

CONTRIBUTION TO CHARACTERIZATION OF NATURAL DIATOMITE

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Abstract : With the complex examination of raw material from a Sig deposit in Algeria in the region of Mascara area, physical, chemical and mineralogical properties of diatomite have been defined. It has been found that it is a dominantly amorphous material, sedimentary rock of the type silica-diatomite. The raw material consists of approximately 60% SiO₂. Of the physical properties, more significant is porosity, which is higher than 60%. The raw material has a wide spectrum of possibilities for practical application: intensive absorbent for several types of liquids and chemical properties of the soil, natural insecticide, and filter water etc. For determination of the chemical contents, properties and origin of the raw material the following methods have been used, such as, chemical analysis, XRD analysis, optical microscopy and thermal analysis.

Keywords : diatomite, X-ray, XRD, Sig.