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(54) Title: ANTIMICROBIAL PRE-VULCANIZED RUBBER COMPOSITIONS AND ANTIMICROBIAL VUCLANIZED RUBBER ARTICLES

(57) Abstract: Non-silicone rubber articles that exhibit highly desirable long-term effective antimicrobial characteristics are provided. Such articles are in either solid or blown (foam or sponge) state (or combinations of both in multilayered forms) and can be utilized in a variety of applications. This invention utilizes the presence of non-sulfur-based curing systems and agents, such as bisphenols and peroxides, that permit vulcanization and do not irreversibly bind silver ions thereto, thereby resulting in long-term antimicrobial performance of the rubber article. This invention further provides a simple method of producing such an antimicrobial vulcanized non-silicone rubber article. This invention also encompasses certain non-silicone pre-vulcanized raw rubber formulations made from at least a majority by weight of non-silicone rubber that includes silver-based components to provide highly desirable long-term antimicrobial characteristics within the ultimate cured rubber articles made therefrom.



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