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收稿日期: 2014-02-10

Effects of Environment-friendly Extending Oils on Properties of SBR

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Abstract: In this study, different environment-friendly extending oils were tested in SBR compounds to replace DAE, and their effect on the properties of SBR was investigated. The results showed that, different oils affected the motion of molecular chain and caused the difference of the structures and properties of SBR. Since DAE had more aromatic hydrocarbon and higher polarity, the glass transition temperature of DAE filled SBR was higher than that of environment-friendly oils filled SBR, and the physical properties were better, but the heat build-up was higher. However, the difference of the physical properties of environment-friendly oils filled SBR comparing with DAE filled SBR was quite small, and could be made up by formulation optimization of the rubber products.

Key words: SBR; environment-friendly extending oil; aromatic oil; dynamic property

耐二甲醚橡胶密封材料行业标准发布

中图分类号: TQ336.4+2 文献标志码: D

日前, 国家工信部第 32 号公告批准发布了《耐二甲醚橡胶密封材料》的化工行业标准, 实施日期为 2014 年 10 月 1 日。该标准的发布实施, 结束了我国二甲醚适用的橡胶密封材料无性能要求及试验方法的历史。

该标准由云南煤化工应用技术研究院组织起草, 西北橡胶塑料研究设计院、山东久泰能源科技有限公司等参与编制。标准中规定了耐二

甲醚橡胶密封材料的技术要求和检验规则以及标志、包装、运输、贮存方法等, 不但适用于耐二甲醚的橡胶密封材料, 也适用于耐液化石油气二甲醚混合燃气的橡胶密封材料, 并为耐二甲醚橡胶密封材料的产品质量提供了检测及判定的依据。

《耐二甲醚橡胶密封材料》化工行业标准的制定及发布实施, 有利于维持市场秩序, 促进二甲醚产业健康发展。

(摘自《中国化工报》, 2014-05-20)