

عنوان مقاله:

Beneficiation of Iranian feldspar for application in the ceramic industry

محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Beneficiation studies were conducted on a Iranian feldspar ore, in order to obtain final products capable of being used in the ceramic industry. The feldspar ore of the Haji-Qara Contains albite (~60%), microcline (~30%), quartz (~28.5%) and muscovite (~1.5%). A flotation scheme consisting two circuits was suggested. The first circuit was anionic flotation to remove the iron bearing minerals by using anionic collectors (Aero801 and Aero825). The second flotation circuit was a cationic flotation by using amines collectors (Armac C and Armac T) to increase $K_2O+Na_2O\%$. The results showed that a final concentrate assaying 90.80% feldspar mineral, 0.08 % Fe_2O_3 and 18.93 % Al_2O_3 was obtained, at the optimum operating conditions, from an ore containing about 16.08% Al_2O_3 , 0.53% Fe_2O_3 and 77.2% feldspar mineral, satisfying the requirements of the ceramic industry.

کلمات کلیدی:

Feldspar, Flotation, collector

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