i \leq 5$, and x is a numerical value determined by the extents of oxidation of the other elements)

which is characterized by being formed of a complex oxide which is prepared by using, as at least a part of the supply sources of components B and C, a compound containing both of the components B and C is provided. The catalyst is useful for vapor phase catalytic oxidation, in particular, is suitable as a catalyst for preparing acrylic acid by vapor phase catalytic oxidation of acrolein.

