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Performance of warm asphalt mixtures using Sasobit

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Abstract: The performance of limestone warm mix asphalt mixtures using Sasobit over control mixtures was investigated. The Superpave mixture design method was used to prepare control and Sasobit-modified mixtures. The indirect tensile and dynamic creep tests were used for fatigue and rutting evaluation, respectively. The main findings of this research were the noticed lower accumulated strains and resilient modulus for Sasobit-modified mixtures over control mixtures in rutting performance testing. On the other hand, higher creep stiffness values in fatigue testing for Sasobit-modified mixtures were observed over control mixtures for deviator loads that ranges from 1 to 2 KN. Moreover, better fatigue resistance at lower temperatures was also observed for both control and Sasobit-modified mixtures.