

Abstract

The mechanical behaviour of several formulas of bituminous concrete containing polymer (HDPE), polymer-bitumens (EVA) and waste of sole of shoes (containing copolymer butadiene-styrene-SBR noted DSBR and ethylene and vinyl acetate-EVA noted DEVA) were studied. The aim of this work is to improvement of the poor mechanicals performances of a bituminous concrete formula (0/14) which isn't conforming to the Algerian standards. Also, the mechanical tests showed that the permanent deformations and the indirect tensile strength at the temperatures of service resistances are improved. At high-temperature service, formulas of asphalt bitumen-EVA most resistant against the average temperature in service, it mixes made with waste are best resistant. All the formulas have a good behaviour with water