

INFLUENCE OF SODIUM CHLORIDE AND POTASSIUM FORMATE AS DEICING AGENTS ON ASPHALT MIXTURE DURABILITY

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ABSTRACT

Abrasive resistance of four bituminous mixtures has been measured to evaluate the effects of sodium chloride and potassium formate on asphalt pavement durability. In both cases a correlation between the particle loss and the concentration of the deicer is found, the effects of potassium formate appear more consistent. Furthermore, alterations of the bitumen were measured evaluating the performance grade of the recovered binder. No significant correlation between particle loss and the critical temperatures of the extracted binders was found. However, a dependency of the extracted binder performance on the characteristics of the aggregates is suggested.