

# **SAND EQUIVALENT OF ROAD AGGREGATES TESTED WITH EUROPEAN AND AMERICAN STANDARDS AND METHYLENE BLUE RESULTS**

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## *ABSTRACT*

Sand Equivalent (SE) and Methylene Blue (MB) tests are two of the basic tests for determining the cleanliness of the aggregates. Until the introduction of European standard EN 933-8 the sand equivalent test was carried out by the American specification AASHTO T-176. Hence, the limited values set in most national specifications have been established according to the test procedure described in the American standard. The European standard differentiates mainly on the size of the fine aggregates sample tested.

The methylene blue test is specified by the European standard EN 933-9. The test is carried out on a 0/2mm particle size, while the fraction 0/0.125mm can also be used.

In the present paper, a brief reference is made to the above mentioned tests and the main differences are spotted between American and European standard for the sand equivalent test. Then, SE and MB results are presented from a great number of crushed aggregate materials used in road construction in Greece.

The purpose of the paper is to detect the difference, if there is any, between sand equivalent results obtained by the European and by the American standard, to make a useful criticism on the methylene blue test results and to determine any correlation among test results.

**KEY WORDS:** Aggregates, Sand equivalent, Methylene blue