Fluidised-Bed Chlorination of Oxidised Titania Slag.

By

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Fluidised-Bed Chlorination of Oxidised Titania Slag.

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ABSTRACT

High-titanium slag (produced by carbothermic reduction of ilmenite) contains a significant percentage of trivalent titanium, which can be converted to the tetravalent form by oxidation. Oxidation can occur through contact with water vapour, for example during water granulation. This work investigated the degree of oxidation of the different size fractions of water granulated titania slag, and the resultant changes in phase composition. For this oxidised slag, the kinetics and exothermicity of the chlorination process are also reported.

Key words
Oxidised titania slag, water granulation, \(M_3\)O_5, anatase, rutile, chlorination, block route slag.
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DEDICATION

The research work is dedicated to my beloved late mother, Late Ma Ikeh Agnes Ndula who supported me from birth and died on the 30\textsuperscript{th} of August 1994. May her soul rest in peace.
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