Title (en)

AGGLOMERATED ZEOLITIC ADSORBENTS, METHOD FOR OBTAINING SAME AND USES THEREOF

Title (de)

AGGLOMERIERTE ZEOLITISCHE ADSORPTIONSMITTEL, VERFAHREN ZUR IHRER HERSTELLUNG UND DEREN VERWENDUNGEN

Title (fr)

ADSORBANTS ZEOLITIQUES AGGLOMERES LEUR PROCEDE D'OBTENTION ET LEURS UTILISATIONS

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Application

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Priority

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Abstract (en)

[origin: US2005170947A1] The present invention relates to agglomerated zeolitic adsorbents containing zeolite X and an inert binder, the inert binder containing at least 80% by weight of clay which has undergone zeolitization by the action of an alkaline solution, the zeolite X having with an Si/Al ratio such that 1.15<Si/Al<=1.5, at least 90% of the exchangeable cationic sites of the zeolite X of which are occupied either by barium ions alone or by barium ions and potassium ions whose Dubinin volume is greater than or equal to 0.240 cm³/g. They are obtained by agglomerating zeolite powder with a binder, followed by the zeolitization of the binder, the exchange of the ions of the zeolite by barium ions (and potassium ions) and the activation of the adsorbents thus exchanged. These adsorbents are particularly suited to the adsorption of the para-xylene present in C₈aromatic hydrocarbon fractions in the liquid phase in processes of simulated moving bed type but also to the separation of sugars, polyhydric alcohols, cresols or substituted toluene isomers.

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