

(3) 与改性CNTs补强硫化胶相比,复配CNTs补强硫化胶的物理性能、导电性能和导热性能较好。

#### 参考文献:

[1] 张玉龙,张晋生.特种橡胶及应用[M].1版.北京:化学工业出版社

社,2011.

[2] 麦亚潘(美).碳纳米管:科学与应用[M].1版.刘忠范,译.北京:科学出版社,2007.

[3] 来国桥,幸松民.有机硅产品合成工艺及应用[M].2版.北京:化学工业出版社,2010.

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## Application of Modified Carbon Nanotubes in MVQ

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**Abstract:** The effect of the addition level of modified carbon nanotubes (CNTs) and mixed CNTs on the properties of polymethyl-vinyl siloxane rubber (MVQ) was investigated. The results showed that, with the increase of the addition level of modified CNTs, the curing degree of the compound increased,  $t_{90}$  was extended, the Shore A hardness, modulus at 100% elongation, tear strength, thermal diffusion coefficient and thermal conductivity of the vulcanizates increased, the tensile strength and DIN abrasion loss changed little, the elongation at break was decreased, and the surface resistivity and volume resistivity decreased only slightly. Similar change of properties was found for the mixed CNTs filled MVQ, and the physical properties, electrical conductivity and thermal conductivity of mixed CNTs reinforced MVQ was better.

**Key words:** MVQ; modified carbon nanotube; physical property; conductivity; thermal conductivity

### 米其林陆续推出多规格Defender LTX M/S轮胎

中图分类号:TQ336.1;F27 文献标志码:D

美国《现代轮胎经销商》(www.moderntiredealer.com)2016年8月5日报道:

米其林Defender LTX M/S轮胎系列新增30个规格(见图1)。米其林北美公司称,该轮胎系列产品适用于约75%的轻型载重汽车。



图1 米其林Defender LTX M/S轮胎

米其林称,2015年夏天推出的Defender LTX M/S轮胎系列因兼具耐久胎面寿命和全天候牵引性能,可以更好地满足现代轻型载重汽车和SUV的较高扭矩需求。

公司称EverTread胶料可使轮胎比前一代产品,即卖得最好的LTX M/S2系列,在苛刻条件下延长10%的使用寿命。

米其林轻载和运动休闲轮胎市场营销经理Stephen Peters说,采用EverTread胶料的Defender LTX M/S轮胎系列范围的扩大给轻型载重汽车和SUV驾驶员带来更多的选择,轮胎既可具有耐久长寿命,还不牺牲安全性和高使用性能。在缩短湿制动距离、提高雪地牵引性能以获得卓越操控性能的同时,Defender LTX M/S轮胎还可降低滚动阻力,在轮胎整个使用寿命周期内提高燃油经济性。

该轮胎现有71个规格,轮辋直径范围为381~559 mm(15~22英寸)。

(吴秀兰摘译 赵敏校)