象,从而降低硅藻土/白炭黑复合填料对NR基体的补强效果,使得DCNR复合材料的综合物理性能下降。

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Study on Property of Natural Rubber Composite Reinforced with Diatomite/Silica Composite Filler

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Abstract: Natural rubber (NR) was filled with diatomite and silica as composite fillers, and the effect of diatomite amount on the properties of the diatomite/silica filled NR composite (DCNR) was studied. The results showed that, as the amount of diatomite increased, the t_{10} and t_{90} of the DCNR composites were prolonged at first and then shortened. When the amount of diatomite was small, the Shore A hardness of the DCNR composites could be improved. If the amount of diatomite was too large, obvious agglomeration was likely to occur, which reduced the reinforcement effect of diatomite/silica composite filler on NR matrix, and the comprehensive physical properties of the DCNR composites were decreased.

Key words: diatomite; silica; NR; composite; physical property

米其林发布两款可持续材料轮胎

日前,米其林公司宣布在全球范围内推出两款可持续材料比例分别达45%和58%的轮胎,将分别适配于乘用车与公共汽车。

这两款轮胎均已取得公路使用批准,性能水平与当前市场中的轮胎产品一致。这两款轮胎的推出是米其林公司加速可持续创新的重要里程碑,为该公司未来2~3年内推出高含量可持续材料轮胎奠定了基础。米其林公司此前宣布,将在

2030年将轮胎生产中的可持续材料比例提高至40%,2050年实现轮胎100%由生物来源、可再生或可回收材料制造。

新发布的两款轮胎都采用了更多天然橡胶、回收炭黑、葵花籽油、生物树脂、从稻壳提取的二氧化硅以及回收钢材。米其林方面表示,该公司已经积极参与了一系列针对可回收材料的合作项目,包括回收苯乙烯、回收炭黑、生物丁二烯等项目。

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