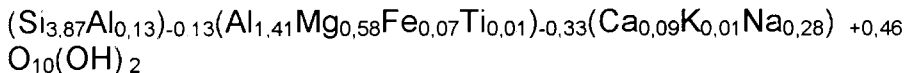


## **A new white bentonite found in North Patagonian Massif, Río Negro Province, Argentina**

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In Valcheta Department, South West of the railroad station Teniente Maza, Río Negro Province, Argentina, the exploitation began of white bentonite deposits whose geological and mineralogical features were ignored until the moment.

They are located in the North Patagonian Massif and included in Upper Cretaceous-Paleocene sedimentary sequences. Clay deposits consist in subhorizontal extensive lenticular shaped bodies with predominant thickness smaller than 1.80 meters. It is a low swelling white colored bentonite, composed by montmorillonite and cristobalite mainly. The whiteness index reach up to 78 %. Its CEC range between 76 and 97 mequ/100 g depending on their silica content. Chemical composition shows a low Fe<sub>2</sub>O<sub>3</sub> proportion that varies between 0.80 y 0.85 % and high sodium content. His main octahedral cation is magnesium and the dominant exchangeable one is sodium, with lesser amount in calcium and potassium. Their main charge comes from substitutions in the octahedral sheet. Its calculated structural formula responds to the following model:



Technologically, this bentonite has a rheological behavior that inhibits it as component in drilling muds and gels, but it shows interesting properties for use in ceramic, filler, bleaching and many other applications.