

出,与3[#]配方混炼胶相比,1[#]和2[#]配方混炼胶的自粘性较好。与3[#]配方硫化胶相比,1[#]和2[#]配方硫化胶的定伸应力、拉伸强度和撕裂强度较高,说明交联密度较大;拉断伸长率较低;透气率较小,气密性提高;老化后拉伸强度保持率和拉断伸长率保持率较高,耐老化性能较好。1[#]与2[#]配方胶料的物理性能相当。

3 结论

在轮胎气密层胶中采用硫黄/硫化剂TB710/促进剂DOTG/促进剂MBTS硫化体系替代硫黄/促进剂TMTD/促进剂MBTS硫化体系,混炼胶的门尼焦烧时间缩短,自粘性提高,交联密度增大,

抗硫化返原性能提高;硫化胶的定伸应力、拉伸强度和撕裂强度提高,耐热老化性能改善,气密性提高;国产硫化剂TB710与进口硫化剂Vultac TB710性能相当。

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收稿日期: 2016-09-29

Application of Nitrosamine-Free Sulfur Donor TB710 in Tire Inner Liner Compound

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Abstract: The application of domestic nitrosamine-free vulcanizing agent TB710 (p-tert-butylphenol disulfide) in the tire inner liner compound was investigated and compared with imported vulcanizing agent Vultac TB710 (alkyl phenol disulfide). The results showed that with sulfur/domestic vulcanizing agent TB710/accelerator DOTG/accelerator MBTS vulcanizing system replacing sulfur/accelerator TMTD/accelerator MBTS vulcanizing system in the compound, the scorch time was shortened, tackiness was improved, crosslinking density increased, anti-reversion property was improved, the tensile modulus, tensile strength and tear strength of the vulcanizates increased, and heat aging resistance and air tightness were enhanced. It was found that domestic vulcanizing agent TB710 possessed similar performance as the imported vulcanizing agent Vultac TB710.

Key words: sulfur donor; vulcanizing agent; nitrosamine; environment-friendly vulcanizing agent; inner liner compound

Falken公司推出新型冬季载重轮胎

中图分类号: TQ336.1; U463.341⁺.3 文献标志码: D

Falken轮胎欧洲公司推出两款新型冬季载重轮胎,一款新为SI011轮胎,用于转向轮轴;另一款为SI021轮胎,用于驱动轮轴。这两款新型冬季载重轮胎具有使用寿命长、牵引力大、稳定性能和安全性能好的特点。Falken公司强调,这两款轮胎的胎面宽度均较大,同时采用住友橡胶工业公司的专利4D-Nano胶料技术。

SI011转向轮胎具有半实心中央块状花纹,提高了轮胎在冰雪路面上的驱动稳定性和牵引性

能;咬合花纹沟和刀槽花纹结构改善了轮胎在加速和制动时的牵引性能,保证了轮胎驱动安全性能;胎肩的J形刀槽花纹可以防止轮胎肩部不规则磨损,提高轮胎在不平坦路面上抵抗平行条状障碍物挫伤的能力。

SI021驱动轮胎有很深的刀槽花纹,可以确保轮胎在使用寿命期间具有很好的抓着性能;较大的接地印痕提高了轮胎的耐磨性能和通过性能;较大的断面高宽比改善了轮胎的牵引性能和驾乘舒适性能。

(谢立)