Study on Dynamic Mechanical Properties of Silica Filled Tire Tread Compounds

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Abstract: In this study, the dynamic mechanical properties of tire tread compounds filled with different silica fillers were experimentally investigated. The silica fillers were Ultrasil 5000GR, Ultrasil 7500GR and Ultrasil 9000GR. The results showed that the tread compound filled with Ultrasil 5000GR possessed better wet skid resistance, lower rolling resistance, lower loss modulus and less heat build-up. Using the tread compound with Ultrasil 5000GR in the tire, the high speed performance and wet skid resistance of the tire were improved, while the rolling resistance increased slightly.

Keywords: silica; tread compound; dynamic mechanical properties; wet skid resistance; rolling resistance



中国汽车轮胎品牌力指数排行榜

2014年中国汽车轮胎行业C-BPI(China Brand Power Index,中国品牌力指数)排行榜目前公布(如图1所示),共有11个轮胎品牌上榜。其中,外资轮胎品牌仍占多数,米其林第3年蝉联榜首,我国大陆自主轮胎品牌仅有回力、双星、三角上榜,而我国台湾正新轮胎品牌首次上榜。我国上榜轮胎品牌少、得分较低的主要原因是我国品牌轮胎给消费者的印象一直停留在技术含量较低、质量较差层面上,同时品牌的传播度也较小。

中国品牌力指数调查是由工信部联合中国 企业品牌研究中心及直属研究咨询机构联袂发 起的,是在我国消费者对使用或拥有过的产品 或服务反馈意见基础上进行的独立无偏见的评 选活动,可在一定程度上反映品牌产品在我国 受欢迎的程度和市场占有率。中国品牌力指数 调查作为一个连续的年度调研项目于2011年首 次实施。

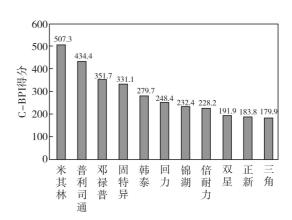


图1 中国汽车轮胎品牌力指数排名

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