

Application of Environmentally Friendly Accelerator TBSI as Substitute for Accelerator DCBS in Adhesive Compound for Rubber and Steel Cord

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Abstract: The application of environmentally friendly long scorch and slow curing accelerator TBSI as the substitute for accelerator DCBS in the adhesive compound for rubber and steel cord was investigated. The results showed that when the amount of accelerator TBSI was the same as the amount of substituted accelerator DCBS, the anti-reversion property of the compound was improved as evidenced by the prolonged flat range after reaching the maximum cure in the curing curve, but the scorch time was a little shorter, the curing speed was slightly faster, and the initial adhesion between rubber and cord was slightly lower. When the amount of accelerator TBSI was adjusted to a lower level with the addition of scorch retarder CTP, the scorching time, curing speed, and the adhesion property of the compound were quite similar to those of the compound with accelerator DCBS, and the anti-reversion property and heat aging resistance were better.

Key words: accelerator; environmentally friendly; adhesive compound; steel cord; adhesion property

2017年我国橡胶防老剂进出口概况

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据中国海关统计, 2017年我国橡胶防老剂总进口量为0.65万t, 同比增长3.17%; 进口金额为2 841.98万美元, 同比增长11.95%; 进口单价为4 397.28美元·t⁻¹, 同比增长8.27%。其中, 来自美国的防老剂进口量为0.11万t, 占防老剂总进口量的16.92%, 同比增长37.50%; 来自韩国的防老剂进口量为0.10万t, 占防老剂总进口量的15.38%, 同比增长42.86%; 来自越南的防老剂进口量为0.11万t, 占防老剂总进口量的16.92%, 同比增长10.00%; 来自中国台湾的防老剂进口量为0.06万t, 占防老剂总进口量的9.23%, 同比增长20.00%。

2017年我国防老剂总出口量为1.66万t, 同比降低65.77%; 出口金额为3 751.16万美元, 同比降低58.52%; 出口单价为2 259.83美元·t⁻¹, 同比增长21.06%。其中, 对泰国的防老剂出口量为0.55万t, 占防老剂总出口量的33.13%, 同比降低38.20%; 对韩国的防老剂出口量为0.19万t,

占防老剂总出口量的11.44%, 同比降低76.25%; 对印度尼西亚的防老剂出口量为0.20万t, 占防老剂总出口量的12.05%, 同比降低60.00%; 对日本的防老剂出口量为0.18万t, 占防老剂总出口量的10.84%, 同比降低76.00%; 对印度的防老剂出口量为0.14万t, 占防老剂总出口量的8.43%, 同比降低36.36%。

(崔小明)

3家橡胶及相关行业企业上榜工信部 第2批绿色制造名单

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国家工业和信息化部公布了第2批绿色制造名单, 其中包括绿色工厂208家, 绿色设计产品53种, 绿色园区22家, 绿色供应链管理示范企业4家。

山东玲珑轮胎股份有限公司、青岛双星轮胎工业有限公司和山东耐斯特炭黑有限公司3家橡胶及相关行业企业上榜绿色工厂名单。

(本刊编辑部)