

Title (en)
ANDALUSITE BENEFICIATION PROCESS

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Application
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Abstract (en)
[origin: US4900431A] The invention relates to a process for upgrading andalusite present in an ore containing it. The process involves separation from other silicates by froth flotation to obtain a concentrate whose content of andalusite is higher than 90%. It is characterized by the fact that the process comprises at least the following steps: (a) grinding as may be required and placing in pulp of the ore containing the andalusite (b) pre-conditioning the ore containing the andalusite by keeping the pH of the aqueous phase of the pulp at a value of below 3.50, the solids ratio in the pulp being higher than 30% (by weight) (c) conditioning the preconditioned ore pulp for at least 10 minutes after addition of an alkyl sulfonate; (d) dilution as may be required of the pulp to bring it to a solids ratio comprised between 15 and 30% (by weight); (e) froth flotation by bubbling calibrated air bubbles therethrough in manner known in itself, the froth flotation proper lasting at the most 10 minutes. The invention is useful in the production of refractory raw materials.

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