

**INFLUENCE OF DUST ON THE PHYSICOCHEMICAL AND ION-
EXCHANGE PROPERTIES OF NATURAL CLINOPTILOLITE**

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ABSTRACT

In the present work the influence of the dust, resulting from the grinding process, on the physicochemical properties of clinoptilolite as well as on its ion-exchange behavior is studied. With the use of scanning electron microscopy, porosimetry and X-ray diffraction it is shown that dust occupies the material surface and blocks the pore openings, influencing thus diffusion towards active sites. Diffusion coefficients in the solid phase, calculated from experimental data, are in accordance with the assumption on hindered diffusion, due to the present of dust.