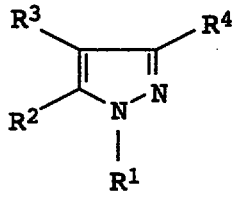
Preparation of N-substituted pyrazoles

Abstract

A process for the preparation of N-substituted pyrazoles of the general formula I



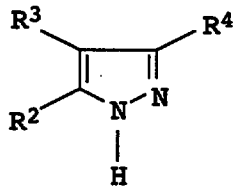
(I),

where

R^1 is C_1-C_{12}-alkyl or C_7-C_{20}-phenylalkyl and

R^2, R^3 and R^4 are, independently of one another, hydrogen, C_1-C_{12}-alkyl, C_7-C_{20}-phenylalkyl or unsubstituted or substituted aryl radicals,

by reacting pyrazoles of the general formula II



(II),

where R^2, R^3 and R^4 have the abovementioned meanings, with an alcohol of the general formula III

$$R^1\text{-O-H} \qquad \text{(III)},$$

where R^1 has the abovementioned meanings, at from 50 to 400°C in the presence of a catalyst, wherein the reaction of pyrazole II with compound III in the molar ratio of from 0.001:1 to 1:1 is carried out in liquid phase under a pressure which is slightly below atmospheric or up to a pressure of 250 bar, and acids and/or their alkyl esters or their anhydrides are used, in the molar ratio of from 0.0001:1 to 0.5:1 with respect to the pyrazole II, as catalyst.