## Application of New Environmentally–friendly Softener SS–140 in the Tread Compound of TBR Tire

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**Abstract:** The new environmentally-friendly softener SS-140 was applied in the tread compound of TBR tire. SS-140 was in the form of granule and easy to use. It had a high softening point and met the requirements of European regulation 2005/69/EC. The experimental testing results showed that when SS-140 was used to replace aromatic oils (TDAE) in the tread compound and the amount of sulfur was appropriately increased, the physical properties of the vulcanized rubber were good, particularly, the tear strength and cut resistance. As a result, the performance of TBR tire was improved.

**Keywords:** softener; environmentally-friendly; oxidized bitumen with high softening temperature; TBR tire; tread compound; tear resistance; cut resistance



## 2019年世界轮胎销售量将达6.67亿条

美国市场研究与咨询机构Research and Markets公司预测,到2019年世界汽车轮胎销售量将达到6.67亿条。

包括中国、印度和日本等在内的亚太地区 汽车市场快速发展,生产成本较低、产能增长 以及对轻型和重型车辆需求日益增长拉动轮胎 市场。预计2014—2019年,亚太地区轮胎市场 将以6.16%的复合年增长率发展。

受欧元危机冲击,2008—2013年欧洲汽车 行业出现负增长。但从2013年以来,欧洲汽车 工业快速恢复性增长,这会拉动轮胎需求增 长。预计2014—2019年,欧洲汽车轮胎市场的复合年增长率将达到5.33%。

包括美国、加拿大和墨西哥等在内的北美地区汽车市场发展成熟。由于墨西哥的劳动力和生产成本较低,各大汽车厂商纷纷进入该国建厂,导致墨西哥汽车产量大幅增长,势必推动该国轮胎市场的发展。美国汽车保有量和车辆平均寿命日益增长,无疑会促进替换轮胎市场增长。预计2014—2019年,北美地区轮胎市场将以6.39%的复合年增长率发展。

清 风