Recovery of Fe2O3 & TiO2 from Bauxite Processing Waste

Description:

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Ferric oxide (Fe? O?) is an inorganic compound also known as hematite. Ferric oxide is used in the iron industry in the manufacturing of alloys and steel. The Food and Drug Administration (FDA) has approved ferric oxide pigment for use in cosmetics. Moreover, ferric oxide granules are used in the form of filtration media for removing phosphates in saltwater aquariums.

FOR Fe2O3

•In iron industries for producing steel and alloys

•Ferric oxide powder, also called jeweler’s rouge, is used for polishing lenses and metallic jewelry

•Its granular form is used as a filtration media for pulling out phosphates in saltwater aquariums

•As FDA-approved Pigment Brown 6 and Pigment Red 101, for use in cosmetics.

•In biomedical applications, because its nanoparticles are non-toxic and biocompatible

Recovery of Fe2O3

Fe2O3 is another material in red mud that has attracted a number of researchers. Until now, there are three means to recover iron from red mud: smelting, solid-state reduction and magnetic separation. In smelting process, red mud is charged into blast furnace or rotary furnace with a reducing agent. Then, iron oxide in red mud is reduced to generate pig iron that can be used in steel production.

For more details download PDF file.

Keywords: #Recovery_of_Fe2O3_from_Bauxite_Processing, #Iron_Oxide_Recovery, #Recovery_of_Ferric_Oxide, #Recovery_of_Ferric_oxide_from_Bauxite_Processing_Waste, Ferric Oxide, Manufacturing Applications for Iron (III) Oxide, Manufacture of ferric oxide, Production of Iron (II) Oxide (Fe2O3), Process for the Manufacture of Iron Oxide, Process for Producing Iron Oxide, Iron Oxide Formula, Ferric Oxide Production, How to Make Iron Oxide, Preparation of iron oxide, Titanium Dioxide (TiO2) Production and Manufac

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