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(54) Title: RUBBER COMPOSITION WITH REDUCED ODOR AND GOOD THERMAL OXIDATIVE AGING-RESISTANT AND ANTI-FATIGUE PROPERTIES

(57) Abstract: A formulation for rubber composition with reduced odor and good thermal oxidative aging-resistance and tension fatigue resistance comprising 100 parts by weight of a diene elastomer, 30 to 70 parts by weight of a reinforcing filler, 0.1 to 8 parts by weight of an antidegradant composition, and 0.5 to 3 parts by weight of a crosslinker, wherein the antidegradant composition includes a 6PPD antidegradant with a purity of equal to or greater than about 98% and an S-TMQ. The rubber composition has no added odor inhibitor/adsorbent or deodorizing additive, while by using combination of a 6PPD antidegradant with purity of equal to or greater than about 98% and an S-TMQ instead of traditional combination of a 6PPD antidegradant and a TMQ antidegradant, the VOC emission of the rubber composition is effectively reduced, the odor grade is reduced, and the thermal oxidative aging-resistance and tension fatigue resistance is improved.



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