

METHOD FOR REGENERATING CATALYST FOR THE PRODUCTION  
OF METHACRYLIC ACID AND PROCESS FOR PREPARING  
METHACRYLIC ACID

5

ABSTRACT

A method for regenerating a catalyst for the production of methacrylic acid comprising a heteropolyacid compound containing phosphorus, molybdenum and at least one element X selected from the group consisting of potassium, rubidium, cesium and thallium, wherein the method comprises the steps of: (I) mixing a deteriorated catalyst for the production of methacrylic acid recovered from a preparation process of methacrylic acid, a nitrate ion, an ammonium ion and water to form aqueous slurry A in which an atomic ratio of the element X to molybdenum is adjusted from 2 : 12 to 4 : 12; (II) mixing starting compounds of the heteropolyacid compound and water to form aqueous slurry B in which an atomic ratio of the element X to molybdenum is adjusted from 0 : 12 to 0.5 : 12; and (III) mixing aqueous slurry A obtained in Step (I) and aqueous slurry B obtained in Step (II), and then drying and calcining the mixture, in which an atomic ratio of the element X to molybdenum in a heteropolyacid compound constituting a regenerated catalyst is from 0.5 : 12 to 2 : 12.