

ABSTRACT

An aqueous dispersion of an amphoteric water-soluble polymer that is stably storable, easily flowable and good for handling as well as a method of manufacturing the same and its possible applications are provided according to the invention. Such an aqueous dispersion can be effectively used as a treating agent such as a chemical for flocculating and/or dehydrating raw sludge, excess sludge, digested sludge or any mixtures thereof derived from municipal sewage, human waste or general industrial waste water, or as a chemical for separating and treating oil from oil-containing industrial waste water, as a drainage aid, a retention aid, a chemical for recovering useful and valuable substances from white water in the papermaking process. The aqueous dispersion of an amphoteric water-soluble polymer according to the invention is obtained by polymerizing a mixture of monomers comprising a specific cationic monomer and an anionic monomer as essential components with stirring in an aqueous salt solution incapable of dissolving the produced polymer and in the presence of a polymer electrolyte dispersant soluble in said aqueous salt solution. Such an aqueous dispersion is highly effective when the concentration of the produced amphoteric water-soluble polymer in the aqueous dispersion, the concentration of the salt, the concentration of the



dispersant, the viscosity of the aqueous dispersion, and the average diameter of the particles of the amphoteric water-soluble polymer in the aqueous dispersion are respectively found within specific ranges.

