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# An Application on Reducing the Evaporation from an Open Water Surface

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An Application on Reducing the Evaporation from an Open Water Surface
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With the rapid increase in world population, industrialization and urbanization, a lot of problems arise on many issues as well as in the use and management of water. Water management is a very crucial issue for the whole world and Turkey, which is an semi-arid counrty. In our study, experiments on the reduction of evaporation were conducted by six applications using Octadecanol and Hexadecanol. Applications were carried out at the meteorological station, which locates on Maslak Campus of Istanbul Technical University, Istanbul between 7 and 22 May 2011. Applying different time intervals and different concentrations for each application, measurements were made by using a total of three evaporation pans (class A). One of the pans was used to measure the reference evaporation.
According to the results, Octadecanol was more effective in reducing evaporation when compared with Hexadecanol. Octadecanol could reduce the evaporation rate for 46.25% on average, while this ratio could reach only 23.6% by Hexadecanol. Due to the limited number of the applications, including additional chemical substances and sample measurements, further future research is needed on clarifying the advantages of Octadecanol usage. Applications on large open water surfaces, such as dams etc. would also be useful on supporting the interpretation capability of the related results.

Keywords: Octadecanol; Hexadecanol; evaporation reduction.