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(54) Title: HIGH STABILITY POLYTETRAFLUOROETHYLENE DISPERSIONS AND METHOD FOR OBTAINING SAME

(57) Abstract: A process for stabilizing aqueous dispersions of polytetrafluoroethylene (PTFE) or co- and terpolymers of PTFE by adding a macromolecular species directly to the aqueous dispersion. Surprisingly, it has been observed that after the macromolecular species has been added to the dispersion of PTFE or co- and terpolymers of PTFE, the dispersions are very stable, do not readily coagulate, and remain stable even when subjected to freeze/melt cycles. The amount of macromolecular species which may be added may vary from about 0.1 wt. % to about 20.0 wt. %, for example, and suitable macromolecular species include polyacrylic acid (PAA), polyvinylalcohol (PVOH), polyethyleneimies (PEI), and polyethylene glycol (PEG), and others. The present method is particularly effective for stabilizing commercially available "unstabilized" aqueous dispersions of PTFE or co- and terpolymers of PTFE which do not include a surfactant or are substantially free of surfactant.



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