UTILIZATION OF DEOIL BLEACHING EARTH AS A CEMENT

REPLACEMENT WITH THE ADDITION OF SIKACIM ADDICTIVE

CONCRETE OUALITY 20 MPa

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Abstract

DOBE is considered to be a new source to bring in investment and has added value with

technology. SBE is processed into value-added products through solvent extraction technology

using hexane as solvent. DOBE includes B3 (Hazardous and Toxic Materials) waste from

specific sources. According to PP 74/2001, hazardous and toxic materials are materials which

due to their nature and or concentration and/or amount, either directly or indirectly,

can pollute the environment, human survival and other living things. The use of spent

bleaching earth is intended as a substitute for cement in mixing concrete. The method used in

this test is to make a concrete mixture using SNI 7656:2012 with bleaching earth doil as a

partial substitute for cement by 5%, 10%, 15%, and 20%. The concrete that was treated for 7

days, 14 days and 28 days was then tested to get the compressive strength and density of the

concrete. From the test results obtained the highest compressive strength value of 14 MPa

with a variation of 20% Doil bleaching earth. This test shows that the greater the level of

spent bleaching earth in the concrete mixture, the lower the compressive strength value

produced keywords: compressive strength,

Deoil bleaching eart with the addition of sikacim additive

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