

(4) 炭黑填充SSBR/BR混炼胶在停放24 h时表现出最佳的挤出流变性能。

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## Effect of Storage Time on Extrusion Rheological Behavior in Carbon Black Filled SSBR/BR Blends

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**Abstract:** Effect of storage time of SSBR/BR filled with carbon black on extrusion rheological behavior was investigated. The results showed that, the bound rubber content, relaxation time and Mooney viscosity increased with the extending of storage time, and they had similar changing characteristics. The Payne effect and the storage modulus of the compound also increased with the extending of storage time, which indicated that the carbon black aggregates agglomerated to some degree in the storage process of the compound. The shearing viscosity increased slightly with the extending of storage time. The entrance pressure drop increased with the extending of storage time, and the effect of temperature was significant. The zigzag defects appeared on the surface of extruded compound when the storage time of the compound reached 48 h. The sample with 24 h of storage time had the minimum extrusion swell behavior. As for carbon black filled SSBR/BR system, the best storage time was 24 h.

**Key words:** carbon black; SSBR; BR; blend; storage time; extrusion rheological behavior

### 一种耐油丁腈橡胶

中图分类号: TQ333.7; TQ336.4<sup>+</sup>2 文献标志码: D

由东至县科创塑料制品有限公司申请的专利(公开号 CN 107033411A, 公开日期 2017-08-11)“一种耐油丁腈橡胶”, 涉及的丁腈橡胶

(NBR)配方为: NBR 100, 炭黑 6, 白炭黑 4, 氧化锌 5, 增塑剂DBS 3, 增塑剂DOP 10, 活化剂FT 15, 防老剂ODPA 3, 促进剂TMTD 2, 促进剂CZ 2, 硫黄 0.5。该NBR胶料的表面极性大, 稳定性好, 不易溶胀, 耐油性能好。

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