CLAIMS

1. A method for producing a meta-xylene selective binderless zeolitic adsorbent comprising:

forming agglomerates having ion-exchangeable sites, the agglomerates formed from a first FAU type zeolite having a silica to alumina molar ratio of from 4.0 to 6.0, a non-zeolitic binder comprising silica, alumina, or a combination of silica and alumina, and a forming aid, wherein agglomerates are formed from greater than 50% of the first FAU type zeolite;

applying a thermal treatment to the agglomerates at 625ºC or higher to precondition the binder and dissipate the forming aid;

applying a hydrothermal treatment to a mixture obtained by mixing the thermal treated agglomerates with a solution containing at least one source of hydroxide to convert the non-zeolitic binder into a binder-converted FAU type zeolite to form the binderless zeolitic adsorbent comprising the first FAU type zeolite and the binder-converted FAU type zeolite; and

drying the binderless zeolitic adsorbent, wherein the solution is prepared by targeting the following gel molar oxide ratio in the material after the hydrothermal treatment of the mixture:

Al_2O_3 : (3.66 to 10.45) SiO_2 : (3.0 to 4.5) Na_2O : 500 H_2O

not including the first FAU type zeolite.

2. The method of Claim 1, wherein the solution is prepared by targeting the following gel molar oxide ratio in the material after the hydrothermal treatment of the mixture:

Al_2O_3 : 10.45 SiO_2 : 4.5 Na_2O : 500 H_2O

not including the first FAU type zeolite.

3. The method of Claim 1 or 2, wherein the first FAU type zeolite is Y-54.