

METHOD OF MANUFACTURE OF MOLECULAR SIEVES

ABSTRACT OF THE DISCLOSURE

Zeolites exchanged with lithium ions and, optionally, with polyvalent cations are prepared by ion-exchanging a sodium-containing zeolite, a potassium-containing zeolite or a sodium- and potassium-containing zeolite with ammonium ions, thereby replacing the sodium and/or potassium ions with ammonium ions, and then reacting the ammonium ion-exchanged zeolite with a water-soluble lithium compound under conditions which result in the removal of ammonia from the reaction zone. Polyvalent ions, which may be present in the zeolite undergoing ion-exchange, will not be substantially replaced by the ammonium or lithium ions.