

A method of preventing or treating lost circulation during the drilling of a well comprises the addition, at concentration ranging between about 0.5 and 6 pounds per barrel, of water-dispersible fibers having a length between about 10 and 25 mm, for instance glass or polymer fibers, to a pumped aqueous base-fluid including solid particles having an equivalent diameter of less than 300 μm . The base-fluid with the solid particles can be the drilling fluid or a small-volume pill specially pumped for curing lost circulation.