(2)随着LDHs用量增大,LDHs/NBR纳米复合材料的粘度增大,硫化速率减小。与NBR胶料相比,复合材料的t_{10}缩短但变化不大。

(3)与NBR胶料相比,LDHs/NBR纳米复合材料物理性能与气体阻隔性能显著提高。

(4)LDHs/NBR用量比为1/20且LDHs用量为1份时复合母胶/BIIR并用胶的气体阻隔性能较好。

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收稿日期:2015-12-04

Preparation and Properties of LDHs/NBR Nanocomposites

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Abstract: In this study, LDHs/NBR nanocomposites were prepared by latex co-coagulation method and the structure and properties of the nanocomposites were investigated. The results showed that, LDHs was uniformly dispersed in the NBR matrix. Compared with NBR compound, the physical properties and gas barrier property of LDHs/NBR nanocomposites were improved significantly. The co-coagulated LDHs/NBR masterbatch was blended with BIIR and the gas barrier property of the LDHs/NBR/BIIR blend was excellent when the blending ratio of LDHs/NBR was 1/20 and the total addition level of LDHs was 1 phr.

Key words: LDHs; NBR; nanocomposite; BIIR; latex co-coagulation; gas barrier property

一种内骨架耐热橡胶密封圈

中图分类号:TQ336.4$^+$2;TQ333.4 文献标志码:D

由青岛三汇橡胶机械制造有限公司申请的专利(公开号 CN 104693611A,公开日期 2015-06-10)“一种内骨架耐热橡胶密封圈”,涉及的橡胶密封圈配方为:三元乙丙橡胶 100,炭黑 40～60,氧化钙 5～7,滑石粉 10～15,硬脂酸 1～2,软化剂 10～12,粘合剂 1～1.9,稳定剂 4～6,复合硫化剂 0.3～0.6,促进剂 2～3.5。该产品具有极好的密封作用,即使在高温下也可以保持优良的性能,耐热性能和抗粘性能优异,耐腐蚀,具有一定的弹性,不会因高温导致迅速老化变形。

(本刊编辑部 赵 敏)