橡胶粉与SBS复合改性沥青路用性能与微观结构

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采用废旧橡胶粉和热塑性弹性体SBS复合改性道路石油沥青AH 90, 分别进行了性能测试试验和结构分析试验,结果表明:改性后沥青的针入度明显下降, 延度和弹性恢复明显增加,软化点升高,T800升高,T1.2降低, 沥青的高温稳定性和低温变形能力均有较大改善。

关键词 <u>道路工程</u> <u>废旧橡胶粉</u> <u>SBS</u> <u>复合改性</u> <u>沥青</u> <u>性能与结构</u> 分类号

The physical properties and microstructure of waste rubber powder and SBS complex modified asphalt

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Abstract

Waste rubber powder and thermoplastic elastomer SBS were used to modify heavy highway asphalt AH 90. The physical properties of the modified asphalt were measured and its microstructure was analyzed. Results show that, after modification, the penetration obviously decreases; the ductility and elastic recovery significantly increase; the softening point and the equivalent softening point T800 increase while the equivalent brittle point T1, 2 decreases. The stability of the modified asphalt at high temperature and its deformability at low temperature are both greatly improved.

Key words road engineering; waster rubber powder; SBS; complex modification; asphalt properties and structure

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