

## **BASINS POTIGUAR AND SERGIPE - ALAGOAS AND YOUR CHALKS**

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The sedimentary chalks found in the Basins of Brasil are used mainly for the industrial use. That work is about the main uses and comparisons of Basin Sergipe - Alagoas sedimentary chalk and of the Basin Potiguar, where the chemical industry this applying in geological researches in order to determine areas with high grade of calcium, with limestones calcium high quality, mainly with  $\text{CaCO}_3$  above 97%, insoluble below 1,0%, and  $\text{MgCO}_3$  below 1,5%, and whiteness around 75%.The sedimentary Basins Sergipe - Alagoas and Potiguar belong to the Riachuelo Formation - Maruim member and Jandaira Formation, respectively, both Cretaceous age, and are represent by thick levels of sedimentary chalk of marine origin, same biostratigrafic age, and that represent as same characteristics of environment sedimentation.These levels of chalk contain likeness and differences in relations to the physico - chemicals characteristics, implying the king of benefit the chemicals industries would have.Calcium chalks, magnesium chalks and dolomite chalks, interdigitatedes in both Formations show the variations and combinations in the grade of Ca and Mg, being represented by the facies existent in the formations, being determined by chemical industry.The studied samples indicate that sediment type and fossilization of these chalks, they can drive the exploration for the face of better quality physico - chemistry.With the research it is possible to elaborate a map of isograde of chalks where the extraction is developed in agreement with customers need, reducing costs and improving the quality of final product.