

Application of High Efficient Modulus Enhancer in Tread Compound and Carcass Compound of Winter Radial Tire

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Abstract: The application of high efficient modulus enhancer in the tread compound and carcass compound of winter radial tire was studied. The results showed that with modulus enhancer, the hardness and modulus at 300% elongation of the vulcanizates for tread and carcass increased, and the heat aging resistance was significantly improved. When the addition level of the modulus enhancer increased, the Mooney viscosity of the tread compound was enlarged, the hardness and modulus at 300% elongation increased, and the wear resistance decreased. The suitable addition level of the high efficient modulus enhancer was about 4 phr. With modulus enhancer, the Mooney viscosity of the carcass compound was reduced, and the adhesion property was improved.

Key words: high efficient modulus enhancer; tread compound; winter radial tire; carcass compound; heat aging resistance; adhesion property

2017年我国天然橡胶进口量 同比增长10.72%

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据中国海关统计,2017年我国天然橡胶(不包括胶乳)总进口量为229.92万t,同比增长10.72%。其中,技术分类天然橡胶(TSNR)进口量为168.07万t,占天然橡胶总进口量的73.10%,同比增长1.38%;烟胶片进口量为33.13万t,占天然橡胶总进口量的14.41%,同比增长61.69%;其他初级形状天然橡胶进口量为28.72万t,占天然橡胶总进口量的12.49%,同比增长34.33%。其中,来自泰国的天然橡胶进口量为125.29万t,占天然橡胶总进口量的54.49%,同比增长3.95%;来自印度尼西亚的天然橡胶进口量为44.92万t,占天然橡胶总进口量的19.54%,同比增长61.12%;来自马来西亚的天然橡胶进口量为29.10万t,占天然橡胶总进口量的12.66%,同比增长4.83%;来自缅甸的天然橡胶进口量为10.49万t,占天然橡胶总进口量的4.56%。其中,青岛海关的天然橡胶进口量为132.89万t,占天然橡胶总进口量的57.80%,同比增长4.42%;昆明海关的天然橡胶进口量为19.11万t,占天然橡胶总进口量的8.31%,同比增长62.36%;济南海关的天然橡胶进口量为

14.84万t,占天然橡胶总进口量的6.45%,同比增长271.00%;上海海关的天然橡胶进口量为14.82万t,占天然橡胶总进口量的6.44%,同比增长13.74%;大连海关的天然橡胶进口量为8.32万t,占天然橡胶总进口量的3.62%,同比增长16.69%;南京海关的天然橡胶进口量为8.31万t,占天然橡胶总进口量的3.61%,同比增长1.84%。其中,山东省的天然橡胶进口量为134.49万t,占天然橡胶总进口量的58.49%,同比增长8.11%;云南省的天然橡胶进口量为19.12万t,占天然橡胶总进口量的8.32%,同比增长62.03%;江苏省的天然橡胶进口量为12.65万t,占天然橡胶总进口量的5.50%,同比增长11.55%;上海市的天然橡胶进口量为10.51万t,占天然橡胶总进口量的4.57%,同比增长42.99%;浙江省的天然橡胶进口量为9.96万t,占天然橡胶总进口量的4.33%,同比增长2.26%;福建省的天然橡胶进口量为9.67万t,占天然橡胶总进口量的4.20%,同比增长35.24%。其中,进料加工贸易的天然橡胶进口量为89.88万t,占天然橡胶总进口量的39.09%,同比降低11.15%;保税区仓储转口货物贸易的天然橡胶进口量为55.81万t,占天然橡胶总进口量的24.27%,同比增长26.61%。

(崔小明)