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(54) Title: POLYVINYL ALCOHOL COMPOSITION AND FILM

(57) Abstract: A method of preparing a plasticised particulate polyvinyl alcohol (PVA) composition is provided, comprising: mix-
ing, in a mixer, at a mixer speed and for a time sufficient that the mixture attains a temperature of at least 50°C: particulate PVA resin
in an amount from 80% to 90% by weight of the mixture; and plasticiser in an amount from 10% to 20% by weight of the mixture,
wherein at least a portion of the plasticiser is water; monitoring the apparent viscosity of the mixture during mixing and continuing
mixing until the apparent viscosity of the mixture has peaked to a maximum and dropped off to a substantially constant level, thereby
to obtain a plasticised particulate mixture having a moisture content in the range from 7% to 14%; preferably adding an anti-caking
agent in an amount from 0.05% to 0.5% by weight of the plasticised particulate mixture, and continuing mixing until the anti-cak-
ing agent is blended to the plasticised particulate mixture; and stopping mixing, and removing the mixture from the mixer, wherein
the mixture temperature is kept below 100°C at all times during mixing. The properties of the plasticised particulate composition
are such that it can be processed, by extrusion and blowing, to a film having advantageous characteristics in terms of structure and
properties. Accordingly, also provided is a PVA film characterised in that, when viewed using polarising light microscopy, it has a
nonuniform texture consisting of distinct short range areas, e.g. 10 to 500 micrometers, each short range area showing anisotropic
orientation within its area, each short range area being oriented isotropically.



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