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(54) Title: PROCESS FOR THE PREPARATION OF STYRENE-BUTADIENE RUBBERS COMPRISING RECYCLED RUBBER POWDER

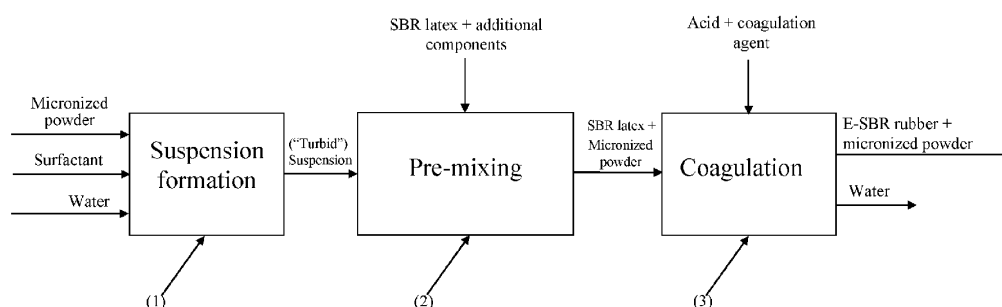


FIGURE 1

(57) Abstract: Process for preparation of a styrene-butadiene rubber comprising micronized recycled rubber powder, said process comprising the following steps: (a) preparing a suspension comprising micronized recycled rubber powder, water and at least one surfactant; (b) mixing the suspension obtained in step (a) with at least one styrene-butadiene latex to obtain a styrene-butadiene latex comprising micronized recycled rubber powder; (c) subjecting the latex obtained in step (b) to coagulation to obtain a coagulated styrene-butadiene rubber comprising micronized recycled rubber powder; wherein: in step (a) the particle size of said micronized recycled rubber powder is ranging from 0.05 mm to 0.8 mm, preferably ranging from 0.1 mm to 0.4 mm; in step (a) said at least one surfactant is present in an amount ranging from 0.5% by weight to 3% by weight, preferably ranging from 1% by weight to 2.5% by weight, with respect to total weight of said micronized recycled rubber powder; in step (a) said micronized recycled rubber powder has a concentration in water ranging from 1% by weight to 50% by weight, preferably ranging from 5% by weight to 30% by weight, with respect to the total weight of said water. The styrene-butadiene rubber comprising micronized recycled rubber powder obtained from the aforesaid process, as it is, or in a mixture with other rubbers such as, for example, natural rubber (NR), polybutadiene (BR), styrene-butadiene copolymers, or mixtures thereof, may be advantageously used in vulcanizable elastomeric compositions, which in turn may be used in various sectors such as, for example, tyres, shoe soles, brakes, conveyor belts.

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