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## Fatigue failure, rupture parameter $\beta$ and life expectancy of BR/NR blend with various antioxidants

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**Abstract:** The tension fatigue property, dynamic fatigue failure property at high or low strain and rupture parameter  $\beta$  of BR/NR blend with various antioxidants were determined by test to obtain a regressive equation which could be used to predict the fatigue life with any tension ratio  $\lambda$ . It was found that the predictive fatigue life was basically in accordance with the measured one. The characteristics in rupture process on ruptured cross-section was analysed. The test results showed that the amine-type antioxidants were effective to improve the fatigue life of BR/NR blend.

**Keywords:** BR; NR; blend; fatigue failure; rupture characteristics; life expectancy

## 抗氧剂 TNP 小试通过鉴定

中图分类号: TQ330.38<sup>+</sup>2 文献标识码: D

由兰化有机厂研究所开发的抗氧剂 TNP 小试技术日前通过了甘肃省科委和石化局组织的技术鉴定。TNP是生产橡胶、胶乳的稳定剂和抗氧剂,尤其对 NBR 和 SBR 具有很好的抗氧化降解和防止过度交联的作用。此外,该产品也可用作 PE、高抗冲击聚苯乙烯、PP、聚酯、ABS 树脂等产品的辅助抗氧剂。目前兰化有机厂研究所已成功地开发了以国产壬基酚为主要原料的生产工艺,产品基本无"三废",易工业化生产,产品质量达到国际同类产品水平。

(摘自《中国化工报》,1999-10-26)

## 新型汽车液压胶管批量投产

中图分类号: TQ336.3 文献标识码: D

一种应用于汽车液压传动系统的专用胶管,近日在河北景县胜华橡胶厂研制成功并投入批量生产。

这种新产品具有耐压性能高、使用寿命长等特点。其中, $\Phi$ 16 II 胶管爆破压力达 110 M Pa, 比国内目前同类产品高 30%以上; 脉冲寿命达 20 万次以上,且耐油性能优越。经国家石油和化学工业局质量检测中心测试,该产品完全达到国外同类产品水平,有着广阔的市场前景。

(摘自《中国汽车报》,1999-11-11)