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**ACCELERATED AGING OF SBR COMPOSITES FILLED WITH SBR-R SCRAPS DEVULCANIZED BY MICROWAVES**

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The aim of this work was to evaluate the effects of two accelerated aging processes on the chemical characteristics of SBR composites filled with rubber scraps devulcanized by microwave. The mixtures were developed by the incorporation of the devulcanized rubber scraps in a rubber matrix at different proportions (0 to 100 phr) and subsequent revulcanization. The mechanical properties indicated that the better performance was achieved by the composition containing 80 phr of rubber scraps devulcanized for 2 minutes in the microwave. So, this composition was submitted to two types of accelerated aging processes, in an air oven (7 and 14 days) and in an UV chamber (240 and 420 h). The changes in the chemical characteristics were evaluated through crosslink density and ATR-FTIR analyses, and compared to a control sample submitted to the same treatments. The results revealed that the aging mechanism was dependent on the presence of SBR-r and on the time of aging. Crosslink density analysis confirmed the occurrence of crosslink scission at lower times and formation of additional crosslinking for longer times of aging. ATR-FTIR results indicated an oxidative process in the surface of the composites for both aging processes. Moreover, UV aging presented a more pronounced change in the chemical structure of the elastomers. In all the cases, the control sample, without scraps, was more sensitive to the aging effects.