# Evaluating Marination Effect of Diluted Zycotherm on Hot Mix Asphalt

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***Abstract*—Since asphalt concrete undergo different failure problems at different temperature and moisture conditions and for years many scientists and researchers used different kinds of materials and variety of methods for improving the properties of asphalt concrete made with either basalt or limestone. So it became necessary to provide the best possible way to get rid of these failure problems. In this study diluted zycotherm nanomaterial at three different percentages by weight of aggregate used with two aggregate types, basalt and limestone, and asphalt concrete made with the marinated aggregate and later the properties of asphalt concrete were investigated after the marination. Indirect tensile strength test and retained stability test results were used to evaluate the marinating effect. As a result zycotherm dilution by weight of aggregate has changed the properties of asphalt mixture and improved to a great extent. From the results it can be concluded that rutting and fatigue problems decreased with a great range.**

***Keywords*—diluted zycotherm, marinated aggregate, indirect tensile strength test**

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