

ABSTRACT

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

5 A catalyst for the production of methacrylic acid
comprising a heteropolyacid compound containing phosphorus and
molybdenum is regenerated by a method comprising the steps of
drying a mixture containing a deactivated catalyst, an ammonium
ion, a nitrate ion and water, molding the dried mixture, firstly
10 calcining the molded product in an atmosphere of an oxidizing
gas at a temperature of 360 to 410°C, and then secondly
calcining the product in an atmosphere of a non-oxidizing gas at
a temperature of 420 to 500°C. The regenerated catalyst has
substantially the same catalytic activity as a fresh catalyst in
15 a gas phase catalytic oxidation reaction of methacrolein,
isobutylaldehyde, isobutene or isobutyric acid to prepare
methacrylic acid.