

Irradiation Precuring of Carbon Black or Silica Filled Natural Rubber Compounds

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Abstract: Natural rubber filled with carbon black or silica was precured by electron beam, and the effect of irradiation precuring on the bound rubber content, Mooney viscosity and curing characteristics of the compound, and effect on the mechanical properties and dynamic properties of the vulcanizates were investigated. The results showed that, irradiation precuring increased the bound rubber content, Mooney viscosity and curing speed, but it had different effects on the stress-strain properties, heat build-up and abrasion resistance of these two vulcanizates filled with carbon black or silica, respectively, and irradiation precuring could effectively restrain the formation of filler network in the rubber matrix which resulted in a reduced hysteresis loss.

Key words: radiation precuring; carbon black; silica; natural rubber; filler network; hysteresis loss

飞劲推出Azenis RT615K+轮胎

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美国《现代轮胎经销商》(www.moderntiredealer.com)2016年11月3日报道:

飞劲轮胎公司在专业设备市场协会(SEMA)展上推出最新运动型Azenis RT615K+轮胎(见图1)。



图1 Azenis RT615K+轮胎

为要求性能最大化司机开发的Azenis RT615K+轮胎由富有竞争力的RT615K轮胎演变而来。“+”蕴含包括全新数字工程、纳米技术配方胶料,以获得最优抓地和操纵性能,其鼓舞信心的直线和转弯行驶性能可充分发挥车辆功能。

新轮胎将于2017年3月推出21个规格,轮胎直

径为356~457 mm(14~18英寸),UTQG等级为200 A-A,适配于高性能小型轿车、跑车、运动型轿车和大功率轿车。

(吴秀兰摘译 赵敏校)

一种内附有聚氨酯弹性体材料的轮胎及其制备方法

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由太原理工大学申请的专利(公开号 CN 106189794A,公开日期 2016-12-07)“一种内附有聚氨酯弹性体材料的轮胎及其制备方法”,涉及的内附有聚氨酯弹性体材料的轮胎制备方法为:在轮胎内面先均匀涂覆一层聚氨酯底涂,待聚氨酯底涂表面略有粘性时,在其表面均匀涂覆一层聚氨酯弹性体。聚氨酯底涂由A和B组分组成:A组分包括蓖麻油、乙酸丁酯、多亚甲基多苯基异氰酸酯和三氯乙烯;B组分包括聚四氢呋喃二醇和二甲苯。聚氨酯弹性体由C和D组分组成:C组分包括聚醚多元醇、4,4'-二苯基甲烷二异氰酸酯和增塑剂;D组分包括聚醚多元醇、增塑剂和催化剂。本发明可以直接对现有轮胎进行升级,升级后不影响原有结构和性能,自愈和防漏气效果好。

(本刊编辑部 马晓)