EFFECT OF CYCLOGEN AS REJUVENATOR IN 100% RECYCLED ASPHALT MIXTURES

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ABSTRACT
In this study Cyclogen was used as an admixture to improve properties of aged bitumen. The effects of this rejuvenator on recovered asphalt binder specimens using penetration test, softening point and viscosity and on asphalt mixtures containing 100% of reclaimed asphalt pavement specimens using Marshall, dynamic creep and resilient modulus tests were surveyed. Results showed that using Cyclogen with 5% content (of bitumen) in asphalt mixtures will lead to improvement in both bitumen and asphalt mixtures. A fair correlation existed between rejuvenated bitumen and mixture behavior, and conventional binder tests showed appropriateness for determining the optimum amount of rejuvenator.