

Abstract

AQUEOUS SOLUTION COMPRISING ACRYLIC ACID AND THE CONJUGATE BASE THEREOF

5 An aqueous solution comprising acrylic acid and the conjugate base thereof in a total amount, calculated as acrylic acid, of at least 10% by weight, based on the weight of the aqueous solution, and, based on the total amount of acrylic acid and the conjugate base thereof present in the aqueous solution, calculated as acrylic acid,

≥ 50 ppm by weight	in total of propionic acid and the conjugate base thereof, calculated as propionic acid,
≥ 200 ppm by weight	in total of formic acid and the conjugate base thereof, calculated as formic acid,
≥ 3000 ppm by weight	in total of acetic acid and the conjugate base thereof, calculated as acetic acid,
≤ 10 ppm by weight	in total of benzoic acid and the conjugate base thereof, calculated as benzoic acid,
≤ 10 ppm by weight	in total of maleic anhydride, maleic acid and the conjugate bases thereof, calculated as maleic acid,
≤ 10 ppm by weight	in total of phthalic anhydride, phthalic acid and the conjugate bases thereof, calculated as phthalic acid,
≤ 50 ppm by weight	of acrolein,
≤ 50 ppm by weight	of benzaldehyde,
≤ 50 ppm by weight	of 2-furaldehyde, and

10 at least 20 mol% of at least one alkali metal cation, process for preparing this solution and the use of this solution for preparation of polymer by free-radical polymerization.

Figure 1