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ABSTRACT OF THE DISCLOSURE

Disclosed is a process for producing isopropyl alcohol by hydrating directly propylene and water in the presence of a strong acid solid catalyst, comprising:

5 feeding continuously propylene, water which is the same as or more than propylene in terms of mole, and a saturated hydrocarbon (propane, butane and the like) to a reactor in which the above solid catalyst is filled or suspended,

 carrying out a hydration reaction while maintaining the
10 temperature and the pressure of the inside of the reactor in the conditions exceeding or slightly lower than the critical temperatures and the critical pressures of the above propylene and the saturated hydrocarbon and maintaining the concentration of isopropyl alcohol contained
15 in the reaction liquid at 6 % or more, and

 drawing a vapor phase out of the reactor, liquefying a part thereof by reducing the pressure and cooling to separate vapor components, and refining crude isopropyl alcohol contained in the liquid phase to obtain refined
20 isopropyl alcohol.

 In this process, produced isopropyl alcohol can be distributed selectively in the saturated hydrocarbon phase in a large quantity by using the saturated hydrocarbon in the conditions exceeding or slightly lower than the critical
25 temperature and the critical pressure of the saturated

This Sheet Has Been Replaced



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hydrocarbon, whereby isopropyl alcohol of a high concentration can be obtained, and energy needed for concentration and refining can be reduced.