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(54) Title: ZEOLITE Y

(57) Abstract: Process for preparing a modified zeolite Y which process comprises subjecting zeolite Y having a silica to alumina molar ratio of at least 10 to calcination at a temperature of from 700 to 1000 °C wherein (i) the steam partial pressure is at most 0.06 bar at a temperature of from 700 to 800 C, (ii) the steam partial pressure is at most 0.08 bar at a temperature of from 800 to 850 C, (iii) the steam partial pressure is at least 0.03 bar at a temperature of from 850 to 900 C, and (iv) the steam partial pressure is at least 0.05 bar at a temperature of from 900 to 950 C and (v) the steam partial pressure is at least 0.07 bar at a temperature of from 950 to 1000 C, a modified zeolite Y obtainable by such process, zeolite Y having a silica to alumina molar ratio of at least 10, the infrared spectrum of which has a peak at 3700 cm⁻¹ but substantially no peaks at 3605 and 3670 cm⁻¹ and zeolite Y having a silica to alumina molar ratio of at least 10, which zeolite Y has an acidity as measured by exchange with perdeuterated benzene of at most 20 micromole/gram.



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