

分的比例达到 4/1 时,即凝胶组分在共混胶中的质量分数达到 0.2 时,共混胶的表观粘度和挤出膨胀率与线形 CR 相比均大幅度下降,挤出胶条的表面光滑度也显著提高。但继续增大凝胶组分质量分数,对加工性能的改进效果已不明显,而且会使共混胶的拉伸强度下降,这方面的研究将另文发表。

3 结语

采用溶胶、凝胶两种组分以胶乳形式共混的方法所得到的预交联型 CR 具有良好的加工性能。降低溶胶组分的门尼粘度、增大凝胶组分的交联密度或者提高凝胶组分的质量分数,都能使预交联型 CR 的加工性能得到改善,即表观粘度下降、挤出膨胀率减小、表面光滑度提高。

参考文献

- 1 王亚平,蔡平.预交联型氯丁橡胶.合成橡胶工业,1991,14(1):61~65
- 2 付力.T 型氯丁橡胶的研究:[学位论文].北京:北京化工大学,1994
- 3 Fu Z F, Zhang Y T. The synthesis of precrosslinked poly-chloroprene rubber. Proceedings of the Third International Joint Symposium between BUCT and CNU, Beijing, Ma Runyu Ed. 1996: 36~39
- 4 Pariser R, Hundred B. Method of preparing elastomeric blend or benzene soluble chloroprene polymer and a cross-linked chloroprene polymer. USA, USP 3042652. 1964
- 5 Jungk H, Pariser R. Polychloroprene sol-gel blend. USA, USP 3147317. 1964
- 6 门肋孝.氯丁二烯弹性体组合物.日本,日本公开特许公报,49-22444. 1974

收稿日期 1997-08-06

Influence of Precrosslinked CR Structure on Its Processibility

Fu Zhifeng, Guo Wei and Zhang Yinting

(Beijing University of Chemical Technology 100029)

Zhang Xueyi and Zhang Jisen

(Shanxi Chemical Factory 037500)

Abstract The influence of the Mooney viscosity[ML(1+4)100 °C] of sol component, the crosslinking density of gel component and the sol/gel mass ratio of the precrosslinked CR on its processibility was investigated. The results showed that the decrease of the Mooney viscosity of sol component and the increase of the crosslinking density and the mass proportion of gel component resulted in the improved processibility, the lower apparent viscosity and extrusion swell, and the smoother extrudate surface of precrosslinked CR.

Keywords precrosslinked CR, sol, gel, apparent viscosity, extrusion swell, surface smoothness

《高分子辞典》出版

由冯新德院士主编的《高分子辞典》已经正式出版。这部辞典约 170 万字,收词 7 000 余条,范围包括高分子化学、高分子物理、高分子工程与工艺学、高分子材料(含塑料、橡胶、纤维、胶粘剂、涂料等)及其加工应用、天

然高分子、功能高分子等,突出了全、准、新的原则,选词力求兼顾到高分子的所有领域;对选入的词条都予以详细解释,包括定义、特点、表征、应用、原理、过程等,使读者能了解词条本身及与其相关的知识。

(本刊讯)